

BORREGO WATER DISTRICT

**FISCAL YEAR 2020-2021
ANNUAL BUDGET
ADOPTED JUNE 9, 2020
REVISED NOVEMBER 24, 2020**

SUBMITTED BY:

**GEOFF POOLE
GENERAL MANAGER**

TO:

BOARD OF DIRECTORS

**KATHY DICE
PRESIDENT**

**LYLE BRECHT
VICE-PRESIDENT**

**DAVE DUNCAN
TREASURER**

**RAYMOND DELAHAY
DIRECTOR**

**DIANE JOHNSON
DIRECTOR**

**BORREGO WATER DISTRICT
ANNUAL BUDGET
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BORREGO WATER DISTRICT

June 9, 2020

TO: Ratepayers and Investors of the Borrego Water District
FROM: Geoff Poole, General Manager
SUBJECT: Strategic Objectives 2020-21

STRATEGIC GOALS AND OBJECTIVES 2020-21

Enhance District Financial Condition:

GOAL: Operate BWD Finances to enhance its Financial Position and Creditworthiness and to allow for possible future BWD debt issuances.

OBJECTIVE: The BWD Board and Staff have taken extraordinary steps over the past decade or so to first, stabilize and then, improve the BWD Financial Condition. The effects of this hard work were realized when BWD successfully issued \$5.6 M in Bonds to fund various water and sewer improvements in 2018. BWD is committed to maintain water and wastewater rates, charges and reserve fund balances that provide the required debt service coverage ratios and other economic factors. BWD staff and Board will monitor Water and Wastewater Operations and Capital Planning to ensure all expenditures are prudent and necessary.

Protect BWD Interests in Newly Formed Watermaster:

GOAL: A major accomplishment in 2019-20 was realized with the signing of The Settlement Agreement and Stipulated Judgment by over 92% of Basin pumpers. BWD and its Representatives will engage in the Watermaster process with the best interest of BWD ratepayers, community and the environment in mind.

OBJECTIVE: Various potential future Watermaster actions could have a significant impact upon BWD ratepayers, community and the environment including water quality degradation and other factors. BWD and its representatives on the Watermaster will focus on ensuring actions taken by the Watermaster do not adversely or unfairly impact BWD, the community or the environment.

Replace & Upgrade Water and Sewer Infrastructure:

GOAL: Commit the necessary resources to fund replacement of aging water and sewer infrastructure before failure.

OBJECTIVE: BWD issued Bonds in 2018 and has expended approximately 70% or proceeds to date. A second new well, pipelines in the De Anza area and more fire hydrant replacements are scheduled for FY 2020-21 to meet three-year bond proceed spending requirements necessary to retain tax exempt status. The Board and Staff will focus on completing these vital projects.



BORREGO WATER DISTRICT

June 9, 2020

TO: Ratepayers and Investors of the Borrego Water District
FROM: Geoff Poole, General Manager
SUBJECT: Submittal Letter – What happened in FYE 2020 and how will FYE 2021 be different?

Transmitted herewith is the Proposed Final Fiscal Year 2020-21 Budget and Capital Improvement Plan for the Borrego Water District. The consolidated budget was prepared in compliance with the laws of the State of California and reflects the Board of Directors' (Board) goals and priorities and the District's strategic plans by which to achieve them.

2019-20 IN REVIEW

COVID 19 created the need for BWD staff to work under less than optimal conditions for the last quarter of 2019-20. To their credit, BWD employees and Board completed all water and wastewater duties and responsibilities. The economic impact to BWD in terms of water sales and payment revenue reductions are unknown at this time and under continuous evaluation. Staff intends to continue to monitor the situation and to report to the Board after Q1 of FY 2020-21 and consider adjusting the BWD Budget accordingly.

2019-20 was a milestone year in which BWD entered into a Settlement Agreement and Stipulated Judgment with 92.4% of Basin Pumpers. The documents outline the steps that will be taken to implement the Basins' Groundwater Management Plan and reduce pumping by an estimated 74.6% on or before 2040. Once the Agreements are approved by The Courts and Department of Water Resources, the Borrego Springs Watermaster will be formally created to manage the Basin and recover costs from those who continue to pump. The BWD budget for 2020-21 includes expenditures for its proportional share of Watermaster expenses (approx. 10%).

During the past year, BWD and its consultants completed construction of a new well, well-head piping upgrades, approximately 30 fire hydrant replacements and waterlines in and around Borrego Springs Road, Barrel Drive, and Flying J Road. The Club Circle wastewater collection system was also inspected and no serious issues were found.

No extensive, unplanned water or sewer service outages were experienced during the year and the water delivered met all State Quality Requirements. No loss time injuries were encountered during the year. Last but not least, long term BWD employees Kim Pitman and Greg Holloway retired in June 2020 and the Board and Staff wish them well.

The amount budgeted in each category represents Management's best assumptions to successfully accomplish the District's objectives. A summary of the FY 2020-21 budget is below:



BORREGO WATER DISTRICT

Budget Components for FY 2020-21 - Revenues

Water sales are projected to remain stable (FY 2019-20 = 1,600 afy), however Staff is continuously monitoring changes to consumption and payments received due to COVID-19. The previously approved Prop 218 rate and fee increases of 6% for is being delayed until January 1, 2021 or deferred until new 218 rates are approved for July 1, 2021, based on conditions after Q1 20-21.

Monthly meter standby fees are also proposed to remain unchanged thru at least Q1 20-21.

Property tax revenues are expected to remain constant and within BWD's legal authority to assess.

Non-budgeted revenue: BWD is also aggressively pursuing a number of State grants and although the revenue is technically not included in the Budget, once received, the additional revenue will have a positive effect on the Districts financial position and reserve fund levels.

Budget Components for FY 2020-21 – Expenses

- In FY 2020-21, BWD has included projected expenses for Groundwater Management including the to-be-formed Watermaster. BWD expenses are planned to be an estimated \$310,000 have been included in FY 2020-21 Budget for this purpose.
- All existing programs in BWD Operations, Maintenance and Administration Departments are fully funded through 2020-21. The major programs in the Water Operations Department include system operations and maintenance, water quality monitoring, meter testing and replacement, pipeline replacement, reporting and the inevitable emergency pipeline repairs that happen each year. Capital projects planned for the year include the aforementioned replacement well, pipeline and fire hydrant upgrades.
- In the Sewer Operations Department, BWD is planning to construct a series of improvements at the Wastewater Treatment Facility to replace equipment and components that have passed their useful lives. These projects are planned to be funded by State Grants.
- In the Administration Department, all programs are fully funded.

Included in this Budget Package are the proposed Board Resolution to adopt and approve the FY 2020-21 Budget, detailed revenue and expenses, Capital Improvement Plan with project explanations and justifications from the District's Consulting Engineer (David Dale), Non CIP expenses, updated Reserve Policy and projected Cash Flow including proposed future rate increases.

I would personally like to thank the BWD staff and Board for their hard work in preparing and reviewing this Proposed Budget for FY 2020-21.

Sincerely,

Geoff Poole
General Manager

BORREGO WATER DISTRICT ORGANIZATIONAL CHART

June 9, 2020 rev 12/8/20



Borrego Water District		
FY2021 Budget		
<i>Revisions Adopted 11/24/2020</i>		
	6/23/2020	11/24/2020
	ADOPTED	ADOPTED
	BUDGET	CHANGES*
	<u>2020-2021</u>	<u>2020-2021</u>
*Changes shown in darker shade		
<u>WATER REVENUE</u>		
Residential Water Sales	866,507	886,004
Commercial Water Sales	445,791	455,822
Irrigation Water Sales	203,358	207,934
GWM Surcharge	173,911	177,824
Water Sales Power Portion	<u>465,462</u>	<u>475,935</u>
TOTAL WATER COMMODITY REVENUE:	2,155,031	2,203,519
Readiness Water Charge	1,210,230	1,237,460
Meter Install/Connect/Reconnect Fees	1,725	1,764
Backflow Testing/installation	5,100	5,215
Bulk Water Sales	2,440	2,495
Penalty & Interest Water Collection	<u>34,000</u>	<u>34,765</u>
TOTAL WATER REVENUE:	3,408,526	3,485,217
<u>PROPERTY ASSESSMENTS/AVAILABILITY CHARGES</u>		
641500 1% Property Assessments	55,000	55,000
641502 Property Assess wtr/swr/fld	75,000	75,000
641504 Water avail Standby	91,000	91,000
641503 Pest standby	<u>14,000</u>	<u>14,000</u>
TOTAL PROPERTY ASSES/AVAIL CHARGES:	235,000	235,000
<u>SEWER SERVICE CHARGES</u>		
Town Center Sewer Holder fees	196,640	199,590
Town Center Sewer User Fees	97,194	98,652
Sewer user Fees	<u>288,288</u>	<u>292,612</u>
TOTAL SEWER SERVICE CHARGES:	582,122	590,854
<u>OTHER INCOME</u>		
Water Credits income		
JPIA Insurance Rebate		
Interest Income	<u>76,000</u>	<u>76,000</u>
TOTAL OTHER INCOME:	76,000	76,000
TOTAL INCOME:	4,301,648	4,387,071
<u>CASH BASIS ADJUSTMENTS</u>		
Anticipated Increase in Receivables due to COVID-19		(200,000)
TOTAL CASH BASIS ADJUSTMENTS:		(200,000)
TOTAL OPERATING INCOME RECEIVED:		4,187,071

<u>EXPENSES</u>	ADOPTED BUDGET 2020-2021	ADOPTED CHANGES* 2020-2021
MAINTENANCE EXPENSE		
R & M Buildings & Equipment	250,000	250,000
R & M - WTF	120,000	120,000
Telemetry	10,000	10,000
Trash Removal	5,500	5,500
Vehicle Expense	18,000	18,000
Fuel & Oil	<u>35,000</u>	<u>35,000</u>
TOTAL MAINTENANCE EXPENSE:	438,500	438,500
PROFESSIONAL SERVICES EXPENSE		
Tax Accounting (Taussig)	3,000	3,000
Administrative Services (ADP)	3,000	3,000
Audit Fees (Leaf & Cole)	17,000	17,000
Computer billing (Accela/Parker)/Cyber Security	31,000	31,000
Financial/Technical Consulting (Raftelis/Fieldman)	80,000	80,000
Engineering (Dudek)	35,000	35,000
District Legal Services (BBK)	45,000	45,000
Air Quality Study		55,051
Grant Acquisitions (TRAC) 17170+17180	30,000	30,000
Testing/lab work (Babcock Lab/Water Quality Monitoring)	24,000	24,000
Regulatory Permit Fees (SWRB/DEH/Dig alerts/APCD)	<u>36,500</u>	<u>36,500</u>
TOTAL PROFESSIONAL SERVICES EXPENSE:	304,500	359,551
INSURANCE EXPENSE		
ACWA/JPIA Program Insurance	60,000	60,000
ACWA/JPIA Workers Comp	<u>18,000</u>	<u>18,000</u>
TOTAL INSURANCE EXPENSE:	78,000	78,000
DEBT EXPENSE		
Compass Bank Note 2018A/B	388,939	388,939
Pacific Western Bank 2018 IPA	<u>499,406</u>	<u>499,406</u>
TOTAL DEBT EXPENSE:	888,345	888,345
PERSONNEL EXPENSE		
Board Meeting Expense (board stipend/board secretary)	23,000	23,000
Salaries & Wages (gross)	930,000	930,000
Salaries & Wages offset account (board stipends/staff proj)	(80,000)	(80,000)
Consulting services/Contract Labor	10,000	10,000
Taxes on Payroll	23,700	23,700
Medical Insurance Benefits	212,700	212,700
Calpers Retirement Benefits	210,000	210,000
Conference/Conventions/Training/Seminars	<u>18,000</u>	<u>18,000</u>
TOTAL PERSONNEL EXPENSE:	1,347,399	1,347,399

<u>EXPENSES(Con't)</u>	ADOPTED BUDGET 2020-2021	ADOPTED CHANGES* 2020-2021
OFFICE EXPENSE		
Office Supplies	24,000	24,000
Office Equipment/ Rental/Maintenance Agreements	50,000	50,000
Postage & Freight	15,000	15,000
Taxes on Property	3,300	3,300
Telephone/Answering Service/Cell	20,000	20,000
Dues & Subscriptions (ACWA/CSDA)	23,000	23,000
Printing, Publications & Notices	2,500	2,500
Uniforms	7,000	7,000
OSHA Requirements/Emergency preparedness	<u>5,500</u>	<u>5,500</u>
TOTAL OFFICE EXPENSE:	150,300	150,300
UTILITIES EXPENSE		
Pumping-Electricity	325,000	325,000
Office/Shop Utilities	<u>6,000</u>	<u>6,000</u>
TOTAL UTILITIES EXPENSE:	331,000	331,000
GROUNDWATER MANAGEMENT EXPENSE		
Pumping Fees	69,300	123,888
Physical Solution Development	-	-
Physical Solution Reimbursement (42,800 rcvd in FY2020)	(100,000)	(57,200)
Stipulation Legal	85,000	185,000
Stipulation Legal Reimbursements (24,400 rcvd in FY2020)	(65,000)	(40,600)
Interim Judgement Legal Support	45,000	
Interim Judgement Technical Support	45,000	45,000
Misc. & Contingency	20,000	20,000
BPA Transactions that meet CEQA requirements	<u>5,000</u>	<u>5,000</u>
TOTAL GWM EXPENSE:	104,300	281,088
TOTAL EXPENSES:	3,642,343	3,874,182
CASH BASIS ADJUSTMENTS		
Decrease (Increase) in Accounts Payable		
Increase (Decrease) in Inventory		
TOTAL CASH BASIS ADJUSTMENTS:		
TOTAL OPERATING EXPENSES PAID:	3,642,343	3,874,182
NET OPERATING INCOME RECEIVED:	459,304	312,889

<u>CIP PROJECTS</u>	ADOPTED BUDGET <u>2020-2021</u>	ADOPTED CHANGES* <u>2020-2021</u>
Prop 86 Grant (Reimbursable)		
<u>CASH FUNDED - WATER</u>		
Bending Elbow Pipeline Project	170,000	380,000
SCADA Replacement	50,000	100,000
Facilities Maintenance - Office Interior	15,000	15,000
Emergency System Repairs	60,000	60,000
Replace Twin Tanks (Moved from GRANT)		630,000
Engineering/Construction Management Consulting	25,000	25,000
TOTAL CASH CIP EXPENSES WATER:	320,000	1,210,000
<u>CASH FUNDED - SEWER</u>		
Oxygen Injection at Borrego Valley Rd Pump	20,000	20,000
Difusers at Sludge Holding Tank (Completed from R&M)	100,000	
Manhole Replacement/Refurbishments	43,000	43,000
Engineering/Construction Management Consulting	18,000	18,000
TOTAL CASH CIP EXPENSES SEWER:	181,000	81,000
CASH FUNDED - Short Lived Asset Replacement Prog	305,000	305,000
TOTAL CASH FUNDED CIP EXPENSES:	806,000	1,596,000
<u>CASH RECAP</u>		
Net Operating Income		312,889
Total Budgeted Cash CIP		(1,596,000)
Bond Funded CIP Shortfall		(372,738)
Period Reserves Adjustment		(1,655,849)
Projected Cash Balance at Year End		4,369,344
FY Reserves Target		7,710,218
Reserves Surplus/(Shortfall)		(3,340,874)

<u>DEBT & GRANT ACCOUNTING</u>	ADOPTED BUDGET 2020-2021	ADOPTED CHANGES* 2020-2021
GRANT(PROP 1) FUNDED CIP - WATER		
Replace Twin Tanks (Changed to CASH)	630,000	
Replace Wilcox Diesel Motor (Push to FY22)	75,000	
Replace Indianhead Reservoir (Push to FY22)	435,000	
Rams Hill #2, recoating (Push to FY22)	616,000	
TOTAL GRANT CIP EXPENSES WATER:	1,756,000	0
GRANT(PROP 1) FUNDED CIP - SEWER		
Plant-Grit removal at the headworks	214,000	214,000
Clarifyer Upgrade/Rehabilitation	240,000	240,000
TOTAL GRANT CIP EXPENSES SEWER:	454,000	454,000
TOTAL GRANT CIP EXPENSES:	2,210,000	454,000
BOND FUNDED CIP - WATER		
De Anza Pipeline Replacement Project	430,000	430,000
Production Well 2 Investigation and Construction	1,250,000	1,250,000
Replace 30 fire hydrants 17160 (\$400K spend FY20)	540,000	140,000
Production Well #1 ID4-Well #9-17110	-	-
Replace 5 well discharge manifolds and electric panel upgr	0	0
TOTAL BOND FUNDED WATER CIP:	2,220,000	1,820,000
BOND FUNDED CIP - SEWER		
Miscellaneous Sewer System Improvements	410,000	410,000
TOTAL SEWER BOND FUNDED CIP:	410,000	410,000
TOTAL BOND FUNDED CIP EXPENSES:	2,630,000	2,230,000
BOND PROCEEDS RECAP		
Bond Balance at beginning of period (07/01/2020)		1,857,262
Less Bond Expenditures		<u>(2,230,000)</u>
Bond Balance at end of period (06/30/2020)		<u>(372,738)</u>

BWD				
INCOME/EXPENSE				
CONDENSED BUDGET				
2020-2021				
	TOTAL			TOTAL
	BUDGET	WATER	SEWER	ALL FUNDS
REVENUE				
Water Sales	3,307,393	3,307,393	-	3,307,393
GWM Surcharge	177,824	177,824	-	177,824
1% Property Assessment (641500)	55,000	55,000	-	55,000
Water Availability Standby (641504)	91,000	91,000.00		91,000
Water/Sewer/Flood Assessment (641502/3)	89,000	81,500	7,500	89,000
Sewer Revenue	590,854	-	590,854	590,854
Interest Income	76,000	68,400	7,600	76,000
Less Potential Increase in Receivables due to COVID-19	(200,000)	(180,000)	(20,000)	(200,000)
TOTAL BUDGETED INCOME FY 2021:	4,187,071	3,601,117	585,954	4,187,071
GRANT & DEBT PROCEEDS				
Prop 1 GSP Grant	454,000	-	454,000	454,000
TOTAL GRANT & DEBT PROCEEDS:	454,000	-	454,000	454,000
TOTAL BUDGETED INCOME, GRANT & DEBT PROCEEDS:	4,641,071	3,601,117	1,039,954	4,641,071
EXPENSE				
Repairs & Maintenance				438,500
R&M Water	250,000	250,000	-	
R&M WWTP	120,000	-	120,000	
Telemetry	10,000	8,500	1,500	
Trash Removal	5,500	4,216	1,284	
Vehicle Expense	18,000	15,300	2,700	
Fuel/Oil	35,000	29,750	5,250	
Professional Services				359,551
Tax Accounting	3,000	2,550	450	
Administrative Services	3,000	2,550	450	
Audit Fees	17,000	14,450	2,550	
Computer Billing	31,000	26,350	4,650	
Consulting	80,000	68,000	12,000	
Engineering	35,000	21,000	14,000	
Legal	45,000	38,250	6,750	
Air Quality Study	55,051	55,051		
Grant Acquisitions	30,000	25,500	4,500	
Testing/Lab	24,000	12,000	12,000	
Permit Fees	36,500	31,025	5,475	
Insurance				78,000
Program Insurance	60,000	51,000	9,000	
Workers Comp	18,000	15,300	2,700	
Personnel Expense				924,700
Board Expense	23,000	19,550	3,450	
Salaries & Wages	850,000	722,500	127,500	
Consulting Services	10,000	8,500	1,500	
Taxes on Payroll	23,700	20,145	3,555	
Training/Seminars	18,000	15,300	2,700	
Employee Benefits				422,700
Medical	212,700	180,795	31,905	
Retirement	210,000	178,500	31,500	
Office expense (15% of all subcategories to Sewer)	150,300	129,148	21,152	150,300
Utilities				331,000
Pumping/Electricity	325,000	322,000	3,000	
Office Utilities	6,000	6,000	-	
Compass Bank Note 2018A/B	388,939	334,204	54,735	388,939
Pacific Western Bank 2018 IPA	499,406	421,552	77,854	499,406
GWM	281,088	281,088	-	281,088
TOTAL BUDGETED EXPENSE FY 2021:	3,874,184	3,310,074	564,110	3,874,184
UNEXPENDED DEBT PROCEEDS:	1,857,262	1,447,262	410,000	1,857,262
TOTAL EXPENSES AND UNEXPENDED DEBT PROCEEDS:	5,731,446	4,757,336	974,110	5,731,446
NET BUDGETED INCOME (EXPENSE):	312,887	291,043	21,844	312,887
TOTAL CIP CASH EXPENSE:	2,368,738	2,287,738	81,000	2,368,738
TOTAL BOND FUNDED CIP EXPENSE:	2,630,000	2,220,000	410,000	2,630,000
TOTAL BUDGETED ANNUAL NET CASH FLOW FY 2021:	(2,055,851)	(1,996,695)	(59,156)	(2,055,851)



BORREGO WATER DISTRICT

June 9, 2020

TO: Ratepayers and Investors of the Borrego Water District
FROM: Geoff Poole, General Manager
SUBJECT: Fiscal Year 2020-21 Budget and Capital Improvement Plan

Transmitted herein is the Proposed Final Fiscal Year 2020-21 Budget and Capital Improvement Plan for the Borrego Water District. The consolidated budget was prepared in compliance with the laws of the State of California and reflects the Board of Directors' (Board) goals and priorities and the District's strategic plans by which to achieve them.

2019-20 was marked with the signing of a first of its kind Stipulated Judgment and Settlement Agreement between over 90%+ of Basin Pumpers creating a Watermaster Board and Staff structure to implement the Agreement. In addition, a new well, fire hydrant and waterline replacements and inspection of the Club Circle development occurred. COVID-19 required BWD staff to quickly adjust its daily routines and they did so remarkably well under the conditions. Staff will continue to monitor the financial impacts of the pandemic in terms of incoming water and sewer revenue impacts and report to the Board and adjust as necessary.

2020-21 will be a year in which another new well and additional fire hydrant and pipeline replacements are planned. In addition, monitoring the impact of COVID-19 will continue.

The amount budgeted in each category represents Management's best assumptions to successfully accomplish the District's objectives. A summary of FY 2020-21 budget is below. The Board will conduct a full budget review in three months and adjust the budget accordingly depending upon the conditions.

Budget Comparison for FY 2020-21 – Revenues

Water sales are projected to be stable and will be monitored and adjusted due to COVID-19 and other factors, if needed, in September 2020. During the two-month period when Stay at Home Orders were in effect, water consumption for BWD Customers was up 15% in March 2020 compared to March 2019 and down 29% in April 2020 compared to April 2019.

In 2016, The BWD Board adopted a water and sewer rate schedule that included a planned (6% water and 5% sewer) rate and charge increase that is being temporarily postponed. Water rates will initially remain unchanged in an effort to assist our Customers through various economic challenges. BWD has adequate reserve funds to offset the income from the previously planned rate increase and will retain the ability to adjust rates, if needed, in September. Monthly water meter fees will also remain unchanged thru at least September 2020.

Property tax revenues are expected to remain constant and within BWD's legal authority to assess. Non-Budgeted Revenue is being aggressively pursued on a number of State grants. Funding is for upgrading BWDs Wastewater Treatment Plant and replacing three Reservoirs reaching the end of their useful life.



BORREGO WATER DISTRICT

Budget Components for FY 2020-21 - Expenses

Expenses for FY 2020-21 are expected to remain constant. New expense categories were added (and some of the old ones eliminated) pertaining to the transition from the previous GSA structure to the Watermaster. The new chart of accounts for this section is much more descriptive of the nature of the expense. The new accounts added are Pumping Fees, Stipulation Legal, Interim Judgement Legal & Technical Support, Miscellaneous & Contingency, and BPA Transactions that meet CEQA requirements with a total net budget of \$104,300 after about \$165,000 in Watermaster reimbursements. Accounts removed are Misc. GWM Costs and Net SGMA GSP & Stipulation Costs previously budgeted at \$130,000.

Minimal personnel changes have occurred or are anticipated, bringing the total authorized positions up from 11.5 positions in FYE 2020 to 12.65 positions in FYE 2021. Diana Del Bono has moved from Part-Time Administrative Assistant to Full-Time Administrative Manager to facilitate Kim Pitman's retirement. In addition, BWD proposes adding a District Engineer on staff at 65% of Full-Time. The new salaries are offset by the salaries of retiring staff, thus Personnel Expenses are expected to remain constant.

All existing programs in BWD Operations, Maintenance and Administration Departments are fully funded through 2020-21. The major programs in Water Operations Enterprise include system operations and maintenance, water quality monitoring, meter testing and replacement, Regulatory Reporting and the inevitable emergency repairs that happen each year. Capital projects planned include drilling another well (replacement of existing), pipeline and fire hydrant replacement projects.

All existing programs in BWD Wastewater Department are fully funded through 2020-21. The major programs in Wastewater Enterprise include the collection system and treatment plant operations, wastewater quality monitoring and Regulatory reporting. Capital projects planned include upgrades to the Wastewater Treatment Plant (Pending State Grant Approval) and oxygen injections system for odor control (2018 BWD Bond Funded).

In the Administrative Department, all programs are fully funded.

Included in this Budget Package are the proposed Board Resolution to adopt and approve the FY 2020-21 Budget, detailed revenue and expenses, Capital Improvement Plan with Project explanations and justifications, Non-CIP expenses, updated Reserve Policy and projected Cash Flow that includes proposed future rate increases. I would personally like to thank the BWD staff and Board for their hard work and dedication displayed throughout the current Fiscal Year.

Sincerely

Geoff Poole
General Manager



BORREGO WATER DISTRICT

5/29/20

Geoff Poole
General Manager
Borrego Water District
806 Palm Canyon Drive
Borrego Springs, CA 92004

Mr. Poole:

I have reviewed the proposed Capital Improvement Projects (CIP) for the next eight years and concur that the projects identified in the schedule are the most pressing physical infrastructure needs of the District at this time. The estimated costs (in 2020 dollars) of these improvements are reasonable for planning purposes.

The projects and short-lived assets expenses contained in the FY 2021 CIP have been organized to address the dynamics of the District's operations, minimize economic impacts, maintain the District's financial stability and enable the District to supply dependable water and wastewater services for its customers.

If you have any questions please contact me.

Regards,

David Dale, PE, PLS

CAPITAL IMPROVEMENT PROJECTS(Rev 10-7-21)		FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	TOT 2020-29
<i>CIP Numbers Correspond to Descriptions in Appendix A</i>											
CASH RESERVE FUNDED WATER PROJECTS											
Water Projects											
1	Bending Elbow Pipeline Project		\$ 380,000								\$ 380,000
2	El Tejon Road Pipeline Project		\$ 140,000								\$ 140,000
3	Flying H Road Pipeline Project			\$ 137,500							\$ 137,500
3A	Walking H/Double O Road Pipeline Project		\$ 200,000								\$ 200,000
4	ID-5 Well VFD				\$ 150,000						\$ 150,000
5	Replace and upgrade Booster Pump Station 5				\$ 100,000						\$ 100,000
6	SCADA replacement	\$ 100,000									\$ 100,000
7	Facilities Maint - Office	\$ 15,000	\$ 20,000								\$ 35,000
29b	Water Treatment Facility (phase 2)									\$ 250,000	\$ 250,000
13	Replace Twin Tanks	\$ 630,000									\$ 630,000
8	Program Engineering/Construction Management Consulting	\$ 25,000	\$ 40,000	\$ 41,200	\$ 42,436	\$ 43,709	\$ 45,020	\$ 46,371	\$ 47,762	\$ 49,195	\$ 380,693
9	Emergency System repairs	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 540,000
SUBTOTAL WATER CASH RESERVE PROJECTS		\$ 830,000	\$ 840,000	\$ 238,700	\$352,436	\$103,709	\$ 105,020	\$ 106,371	\$107,762	\$359,195	\$ 3,043,193
Sewer Projects											
10	Manhole Replacements/Refurbishment	\$ 43,000	\$ 45,150	\$ 47,408	\$ 49,778	\$ 52,267	\$ 54,880	\$ 57,624	\$ 60,505	\$ 63,531	\$ 474,142
11	Install Oxygen Injection System	\$ 20,000									\$ 20,000
12	Engineering/Construction Management Consulting	\$ 18,000	\$ 18,540	\$ 19,096	\$ 19,669	\$ 20,259	\$ 20,867	\$ 21,493	\$ 22,138	\$ 22,802	\$ 182,864
SUBTOTAL SEWER CASH RESERVE PROJECTS		\$ 81,000	\$ 63,690	\$ 66,504	\$ 69,447	\$ 72,526	\$ 75,747	\$ 79,117	\$ 82,643	\$ 86,332	\$ 677,006
TOTAL CASH WATER/SEWER CIP PROJECTS 2021 THROUGH 2029		\$ 911,000	\$ 903,690	\$ 305,204	\$421,883	\$176,235	\$ 180,767	\$ 185,488	\$190,405	\$445,527	\$ 3,720,200
Total 3 Year Water/Sewer Cash Reserve Projects:				\$ 2,119,894							
FACILITIES MAINTENANCE DETAIL											
<i>Stucco Building and Replace Failing Solar Cells</i>			\$ 20,000								
<i>Carpet/Paint Office and Install Energy Efficient Lighting</i>			\$ 15,000								
TOTAL CASH RESERVES CAPITAL IMPROVEMENTS PROGRAM		\$ 911,000	\$ 903,690	\$ 305,204	\$421,883	\$176,235	\$ 180,767	\$ 185,488	\$190,405	\$445,527	\$ 3,720,200
TOTAL CASH RESERVES SHORT LIVED ASSETS		\$ 305,000	\$ 570,000	\$ 25,000	\$ 37,000	\$ 10,000	\$ 235,000	\$ 138,000	\$110,000	\$200,000	\$ 1,630,000
TOTAL CASH RESERVES CIP AND SHORT LIVED ASSETS ANNUAL BUDGET		\$ 1,216,000	\$ 1,473,690	\$ 330,204	\$458,883	\$186,235	\$ 415,767	\$ 323,488	\$300,405	\$645,527	\$ 5,350,200
Total 3 Year Cash Reserve and Short Lived Assets:				\$ 3,019,894							
GRANT FUNDED CIP PROJECTS											
Water Projects											
14	Replace Wilcox Diesel Motor-(Prop 1 grant)		\$ 75,000								\$ 75,000
15	Replace Indianhead Reservoir-(Prop 1 grant)		\$ 435,000								\$ 435,000
16	Rams Hill #2, 1980 galv. 0.44 MG recoating -(Prop 1 grant)		\$ 616,000								\$ 616,000
Sewer Projects											
17	Plant-Grit removal at the headworks-(Prop 1 grant)	\$ 214,000									\$ 214,000
18	Clarifier Upgrade/Rehabilitation -(Prop 1 Grant)	\$ 240,000									\$ 240,000
TOTAL WATER/SEWER GRANT CIP PROJECTS		\$ 454,000	\$ 1,126,000								\$ 1,580,000
2018 BOND FUNDED CIP PROJECTS											
19	De Anza Pipeline Replacement Project	\$ 430,000									\$ 430,000
20	Replacement Well #2 (\$250,000 DWR Grant Approved for 20-21)	\$ 1,250,000									\$ 1,250,000
21	Fire Hydrant Replacement	\$ 540,000									\$ 540,000
22	18-inch Gravity Sewer Main along Borrego Springs Road	\$ 410,000									\$ 410,000
TOTAL 2018 BOND FUNDED CIP PROJECTS		\$ 2,630,000	\$ -								\$ 2,630,000
POTENTIAL FUTURE BOND FUNDED CIP PROJECTS											
Wells, Booster Stations, Reservoirs & Associated Transmission Mains											
23	Borrego Springs Road Pipeline Replacement					\$ 862,000					\$ 862,000
24	Sun Gold Pipeline Replacement					\$ 1,711,500					\$ 1,711,500
25	Deep Well Pipeline Replacement					\$ 2,225,000					\$ 2,225,000
26	West and East Star Road Pipeline Replacement					\$ 450,000					\$ 450,000
27	Country Club Tank Recoating, 1999 1.0 MG					\$ 250,000					\$ 250,000
28	Water Treatment Facility (phase 1)							\$ 900,000			\$ 900,000
29	Water Treatment Facility (phase 2)								\$ 650,000		\$ 650,000
30	New production well					\$ 2,000,000					\$ 2,000,000
31	Solar *Updated to convert approximately 85% of BWD Wells to Solar					\$ 1,200,000					\$ 1,200,000
32	Well 5 Transmission Main Project					\$ 1,215,000					\$ 1,215,000
33	Club Circle Water and Sewer Pipeline Replacement Project							\$ 2,286,000			\$ 2,286,000
TOTAL FUTURE BOND CIP PROJECTS		\$ -	\$ -	\$ -	\$ -	\$ 5,498,500	\$ 4,415,000	\$ 3,186,000	\$ 650,000	\$ -	\$ 13,749,500
Total 9 Year CIP (Including all proposed projects):											\$ 23,309,700

CIP-SHORT LIVED ASSETS	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
WELLS									
ID1-8, 125 Hp - Well out of service life		\$ 60,000							
ID-1 Well 12 pump and casing/cleaning						\$ 165,000			
ID-1 16		\$ 165,000						\$ 100,000	
ID4-11, 200 Hp	\$ 165,000						\$ 100,000		
ID4-18 - make a monitoring well		\$ 10,000							
Other Well Rehabilitation									\$ 100,000
TANKS									
Reservoir cleaning/video inspection	\$ 35,000			\$ 37,000			\$ 38,000		
BOOSTER/PRESSURE REDUCING STATIONS									
WASTEWATER TREATMENT FACILITY									
Clarifier Maintenance			\$ 25,000			\$ 25,000			\$ 25,000
RAS pumps		\$ 60,000							
Lift Station Pumps		\$ 10,000			\$ 10,000			\$ 10,000	
EQUIPMENT									
Emergency Generator Mobile Trailer	\$ 25,000								
Mini Excavator		\$ 100,000							
Valve Exercise Machine	\$ 80,000								
Track skid steer		\$ 125,000							
Pickup		\$ 40,000				\$ 45,000			\$ 75,000
TOTAL SHORT LIVED ASSETS REPLACEMENT PROGRAM	\$ 305,000	\$ 570,000	\$ 25,000	\$ 37,000	\$ 10,000	\$ 235,000	\$ 138,000	\$ 110,000	\$ 200,000

BORREGO WATER DISTRICT
POLICY STATEMENT

SUBJECT: CASH RESERVES POLICY

NO: 2011-05-01

ADOPTED: 2011-05-25 **AMENDED: 2019-05-28**
AMENDED: 2015-05-27 **AMENDED: 2020-06-09**
AMENDED: 2016-05-25
AMENDED: 2017-05-24
AMENDED: 2018-06-19

I. BACKGROUND AND INTRODUCTION

Reserves are needed because of financial risk.¹ Water and sewer operations are inherently risky, given the potential costs associated with repairing and replacing infrastructure necessary for maintaining 24x7 operations for supplying potable water and sewer and wastewater treatment services to the homes and businesses of Borrego Springs. In addition, water operations have risk associated with the volatility of revenue due to weather conditions that alter expectations of the amount of water sold. Reserves also assist in reducing rate shocks. Without them a water utility is exposed to rate instability. Rate instability increases the cost of borrowing, which drives up rates. In addition, reserves help the District improve its credit rating, which translates into lower interest rates on debt and thus lower rates for the District's customers. Also, bond or loan covenants often require a debt reserve or recommend a rate stabilization reserve.

Some utilities operate in a state of revenue deficiency, which means they either rely on existing reserves, skimp on funding reserves, or defer economically prudent repair and replacement (R&R) of capital infrastructure to the future where higher costs will be borne by future ratepayers to repair or replace infrastructure that may have failed catastrophically. Catastrophic failure is sometimes many times more expensive than prudent R&R before failure occurs. Becoming revenue sufficient means that a utility can count on receiving adequate revenues to fully fund utility operations, including debt service obligations, and some portion of capital improvements from rate revenues and reserves. Reserve accounts are a vital part of water and sewer and wastewater treatment system's financial health that lead to lower rates for the District's customers.

This Board believes that operating with revenue sufficiency is required, not only to remain creditworthy

¹ *Financial Risk* is defined as the sum(probability of an event occurring) x (the potential financial cost if that event occurs).

for future capital borrowing, but also to replace depleted reserves necessary to operate most economically. For these reasons, the District will maintain reserve funds so as to provide working capital for operations; funds required by law, ordinance and bond covenants; and necessary cash for the scheduled and unscheduled R&R of capital infrastructure; as well as funds set aside for meeting water supply requirements under the Sustainable Groundwater Management Act (SGMA) and the Borrego Springs Subbasin Adjudicated Judgement.

Reserves are also necessary for the District to stabilize rates due to normal revenue and cost uncertainties due to a variety of circumstances beyond the District's control, and to provide a prudent amount of insurance against economic downturns and a wide range of potential emergencies. The efficient and discrete management of these cash reserves, when combined with their appropriate replacement as they are drawn down from time-to-time add additional assurance that the current levels of service reliability and quality that the District's ratepayers have grown to expect will continue into the future.

This reserve policy is based on prudent financial management practices and those amounts required by legal, legislative, and contractual obligations that are critical to the financial health of the District. This policy defines required fund types for segregation purposes and funding levels that are based upon this District's unique operating, capital investment and financial plans. Both Restricted Reserves and Board designated Discretionary Reserves for the water enterprise and the sewer and wastewater enterprise will be funded by rates specific to those enterprises so as to meet California Proposition 218 requirements. That is, reserves specific to the needs of the District's water enterprise will be accumulated from water rates. Reserves specific to the needs of the District's sewer and wastewater enterprise will be funded from sewer and wastewater treatment rates.

II. RESTRICTED RESERVES. Restricted Reserves are established and utilized for narrowly defined purposes and are protected by law or covenant. The District's Restricted Reserves for its water and sewer and wastewater treatment enterprises are the following:

Debt Reserves. Reserves equal to the annual principle and interest (P&I) for debt obligations of the District shall be formally transferred and restricted in accordance with all legal requirements.

System Growth Reserves. These reserves generated from development charges for new meters as specified by the District's Policy for Water and Sewer Service to New Developments in effect, as amended from time to time, are used to offset capital projects or debt service related to new development in the District so that new development pays for itself rather than requiring a subsidy from existing ratepayers.

III. BOARD DISCRETIONARY RESERVES

Operating or Working Capital Reserves. The purpose of an operating reserve is to have cash on hand for the continued day-to-day operations of the utility. The Operating Reserve may be used for cash flow purposes to fund necessary expenses without the need to wait for billed revenue to come in as well as any unexpected increases in operating expenses. The amount of the Operating Reserve is commonly pegged to a certain percentage of the utility's total operating expenses. The set percentage is usually dictated by the utility's bill frequency; if customers are billed on a monthly basis, then revenue continuously comes in and the need to have a significant amount of funds within the Operating Reserve may not be necessary. Based on industry standards, the Operating Reserve, in the case of monthly billing, should equal around 90 days of expenses (3 months). If the billing frequency is less frequent or there are revenue receipt delays due to other contingencies, the Operating Reserve may be increased to account for the time delay of receiving cash on hand. The Operating or Working Capital Reserve shall be a minimum reserve of no less than 90 days of Operating and Maintenance (O&M) annual expenses, with an ideal Operating Reserve target of 120-days of annual O&M expenses.

Rate Covenant Stabilization Funds. These reserves include the Sewer Enterprise Rate Stabilization Fund and the Water Enterprise Rate Stabilization Fund. The purpose of these reserves are used to stabilize water and sewer revenues in order to maintain adequate debt coverage ratios required by the District's lenders. These reserve funds shall be maintained at level of thirty (30%) percent of the revenue generated from the commodity revenues for water services and thirty (30%) percent of the total revenues from sewer services.

Contingency Reserves. The purpose of this reserve is to accommodate unexpected operational changes, legislative impacts or other economic events that may affect the District's enterprise operations, which could not have been reasonably anticipated at the time the budget was prepared. The target level for this reserve is a minimum of five percent (5%) and a maximum of ten percent (10%) of the District's total enterprise-wide operating expenses. Generally, the level will be increased as the level of economic uncertainty increases.

Capital Repair and Replacement Reserve (Capital Reserve). A Capital Repair and Replacement Reserve is used primarily to meet and ensure the timely construction of necessary capital improvements without any delays due to cash flow concerns. Capital expenses can fluctuate quite a bit from year-to-year and the Capital Reserve may be leveraged to smooth out significant changes in expenses and; thereby, avoiding any unduly rate shocks to District customers. It may also serve as collateral and reassurance when awarding a construction contract. The Capital Reserve target is a reserve equal to the inflated value of a rolling average of the previous 5 years of the District's Capital Improvements Plan (CIP) for water infrastructure repair and replacement (R&R) and sewer and wastewater R&R.

Water Supply Purchase Reserve (Supply Reserve). The District will need to purchase Baseline Pumping Allocation (BPA) from Subbasin pumpers to meet its supply requirements established

under SGMA and the Borrego Springs Subbasin California Superior Court Adjudicated Judgment. The District hopes to use grants and/or bank debt to accomplish these purchases. However, BPA may become available in the market on the sellers' timeframe, not necessarily the District's. It would also potentially be financially imprudent for the District to wait until the last moment to purchase BPA before penalties are assessed by the Watermaster for exceeding the District's annual pumping allocation limit. For these reasons, the District shall establish a Supply Reserve of approximately \$1,500,000.

Risk Management Reserve (Emergency Reserve) – Catastrophic events may occur that require substantial investments to replace damaged assets. Some examples of catastrophic events include earthquakes, wind storms, floods, ransomware exploits or hacking that impacts the District's digital networks, health emergencies such as the current COVID-19 emergency, etc. Some of these catastrophic events may allow the utility to recover the cost of damages from FEMA or existing insurance policies. However, FEMA or insurance policy coverage reimbursements may take between 6 months to 2 or more years to recover. The utility should ensure adequate cash reserves exist to replace the assets in a timely fashion and to arrange short term financing options. The minimum reserve levels are sometimes combined with emergency funding from banks or bonding agencies. The percent of the minimum cash reserves are dependent on the replacement cost of capital assets in service and the level of risk of catastrophic type events. The Emergency Reserve policy will include 2% of the replacement cost of the District's capital assets, which is approximately \$62,500,00 as developed by its District engineer, or \$1,250,000.

IV. OTHER RESERVE FUNDS. The District's Board may establish other cash reserve funds for specific needs that are over and above the reserves noted above as may be necessary from time to time.

RESERVES TARGETS FOR FY 2021

DEBT	\$ 900,000
SYSTEM GROWTH	Accumulated developer's charges
WORKING CAPITAL	\$1,250,000
RATE COVENANT STABILIZATION FUNDS	\$1,200,000
CONTINGENCY	\$ 375,034
CAPITAL REPAIRS	\$1,235,184
SUPPLY RESERVE	\$1,500,000
EMERGENCY	<u>\$1,250,000</u>
 FY RESERVES TARGET	 <u>\$ 7,710,218</u>

BORREGO WATER DISTRICT

POLICY STATEMENT

SUBJECT: Risk Management Policy
ADOPTED: February 25, 2020

PURPOSE: To establish procedures to address the wide array of risks facing BWD.

GOALS: Provide clear procedures to be included in future annual budgets and provide direction to Staff on specific steps to take.

POLICY: The Policy of the Board of Directors of the Borrego Water District with regard to Risk Management is as follows:

AIR QUALITY

POLICY

Participate and Support Ongoing Air Quality Monitoring Activities.

PROCEDURES

1. Remain in Contact with UCI and its Consultants to confirm Air Quality Monitoring is ongoing and in compliance with contractual obligations.
2. Provide Logistical Assistance, as needed to UCI and its Consultants for equipment repair and similar operational activities.
3. Receive periodic updates from the Consultant to report the results of the Monitoring.

FUNDING: Consult with State, County and other Organizations to determine if future funding sources exist.

CYBER SECURITY

POLICY

Operate and maintain BWD Computer systems for maximum protection from internal and external threats.

PROCEDURES

1. Understand the Assets
 - a. Perform Asset Inventory, Physical Inspection and Create Database. Identify assets through an annual physical inspection for prioritizing cyber defense including data, processes, personnel and supporting infrastructure and dependencies to other systems (Asset Inventory). The Asset Inventory should include all components on the IT and OT networks and in the field, including third party and legacy equipment. Details should include, but not be limited to; asset user, location, device type, model number, device name, hardware firmware and software

versions, patch levels, device configurations, active services, protocols, network addresses, asset value and criticality. Furthermore, an asset inventory is not a singular task, but an ongoing process.

- b. Inspect for Unauthorized Assets: While conducting the Asset Inventory, perform an inventory to identify equipment that does not belong, such as a rogue wireless access points or other unapproved devices or connections. Inventories also illuminate processes and procedures that could enable the detection of unauthorized configuration changes or other anomalies within the environment.
 - c. Security of Asset Inventory Information: In the same way asset inventory and network diagram documentation are of paramount importance to the asset owner, they are also very attractive to an adversary. Hence, this information needs to be as rigorously protected as the ICS system itself.
2. Understand Risks
- a. Assess Risks: Risk assessments are instrumental in identifying security gaps and vulnerabilities. They are vital to prioritizing the application of controls and countermeasures to protect the organization. The goal of a risk assessment is to identify and prioritize risk based on the likelihood that a threat or vulnerability could adversely impact an organization.
 - b. Restrictive Procedures: Only dedicated and properly secured devices should be permitted within the control system environment, and each one should be clearly marked as such. In the event one is installed and then no longer needed, connections must be disabled immediately.
 - c. Physical Security: Non-technical, physical barriers, like fences, barricades, gates, guards and locked doors/cabinets with alarmed doors/windows should be used to establish a security defense around the perimeter of buildings or rooms containing IT equipment. Utilize off site storage of programs and back up files.
 - d. Enforce User Access Controls: Provide control system access only to those individuals who are authorized to have it.
3. Understand External Threats
- a. Third-Party Testing: On a quarterly basis, third-party, independent Consultants shall be used to evaluate BWDs cyber security systems thru an External Vulnerability Scan, External Pen Test and Internal Vulnerability Scan.
 - b. Cyber-security Insurance: Participate in Cyber Insurance programs to assist with recovery in the event of a loss.

RAMS HILL FLOOD CONTROL FACILITY

POLICY

Ensure facility meets current standards, is properly maintained and BWD ratepayers are insulated from any potential losses.

PROCEDURES

1. Determine if Facility meets current standards.
2. Confirm as-built conditions are reflective of design and construction standards required for the Facility.
3. Inspect by a Registered Engineer at least once every three years or following a significant rain event. BWD staff will inspect the Facility at least once per quarter and during or following a significant rain event.
4. Work with Insurance carrier to provide adequate protection from losses, if one it occurs.

GROUNDWATER ELEVATION AND WATER QUALITY MONITORING

POLICY

Ensure facility meets current standards, is properly maintained and BWD ratepayers are insulated from any potential losses.

PROCEDURES

1. Determine if Facility meets current standards.
2. Confirm as-built conditions are reflective of the design and construction standards required for the Facility.
3. Inspected by a Registered Engineer at least once every three years or following a significant rain event. BWD staff will inspect the Facility at least once per quarter and during or following a significant rain event.
4. Work with Insurance carrier to provide adequate protection from losses, if one it occurs.

	6/11/2019	11/24/2020
BWD	ADOPTED	REVISED
PROJECTED BUDGET	BUDGET	BUDGET
2020-2021	<u>2019-2020</u>	<u>2020-2021</u>
PROFESSIONAL SERVICES DETAIL		
OPERATIONS & MAINTENANCE		
Tax Accounting (Taussig)	3,000	3,000
Administrative Services (ADP)	3,000	3,000
Audit Fees (Leaf & Cole)	17,000	17,000
Computer billing (Accela/Parker)/Cyber Security	31,000	31,000
Financial/Technical Consulting (Raftelis rate study \$52,000)	80,000	80,000
Engineering (Dudek)	24,000	35,000
District Legal Services (BBK)	60,000	45,000
Air Quality Study		55,051
Grant Acquisitions (TRAC) 17170+17180	48,000	30,000
Testing/lab work (Babcock Lab/Water Quality Monitoring)	24,000	24,000
Regulatory Permit Fees (SWRB/DEH/Dig alerts/APCD)	<u>28,000</u>	<u>36,500</u>
TOTAL OPERATIONS & MAINTENANCE:	\$317,999	\$359,551
GROUNDWATER MANAGEMENT EXPENSE		
BPA Assessment		123,888
Stipulation Legal		185,000
Reimbursements (Stipulation Legal/Physical)		(97,800)
Interim Judgement Technical Support		45,000
Misc. & Contingency		20,000
BPA Transactions that meet CEQA requirements		<u>5,000</u>
TOTAL WATERMASTER:		\$281,088
CAPITAL IMPROVEMENT PROJECTS		
Management Consulting Water	30,000	25,000
Management Consulting Sewer	<u>20,000</u>	<u>18,000</u>
TOTAL CAPITAL IMPROVEMENT PROJECTS:	\$50,000	\$43,000

Borrego Water District - Financial Model												
Projected Operating Results												
Fiscal Year Ended June 30	Budget	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Operating Revenue												
Water Revenue - commodity	2,155,031	2,203,519	2,335,730	2,475,874	2,599,668	2,729,651	2,866,134	2,980,779	3,100,010	3,224,010	3,320,731	3,420,353
Water Revenue - base	1,267,495	1,281,699	1,358,601	1,440,117	1,512,123	1,587,729	1,667,115	1,733,800	1,803,152	1,875,278	1,931,536	1,989,483
Sewer service charges	632,122	590,854	614,488	639,068	658,240	677,987	698,327	719,276	740,855	763,080	785,973	809,552
Availability charges	240,054	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000
Property taxes and other	62,300	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000
Interest Income	96,000	76,000	76,000	46,440	53,408	64,890	73,318	84,583	96,989	104,744	110,492	116,662
Total Operating Revenues	\$4,453,002	\$4,387,072	\$4,619,819	\$4,836,498	\$5,058,438	\$5,295,257	\$5,539,893	\$5,753,438	\$5,976,006	\$6,202,113	\$6,383,732	\$6,571,049
O&M Expenses												
Water operations	1,420,616	1,408,096	1,450,339	1,493,849	1,538,665	1,584,824	1,632,369	1,681,340	1,731,780	1,783,734	1,837,246	1,892,363
Sewer operations	380,804	314,655	324,095	333,817	343,832	354,147	364,771	375,715	386,986	398,596	410,553	422,870
Pumping / Treatment	307,500	331,000	340,930	351,158	361,693	372,543	383,720	395,231	407,088	419,301	431,880	444,836
Subbasin Pumping Fees	-	123,888	130,082	136,587	143,416	150,587	158,116	166,022	174,323	183,039	192,191	201,800
Subbasin Management Cost(NET)	-	157,200	161,916	63,773	65,687	67,657	69,687	71,778	73,931	76,149	78,433	80,786
General and administrative	623,083	651,000	670,530	690,646	711,365	732,706	754,687	777,328	800,648	824,667	849,407	874,890
Total O&M Expenses	\$2,732,003	\$2,985,839	\$3,077,892	\$3,069,830	\$3,164,657	\$3,262,465	\$3,363,351	\$3,467,414	\$3,574,756	\$3,685,486	\$3,799,711	\$3,917,546
Total CIP Costs (not included in formula; see list)	\$2,299,607	\$4,680,000	\$2,219,690	\$330,204	\$458,883	\$5,684,735	\$4,830,767	\$5,409,488	\$950,405	\$645,527	\$357,684	\$2,000,000
Net Revenues	\$1,720,999	\$1,401,233	\$1,541,927	\$1,766,668	\$1,893,781	\$2,032,792	\$2,176,543	\$2,286,024	\$2,401,249	\$2,516,628	\$2,584,021	\$2,653,503
Debt Service Obligations												
2008 IPA / Compass Loan 2018A	\$248,184	\$250,970	\$247,555	244,039	250,255	246,204	246,968	242,547	241,960	246,054	-	-
2015 note / Compass Loan 2018B	140,755	140,755	140,755	140,755	140,755	140,755	-	-	-	-	-	-
2018 Bonds	499,406	499,510	354,967	\$354,871	\$354,508	\$354,858	\$354,902	\$354,640	\$354,072	\$354,922	\$354,319	\$353,954
Proposed Debt Service	-	-	-	-	-	448,200	448,200	448,200	695,400	695,400	1,254,990	1,515,777
Total Debt Service	\$888,345	\$891,235	\$743,276	\$739,665	\$745,518	\$1,190,017	\$1,050,070	\$1,045,387	\$1,291,432	\$1,296,376	\$1,609,309	\$1,869,730
Debt Service Coverage Ratio	1.94	1.57	2.07	2.39	2.54	1.71	2.07	2.19	1.86	1.94	1.61	1.42
Net Revenue Available for Reserves or CIP	\$832,654	\$509,998	\$798,651	\$1,027,003	\$1,148,262	\$842,776	\$1,126,473	\$1,240,637	\$1,109,818	\$1,220,252	\$974,711	\$783,773
Total CIP Annual Requirements	\$2,299,607	\$4,680,000	\$2,219,690	\$330,204	\$458,883	\$5,684,735	\$4,830,767	\$5,409,488	\$950,405	\$645,527	\$357,684	\$2,000,000
		TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
Bond Proceeds												
Fixed-Rate Bond Issue #1	\$0	\$0	\$0	\$0	\$11,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fixed-Rate Bond Issue #2	-	-	-	-	-	-	-	6,000,000	-	-	-	-
Fixed-Rate Bond Issue #3	-	-	-	-	-	-	-	-	-	-	-	-
SRF Financing	-	-	-	-	-	-	-	-	-	-	-	-
Total Bond Proceeds Available for CIP	\$0	\$0	\$0	\$0	\$11,000,000	\$0	\$0	\$6,000,000	\$0	\$0	\$0	\$0
Remaining Bond Proceeds	\$0	\$0	\$0	\$0	\$10,541,117	\$4,856,382	\$25,615	\$616,127	\$0	\$0	\$0	\$0
Funding Sources												
Bond Proceeds	-	-	-	-	458,883	5,684,735	4,830,767	5,409,488	616,127	-	-	-
Outside Funding Sources (Grants + Proceeds)	-	3,084,000	1,126,000	-	-	-	-	-	-	-	-	-
Pay-as-you-go Funding	2,299,607	1,596,000	1,093,690	330,204	-	-	-	-	334,278	645,527	357,684	2,000,000
Total Funding Sources	\$2,299,607	\$4,680,000	\$2,219,690	\$330,204	\$458,883	\$5,684,735	\$4,830,767	\$5,409,488	\$950,405	\$645,527	\$357,684	\$2,000,000
Check	-	-	-	-	-	-	-	-	-	-	-	-
Beginning Reserve Balances (after CIP)	\$5,140,398	\$6,025,000	\$4,938,998	\$4,643,959	\$5,340,758	\$6,489,020	\$7,331,796	\$8,458,269	\$9,698,906	\$10,474,446	\$11,049,171	\$11,666,198
Ending Reserve Balances (after CIP)	\$6,025,000	\$4,938,998	\$4,643,959	\$5,340,758	\$6,489,020	\$7,331,796	\$8,458,269	\$9,698,906	\$10,474,446	\$11,049,171	\$11,666,198	\$10,449,971
Days Cash Ratio	805	604	551	635	748	820	918	1,021	1,069	1,094	1,121	974
Reserve Policy Target Levels		\$5,968,068	\$6,922,965	\$7,286,259	\$7,268,153	\$7,236,542	\$7,783,325	\$7,894,048	\$8,615,398	\$8,825,752	\$8,942,751	\$7,959,472

Grants Received in FYE 2020

FUNDING ENTITY	PROJECT	Amount
DWR	Prop 1 Grant	\$267,602.50
Borrego Valley Endowment	Air Quality Study	\$ 21,775.50

Current/Active/Pending Grant Applications

PROJECT	FUNDING ENTITY	VALUE	TIMING	STATUS
UCI Air Quality Monitoring System	San Diego Foundation	\$167,995 (4 years)	Awards Fall 2020	Application Submitted w/BVEF; not awarded
WWTP Upgrade	CA Clean Water Grants	\$478,000	Award expected in 2020	Agreements in preparation now
Water Storage Tank Replacement (Twin, Rams Hill 2, Indian Head)	CA Drinking Water Grants	\$1,897,100	Waterboards staff in final review; Environmental, Cultural Resources, and other supporting documents complete	Application Pending
Wilcox Well Diesel Engine Replacement	CA Drinking Water Grants	\$86,500	Concurrent with Water Tank Replacement	Application Pending
Wilcox Well Engine Replacement with Electric Motor	San Diego-APCD	\$170,000 (estimated)	Carl Moyer Grant Program— Application open July/August 2020	Must be coordinated with Drinking Water Staff
Coyote Creek Watershed Acquisition and Restoration	CADFW- Prop 1 Restoration Grant	\$-- ** undetermined at this time	Restoration Grants expected to open September/October 2020	
Solar Power Commission for Selected Wells (GP?)				
Watershed Coordination Program*	CA Department of Conservation	\$ -- Unknown at this time	Unknown at this time— comment period closes 4/30/20	Applications not currently open

* The grants are being offered for watershed coordinators in regions impacted by SGMA. Coordinators will work with local groundwater sustainability agencies, landowners, and local governments to identify and broader statewide goals of biodiversity and climate resiliency.

**The cost is best expressed on a per acre basis. Estimate a per acre restoration cost in the range of \$20,000-\$35,000. This per acre value would include land acquisition, planning, design, construction, interim maintenance, monitoring, and reporting, and non-wasting endowment for long term management. Some costs that are variable and/or not included in this range could include the level of grading, grade structures to stabilize floodplain areas, conservation easements, and long-term management plans and agreements.

RESOLUTION NO. 2020-06-01

RESOLUTION OF THE BOARD OF DIRECTORS OF THE BORREGO WATER DISTRICT APPROVING THE OPERATIONS, MAINTENANCE, CAPITAL IMPROVEMENTS AND GROUNDWATER MANAGEMENT BUDGETS AND BOARD DESIGNATED RESERVES FUND POLICY FOR FISCAL YEAR 2020-2021

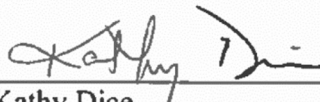
WHEREAS, the Board of Directors has reviewed and considered the Budget as presented for Fiscal Year 2020-2021 hereinafter referred to as the "Budget" which is attached hereto as Exhibit A and incorporated by reference, and

WHEREAS, the Budget provides a comprehensive plan of financial operations for the District including an estimate of revenues and the anticipated requirements for expenditures, appropriations, and reserves for the forthcoming fiscal year, and

WHEREAS, the Budget establishes the basis for incurring liability and making expenditures on behalf of the District.


NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Borrego Water District, that the Budget and each and every part thereof, is hereby approved and adopted for the Fiscal Year 2020-2021.

PASSED, ADOPTED AND APPROVED at a regular meeting of the Board of Directors of the Borrego Water District held on June 9, 2020.



Kathy Dice
President of the Board of Directors
Of Borrego Water District

ATTEST:



Dave Duncan
Secretary/Treasurer of the Board of Directors
Of Borrego Water District

RESOLUTION NO. 2020-06-02

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
BORREGO WATER DISTRICT ESTABLISHING WATER AND
SEWER SERVICE RATES FOR BEGINNING OF FY 2021**

WHEREAS, the Borrego Water District is a California Water District established pursuant to Section 34000 et seq. of the California Water Code; and

WHEREAS, on June 9, 2016, the Board held a duly noticed public hearing in accordance with the provisions of Article XIID of the California Constitution (Proposition 218), received oral and written testimony, and having determined that there was no majority protest, approved a schedule of water and sewer rates for a five year period beginning with FY 2017 and ending with FY 2021; and

WHEREAS, the Board adopted a rate schedule in June of 2016, which set forth the maximum Proposition 218 approved rates effective July 1 of each fiscal year including July 1, 2020; and

WHEREAS, the Board held a public meeting to discuss the budget and rates for FY 2021 at its June 9, 2020 Board Meeting; and

WHEREAS, the Board has determined that the District's customers are presently facing financial challenges due to the COVID-19 pandemic; and

WHEREAS, the Board has determined at this time that it is not absolutely necessary to increase rates up to the fully authorized amount for FY 2021; and

WHEREAS, the Board approved the budget and rates beginning July 1, 2020 at its June 9, 2020 Meeting.

NOW THEREFORE, the Board of Directors of the Borrego Water District does hereby resolve, determine and order as follows:

The Board finds that the adoption of the rates and charges set forth herein is necessary and reasonable to fund the administration, operation, maintenance and capital improvements of the Borrego Water District's water and sewer system.

Based on this finding, the Board determines that the adoption of the rates and charges established by this Resolution are exempt from the requirements of the California Environmental Quality Act pursuant to section 21080(b)(8) of the Public Resource Code and section 15273(a) of the State CEQA Guidelines.

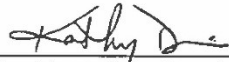
The Board hereby adopts the rates and charges for each separate rate classification for each separate service area as set forth in Exhibit A attached to this Resolution. The current rates and charges set forth for FY 2020 shall remain effective as of July 1, 2020.

However, the Board reserves the right to increase the rates that were approved under the 2016 Proposition 218 for FY 2021 at any time up to the maximum amount previously authorized for FY 2021.

All resolutions or administrative actions by the Board, or parts thereof, which are inconsistent with any provision of this Resolution, are hereby superseded, to the extent of such inconsistency. Any rates or fees associated with water or sewer service that are not addressed in this Resolution or Exhibit A shall remain in full force and effect as previously adopted by the Board.


In any section, subsection, clause or phrase in this Resolution or the attached Exhibits is for any reason held to be invalid; the validity of the remainder of the Resolution or Exhibits shall not be affected thereby.

PASSED, ADOPTED AND APPROVED at a special meeting of the Board of Directors of the Borrego Water District held on 9th day of June 2020.



President of the Board of Directors
Of Borrego Water District

ATTEST:



Secretary/Treasurer of the Board of Directors
Of Borrego Water District

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN DIEGO)

I, Dave Duncan, Secretary of the Board of Directors of the Borrego Water District, do hereby certify that the foregoing resolution was duly adopted by the Board of Directors of said District at a regular board meeting held on the 9th day of June, 2020 and that it was so adopted by the following vote:

AYES: DIRECTORS:
NOES: DIRECTORS:
ABSENT: DIRECTORS:
ABSTAIN: DIRECTORS



Secretary of the Board of Directors of Borrego
Water District

STATE OF CALIFORNIA)
) ss.
COUNTY OF SAN DIEGO)

I, Dave Duncan, Secretary of the Board of Directors of the Borrego Water District, do hereby certify that the above and foregoing is a full, true and correct copy of RESOLUTION NO. 2020-06-02, of said Board, and that the same has not been amended or repealed.

Dated:



Secretary of the Board of Directors of Borrego Water
District

EXHIBIT A - FY 2020 and FY 2021 PROPOSITION 218 APPROVED RATES

Water Rates

Monthly Readiness to Serve Charge

Meter Size	FY 2020 Current	FY 2021 Approved
3/4"	41.57	44.07
1"	53.93	57.17
1 1/2"	84.82	89.91
2"	121.87	129.19
3"	220.72	233.97
4"	331.93	351.85
6"	640.82	679.27

Usage Charge Based on HCF Consumption

Residential Tier 1 Usage	3.78	4.01
Residential Tier 2 Usage	4.16	4.41
Non-Residential Usage	4.00	4.24

Sewer Rates

	FY 2020 Current	FY 2021 Approved
Sewer Area 1	43.62	45.37
Sewer Area 5	50.73	52.76
TCS User	50.73	52.76
TCS Holder	27.85	28.97
BSR Readiness to Serve	27.85	28.97
BSR Usage	2.05	2.13

BELOW IS AN EXCERPT FROM THE MINUTES OF THE NOVEMBER 24, 2020 BOARD OF DIRECTORS MEETING, APPROVED 12/22/2020, ESTABLISHING WATER AND SEWER RATE INCREASE SCHEDULE FOR FISCAL YEAR 2021.

**Borrego Water District Board of Directors
MINUTES
Regular Meeting
November 24, 2020 @ 9:00 a.m.
806 Palm Canyon Drive
Borrego Springs, CA 92004**

B. Revisions for FY 2020-21 Budget and Capital Improvement Plan and Water and Sewer Rate Increases Effective January 1, 2021: Jessica Clabaugh referred to the Board's action earlier this year to defer the rate increases (six percent for water and four percent for sewer) approved in 2016 under Proposition 218. She explained adjusted expenses in the 20-21 budget, including the WMB BPA and legal expenses. Changes to the CIP approved in October were also included, and she changed from cash basis to accrual per Director Brecht's request. Director Brecht noted the addition of \$11,500 for air quality monitoring, just approved.

Ms. Clabaugh explained the four alternate scenarios for implementing the deferred rate increase. (1) No rate increase; (2) one rate increase for the full amount; (3) two equal rate increases, January 1 and April 1; (4) incremental increases each month until the six/four percent increases are attained. *MSC: Duncan/Brecht approving two equal rate increases, January 1 and April 1. The motion passed by unanimous roll call vote of those present.* Director Brecht requested a draft budget package for Board approval with changes, which will then be submitted to the bank.

APPENDIX A: CIP PROJECT SUMMARIES

DATE: 6/09/20

TO: Board of Directors BWD

FROM: David Dale, BWD District Engineer & Geoff Poole, General Manager

Re: Borrego Water District – 2020-28 CIP Project Summary and Narratives

The following table shows the summary of the 2020-2028 projects. The CIP projects are described in detail on the following pages.

Overall Program Engineering/Planning

CIP Comparison Spreadsheet

8/20/2020

Description	Water Lines by Contractor
Water Pipeline Replacement Program	\$ 8,601,000
Water Treatment Facilities	\$ 1,800,000
Emergency Water Line Repairs	\$ 540,000
Fire Hydrant Replacement	\$ 540,000
Booster Pump Station	\$ 100,000
VFD Replacement	\$ 150,000
CIP Engineering/Construction Management	\$ 513,558
Water Storage Tanks	\$ 2,006,000
Production Wells	\$ 3,250,000
Wastewater Treatment Facility	\$ 454,000
Sewer Line Replacement	\$ 1,186,000
Manhole Rehab/Replacement	\$ 474,142
Wastewater Other	\$ 510,000
SCADA	\$ 100,000
Solar Project	\$ 1,200,000
Facilities	\$ 35,000
Short Lived Assets	\$ 1,960,000

TOTAL PROPOSED 9-YEAR CIP

\$ 23,419,700

CIP PROJECTS 2020-2028 NARRATIVES

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CIP ITEM No. 1-3: Pipeline Replacement Projects

A. Project Description / Justification

The District's water distribution system is aging. Some parts of the distribution system were installed in the 1960's and are starting to reach their life expectancy. The pressure in the system is over 100psi in many areas. Each year there are water pipe breaks that the District repairs. The CIP has included these costs as routine repairs each year. The District's water distribution system was piecemealed together over time as the District took over smaller Districts in the area. The smaller pipelines were interconnected in partial measures. The District has identified three pipeline replacement projects that should be implemented for a more dependable system. The water pipe lines have service laterals that would be replaced to the property lines.

B. Project Design / Process Flow:

These projects will be designed by a professional engineer in the State of California. After design is complete, the projects will be put out to bid. The lowest responsible bidder will be awarded the project. These pipelines are in need of replacement within the next three years.

C. Cost Estimate

Estimates were derived using pipeline lengths and cost per unit length. Not enough information is available to do a detailed analysis at this time.

Bending Elbow Pipeline Project	\$170,000
El Tejon Road Pipeline Project	\$140,000
Flying H Road Pipeline Project	\$137,500
Total: \$447,500	

D. Project Estimated Timeline:

Bending Elbow Pipeline Project	FY 2020-21
El Tejon Road Pipeline Project	FY 2021-22
Flying H Road Pipeline Project	FY 2022-23

E. Impacts of Deferral:

Potential devastating water pipeline breaks; disruption in water service for prolonged periods; unreliable water service. The projects should be completed as shown in the above timeline due to the frequency of water pipeline breaks which cause lack of service to the District's customers.

CIP ITEM No.4 – 9 and 11 & 15: ID-5 Variable Frequency Drive Replacement, Booster Pump Station 5 Upgrade, SCADA system Replacement, Facilities Maintenance and Engineering/Construction Management Consulting

A. Project Description / Reasons for Capital Expense

CIP #4: Budget \$150,000 – ID-5 VFD Replacement

The variable frequency drive (VFD) is a controller that monitors the pressure in the system and changes the speed of the pumps to maintain a steady pressure. It is a high-powered computer system that drives the electric motor by varying the frequency and voltage supplied to the motor, thus adjusting the speed of the motor of the pump. VFDs have a specified life span, and the technology of the VFDs increases each year. VFDs usually don't do well in high heat and dust situations. Therefore, the District is planning on replacing the VFD at ID-5 well in FY 23-24.

CIP #5: Budget \$100,000 – Replace and Upgrade Booster Pump Station 5

Booster Pump Station 5 pumps water to the Indian Head Tank. If Well 18 is inoperative, Booster Pump Station is used. It will need to be upgraded for capacity in the future.

CIP #6 - Budget \$100,000 – SCADA System Replacement

The existing SCADA system is outdated is inoperative and needs to be replaced. The heat had damaged the system, radios, etc. Some of the system is running on "hand" (manual). Includes firmware, hardware, antennas, and software.

CIP #7 & 8: Budget \$35,000 - Facilities Maintenance – Office Repairs

The office carpet is beyond its useful life and should be replaced. This is scheduled for FY 20-21. The stucco on the outside of the building requires repairs. This is scheduled for FY 21-22.

CIP #9: Water Treatment Facility (Phase II)

See CIP item #32 for description. This project is expected to be paid partially by Bonds with the remainder paid from Cash Reserves.

CIP #11 and #15: Budget \$556,557 (average \$70.820/year)– Program Engineering/Construction Management Consulting

This item is for Engineering and Construction Management for items identified in the CIP, both for water projects and wastewater projects. The cost for these items depends largely on the details of the projects.

B. Project Design/Flow

The District works with firms that provide the labor and materials. Quotes will be requested at the time of replacement.

CIP ITEM No. 10: Emergency Water Pipeline Repairs

A. Project Description / Reasons for Capital Expense

Budget \$425,000 (average \$47,222 per fiscal year)

The District's water distribution system is aging. Some parts of the distribution system were installed in the 1960's and are starting to reach their life expectancy. The pressure in the system is over 100psi in many areas. Each year there are water pipe breaks that the District repairs. The CIP has included these costs as routine repairs each year.

Emergency Water Repairs are common in older distribution systems.

B. Project Design/Flow

When a pipeline breaks, the District responds immediately to repair the leak. If the roadway is affected, the County sends an inspector to the project site.

C. Cost Estimate

The cost in the CIP is based on historical trends. It is estimated that the emergency water system repair costs will be reduced as water pipeline replacement projects are completed. The first year estimate is \$60,000, then as pipeline projects are completed the costs are diminished each year through FY 2024.

D. Timeline

The schedule for this item is based on whenever the pipelines break and deferral is not an option.

CIP ITEM No. 13: Sewer Main Repairs/Manhole Replacements/Refurbishments

A. Project Description / Reasons for Capital Expense

Budget: \$435,000 (Average \$43,000/year)

The District acquired Improvement District 5 (ID-5) in 2008. Club Circle is part of ID-5, and the infrastructure therein was installed in 1960's. The sewer collection system pipelines are composed of a clay material. The sewer main that runs from Yaqui Pass Road east/southeast through the Casa Del Zorro parallel to Borrego Springs Road should be video inspected and any deficiencies repaired. Manholes in this area have deteriorated in this area and should be rehabilitated or replaced as necessary.

B. Project Design/Flow

The designs for pipeline repairs will start with a topographic survey that will show the elevations of all the existing tops of manholes, inverts of existing sewer pipe, identify the type and size of pipe, other utilities, rights of ways, existing structures, etc. The design plan will show the locations, size and type of the new sewer pipelines and manholes. The existing sewer system will remain in service until the new sewer collection system is installed. As an alternative, the sewer pipelines may be slip lined, depending on the engineer's recommendations. Slip lining is used to repair leaks or restore structural stability to an existing pipeline. Slip lining is completed by installing a smaller, "carrier pipe" into a larger "host pipe", grouting the annular space between the two pipes, and sealing the ends. The most common material used to slip line an existing pipe is high-density polyethylene (HDPE), but fiberglass-reinforced pipe (FRP) and PVC are also common. Slip lining can be used to stop infiltration and restore structural integrity to an existing pipe. There are two methods used to install a slip line: continuous and segmental.

Continuous slip lining uses a long continuous pipe, such as HDPE, Fusible PVC, or Welded Steel Pipe, that are connected into continuous pieces of any length prior to installation. The continuous carrier pipe is pulled through the existing host pipe starting at an insertion pit and continuing to a receiving pit. Either the insertion pit, the receiving pit, or both can be manholes or other existing access points if the size and material of the new carrier pipe can maneuver the existing facilities.

Segmental slip lining is very similar to continuous slip lining. The difference is primarily based on the pipe material used as the new carrier pipe. When using any bell and spigot pipe such as FRP, PVC, HDPE or Spirally Welded Steel Pipe, the individual pieces of pipe are lowered into place, pushed together, and pushed along the existing pipe corridor. Using either method the annular space between the two pipes must be grouted. In the case of sanitary sewer lines, the service laterals must be reconnected via excavation.

C. Cost Estimate

A budget of \$435,000 (average of \$43,000/year) was allocated in the CIP for this project. Actual costs will depend on the type of rehabilitation or construction selected. The CIP shows expenses every other year for this item.

D. Project Timeline.

There are several areas within the collection system that need to be repaired. The District completed a video inspection of some of the system, which revealed sags, cracks and other issues within the system. Further investigation of the condition of the system is needed to prevent sewer collection system issues.

The projects are proposed to begin in FY 2020-21 and continue every other year. This is highly dependent on any issues that may present themselves as priority to keep the system functional.

E. Impact of Deferral:

Further investigative work is needed to determine the condition of the Casa Del Zorro pipelines and manholes.. Deferring this item could contribute to reduced service and possible failures in extreme situations.

CIP ITEM No. 14: Install Diffusers at the Sludge Holding Tank

A. Project Description / Reasons for Capital Expense

Budget \$100,000

An air diffuser or membrane diffuser is an aeration device typically in the shape of a disc, tube or plate, which is used to transfer air and with that oxygen into the sewage or industrial wastewater. Oxygen is required by microorganisms/bacteria residents in the water to break down the pollutants. Diffusers use either rubber membranes or ceramic elements typically and produce either fine or coarse bubbles.

The existing sludge holding tank needs diffusers to have adequate mixing and desired performance.

B. Project Design/Flow

The District will contact several vendors for pricing of the diffusers.

C. Cost Estimate

The cost estimate is \$100,000 to install the diffusers in the existing sludge holding tank.

D. Timeline

Due to operational issues, the diffusers should be installed FY 20-21.

CIP ITEM No. 16: Replace Twin Tanks

A. Project Description / Justification

The District contracted a dive inspection on February 2, 2017 to determine the condition of the interior of the tanks. The last inspection occurred October 14, 2014. Inspections occur approximately every three years. The inspection of the Indian Head Tank identified that the tank may be at the end of its useful life and requires replacement. BWD is working with the State of California to receive Grant funding for this expenditure.



Figure 1 - Location of the Twin Tanks

B. Project Design/Flow

A Preliminary Engineering Report has been completed. It is recommended that the (2) tanks with 220,000 gallons each (440,000 total) be replaced with (1) bolted steel tank with 500,000 gallons nominal storage capacity. It has the least cost and the shorter tank would have less aesthetic impact to the local desert park. A new altitude valve would be installed to prevent water from spilling over the tank overflow, as the tank would be located at a lower elevation (approximately 860 feet). The benefit of having the tanks at the higher elevations is that gravity supply into the distribution system provides constant pressures without the need for a Variable Frequency Drive (VFD) or emergency backup power at the tank locations. Please note that a geotechnical report will be necessary to determine if the concrete ringwall is necessary. The geotechnical report is out of the scope of this report.

C. Cost Estimate

ALTERNATIVE # 1B - REPLACE TANKS WITH (1) LARGER TANK					
Twin Tanks Replacement					
No.	Qua	Unit	Description	Unit Cost	Total Cost
1 Construction Cost					
1.1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$ 35,000.00	\$ 35,000
1.2	2	LS	Demolish existing bolted 220,000 gallon steel tank. Remove and dispose of the tank.	\$ 23,500.00	\$ 47,000
1.3	1	LS	Provide tank submittal, stamped and signed by a Registered Engineer in the State of California. Payment after acceptance.	\$ 2,500.00	\$ 3,500
1.4	1	LS	Survey Tank Location	\$ 2,500.00	\$ 2,500
1.5	125	CY	Prepare Tank Pad – Install new galvanized steel ring around the perimeter of the tank. Install 1-inch No. 4 Rock eight inches thick. Install ½" Fiber expansion joint material on top of the rock.	\$ 275.00	\$ 34,375
1.6	1	LS	Furnish and Install OSHA exterior locking ladder kit and railing around the roof hatch	\$ 7,500.00	\$ 7,500
1.7	1	LS	Install fusion powder coated bolted steel tank, nominal dimensions 16' high and 73' diameter. After installation, complete holiday testing of interior coating and repair all holidays to the satisfaction of the engineer.	\$ 344,214.00	\$ 344,214
1.8	1	LS	Install piping, valves, transition couplings, fittings, Tideflex valve, expansion joints, check valves, pipe supports, 10" flow meter (relocate existing), ductile iron risers, thrust blocks, anti-vortex hardware, and other appurtenances as necessary for a functional system and as shown on the plans. Connect to existing piping.	\$ 28,500.00	\$ 28,500
1.9	1	EA	Install Altitude Valve	\$ 12,000.00	\$ 12,000
1.10	1	LS	Hydrostatic Testing, VOC Testing, Wash-down and Cleaning of the interior, Disinfection, and Bacteriological Testing. Water provided by the District at no charge.	\$ 3,800.00	\$ 3,800
				Project Construction Cost:	\$ 518,389
				10% Contingency:	\$ 51,839
				Total Construction Cost:	\$ 570,228
2 Admin and Engineering					
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications (5%)	\$ 28,511	\$ 28,511
2.02	1	LS	Construction Management	\$ 25,000	\$ 25,000
				TOTAL PRELIMINARY PROJECT ESTIMATED COST	\$ 623,739

D. Timeline

This project should be completed as soon as possible. The District has identified extreme corrosion in the tanks. Catastrophic failure could result if the tanks are not replaced.

CIP ITEM No. 17: Replace Wilcox Diesel Motor

A. Project Description / Justification

Budget \$75,000

The District has received a Notice of Violation (number 225200) from the APCD on July 7, 2015. In the violation notice, the APCD indicated that the diesel engine must be replaced with an emissions compliant engine, the engine must be refitted with emissions equipment or the engine taken out of service. Due to the age of the engine it is not feasible to install aftermarket controls to meet the new emissions requirement. Therefore, the options include replacement or taking the well out of service (revoking the existing permit to operate). The Wilcox Well is considered an emergency source of water when the electric power is out of service, so it is a critical component of the water distribution system and must be kept online. The alternative to replace the engine is the most cost effective and environmentally friendly option.

The proposed project includes new equipment purchase, necessary construction permits of the APCD, removal of the existing diesel engine and installation of the new compliant engine.

The proposed project includes replacing the existing 80hp diesel engine with a Tier 4 emissions compliant for standby diesel engines. This is considered a green component due to the enhanced energy efficiency of the engine and near-zero emissions. Replacing the existing diesel engine is much more cost effective than to bring electric power to the site and install an electric engine. BWD is working with the State of California to receive Grant funding for this expenditure.

B. Project Design / Process Flow

On May 11, 2004, EPA signed the final rule introducing Tier 4 emission standards, which are phased-in over the period of 2008-2015. The Tier 4 standards require that emissions of PM and NOx be further reduced by about 90%. Such emission reductions can be achieved through the use of control technologies, including advanced exhaust gas after treatment.

The new diesel engine will comply with EPA Tier 4 Final and EU Stage IV emissions standards. It will employ Diesel Oxidation Catalyst (DOC) technology or Diesel Particulate Filters (DPF) to meet the Tier 4 Final/Stage IIIB requirement for near-zero Particulate Matter (PM) emissions. The Tier 4 regulation and later amendments for Engine power between 75hp and 175hp have numeric not-to exceed values for various pollutants and also include a number of provisions:

- *Smoke Opacity*—Existing Tier 2-3 smoke opacity standards and procedures continue to apply in some engines. Exempted from smoke emission standards are engines certified to PM emission standards at or below 0.07 g/kWh (because an engine of such low PM level has inherently low smoke emission).
- *Crankcase Ventilation*—The Tier 4 regulation does not require closed crankcase ventilation in nonroad engines. However, in engines with open crankcases, crankcase emissions must be measured and added to exhaust emissions in assessing compliance.

- *DEF Refill Interval*—For SCR-equipped nonroad diesel engines, a minimum DEF (urea solution) refill interval is defined as at least as long (in engine-hours) as the vehicle’s fuel capacity.
- *Emergency Operation*—In order to facilitate the use of certain nonroad engines in temporary emergency situations, the engines can be equipped with an AECD to override performance inducements related to the emission control system—for example, to allow engine operation without urea in the SCR system during an emergency. This flexibility is intended primarily for engines used in construction equipment and portable equipment used for temporary power generation and flood control.
- *ABT Program*—Similarly to earlier standards, the Tier 4 regulation includes such provisions as averaging, banking and trading of emission credits and FEL limits for emission averaging.

C. Cost Estimate:

Replace Wilcox Diesel Motor with APCD Compliant Motor					
No.	Qua	Unit	Description	Unit Cost	Total Cost
1	Construction Cost				
1.00	1	LS	Replace Wilcox Diesel Motor	\$ 65,000.00	\$ 65,000
				Project Construction Cost:	\$ 65,000
				10% Contingency:	\$ 6,500
				Total Construction Cost:	\$ 71,500
2	Admin and Engineering				
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications	\$	2,000
2.02	1	LS	Construction Management	\$	2,000
			TOTAL PRELIMINARY PROJECT ESTIMATED COST		\$ 75,500

D. Project Timeline.

APCD is requiring replacement of the motor to meet air quality standards. BWD staff has negotiated an agreement with APCD to defer enforcement until BWD receives State Grant proceeds are received, projected for mid-2018.

Planning Initiated: 2020-21
 Bid Project: 2020-21
 Construction: 2020-21

- E. Impact of Deferral: BWD was informed that APCD requirements mandate replacement of the motor. Deferral of this project creates the potential of further enforcement action by APCD.

CIP ITEM No. 18: Replace Indian Head Reservoir

A. Project Description / Justification

The District contracted a dive inspection on February 2, 2017 to determine the condition of the interior of the tanks. The last inspection occurred October 14, 2014. Inspections occur approximately every three years. The inspection of the Indian Head Tank identified that the tank may be at the end of its useful life and requires replacement. BWD is working with the State of California to receive Grant funding for this expenditure.

B. Project Design/Flow

The tank will be replaced with a single 220,000-gallon bolted steel tank. No change in capacity is proposed. The tank will be installed at the same location as the existing tank. The bolted steel tank will be approximately 38 feet in diameter and 24 feet high. The coating will be fusion or powder coated steel.

The estimated life of the tank is approximately 30 years if it is properly maintained. After completion of the tank, it will be filled with water. The water will be tested for Volatile Organic Compounds (VOC) and bacteria prior to putting the tank into service. No change in capacity is proposed.



Figure 4 - Location of Indianhead tank

C. Cost Estimate:

Indian Head Tank Replacement					
No.	Qua	Unit	Description	Unit Cost	Total Cost
1	Construction Cost				
1.1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$ 25,000.00	\$ 25,000
1.2	1	LS	Demolish existing bolted 220,000 gallon steel tank. Remove and dispose of the tank.	\$ 17,500.00	\$ 17,500
1.3	1	LS	Provide tank submittal, stamped and signed by a Registered Engineer in the State of California. Payment after acceptance.	\$ 2,500.00	\$ 3,500
1.4	1	LS	Survey Tank Locations	\$ 2,500.00	\$ 2,500
1.5	150	CY	Prepare Tank Pad – Install Class 2 Base 24 inches thick. Install ½” Fiber expansion joint material on top of the rock.	\$ 225.00	\$ 33,750
1.7	1	LS	Furnish and Install OSHA exterior locking ladder kit and railing around the roof hatch	\$ 7,500.00	\$ 7,500
1.8	1	LS	Install fusion powder coated bolted steel tank, nominal dimensions 16’ high and 50’ diameter. After installation, complete holiday testing of interior coating and repair all holidays to the satisfaction of the engineer.	\$ 135,000.00	\$ 135,000
1.9	1	LS	Install piping, valves, transition couplings, fittings, Tideflex valve, expansion joints, check valves, pipe supports, 10” flow meter (relocate existing), ductile iron risers, thrust blocks, anti-vortex hardware, and other appurtenances as necessary for a functional system and as shown on the plans. Connect to existing piping.	\$ 19,500.00	\$ 19,500
1.10	1	EA	Install Altitude Valve	\$ 12,000.00	\$ 12,000
1.11	1	LS	Hydrostatic Testing, VOC Testing, Wash-down and Cleaning of the interior, Disinfection, and Bacteriological Testing. Water provided by the District at no charge.	\$ 3,800.00	\$ 3,800
			Project Construction Cost:	\$	260,050
			10% Contingency:	\$	26,005
			Total Construction Cost:	\$	286,055
2	Admin and Engineering				
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications (7%)	\$	20,024
2.02	1	LS	Construction Management	\$	15,000
			TOTAL PRELIMINARY PROJECT ESTIMATED COST	\$	321,079

D. Project Estimated Timeline:

The extent of the corrosion in the tank requires replacement as soon as possible. The project would have started earlier but construction is delayed due to the time needed to complete the Grant Application.

Planning Initiated: 2020-21
 Bid Project: 2020-21
 Construction: 2020-21

E. Impact of Deferral

Observed corrosion in the Indian Head Tank has prompted BWD to recommend replacement instead of repair. Deferral of this Project leads to the potential for further degradation of the tank and possible failures.

CIP ITEM No. 19: Rams Hill #2 Tank Replacement

A. Project Description / Justification

Budget: \$616,000

The District contracted a dive inspection on October 19, 2016 to determine the condition of the interior of the tanks. The last inspection occurred in 2012. Inspections occur approximately every three years. The inspection of the Twin Tanks has identified areas inside the tank that require repair. BWD is working with the State of California to receive Grant funding for this expenditure.

Rams Hill #2 Tank Areas	
55'	Diameter
24'	Height
FT^2	Area
4147	interior walls
2376	Interior floor
2376	interior roof
38	Center Support
600	Rafters/etc.
9536	Total Interior
FT^2	Area
2376	exterior roof
4147	exterior shell
6523	Total Exterior
SF=square feet	

B. Project Design/Flow

It may be possible to rehabilitate the tank; however substantial steel repairs and replacement would be required. For purposes of comparison in this report, the costs of the steel repairs is only estimated because the tank would need to be drained, sandblasted fully inspected and an estimate from a licensed contractor obtained. The condition of the metal will not be known until sandblasting operations are complete. The costs of replacement of the tank and the rehabilitation of the tank are similar, so it is recommended to replace the tank in lieu of rehabilitation.

C. Cost Estimate:

Rams Hill Replacement					
No.	Qua	Unit	Description	Unit Cost	Total Cost
1 Construction Cost					
1.1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Insurance,	\$ 45,000.00	\$ 45,000
1.2	1	LS	Demolish existing bolted 440,000 gallon steel tank. Remove and dispose of the tank.	\$ 45,000.00	\$ 45,000
1.3	1	LS	Provide tank submittal, stamped and signed by a Registered Engineer in the State of California. Payment after acceptance.	\$ 2,500.00	\$ 2,500
1.4	120	CY	Prepare Tank Pad – Install new galvanized steel ring around the perimeter of the tank. Install 1-inch No. 4 Rock eight inches thick. Install ½” Fiber expansion joint material on top of the rock.	\$ 275.00	\$ 33,000
1.5	1	LS	Survey Tank Location	\$ 2,500.00	\$ 2,500
1.6	1	LS	Furnish and Install OSHA exterior locking ladder kit and railing around the roof hatch	\$ 7,500.00	\$ 7,500
1.7	1	LS	Install fusion powder coated bolted steel tank, nominal dimensions 16’ high and 73’ diameter (500,000 Gallon Nominal Capacity). After installation, complete holiday testing of interior coating and repair all holidays to the satisfaction of the engineer.	\$ 344,214.00	\$ 344,214
1.8	1	LS	Install piping, valves, transition couplings, fittings, Tideflex valve, expansion joints, check valves, pipe supports, 10’ flow meter (relocate existing), ductile iron risers, thrust blocks, anti-vortex hardware, and other appurtenances as necessary for a functional system and as shown on the plans. Connect to existing piping.	\$ 19,500.00	\$ 19,500
1.9	1	EA	Install Altitude Valve	\$ 12,000.00	\$ 12,000
1.10	1	LS	Hydrostatic Testing, VOC Testing, Wash-down and Cleaning of the interior, Disinfection, and Bacteriological Testing. Water provided by the District at no charge.	\$ 5,000.00	\$ 5,000
				Project Construction Cost:	\$ 516,214
				10% Contingency:	\$ 51,621
				Total Construction Cost:	\$ 567,835
2 Admin and Engineering					
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications (5%)	\$ 28,392	\$ 28,392
2.02	1	LS	Construction Management	\$ 25,000	\$ 25,000
				TOTAL PRELIMINARY PROJECT ESTIMATED COST	\$ 621,227

D. Project Timeline:

Observed corrosion in the tank has prompted BWD to proceed with re-coating as soon as possible. This project is also part of the ongoing State Grant process, which has delayed construction.

Project scheduled to be completed in FY 2020-21

E. Impact of Deferral

Observed corrosion in RH #2 has prompted BWD to recommend repairs. Deferral of this Project leads to the potential for further degradation of the tank and possible failures.

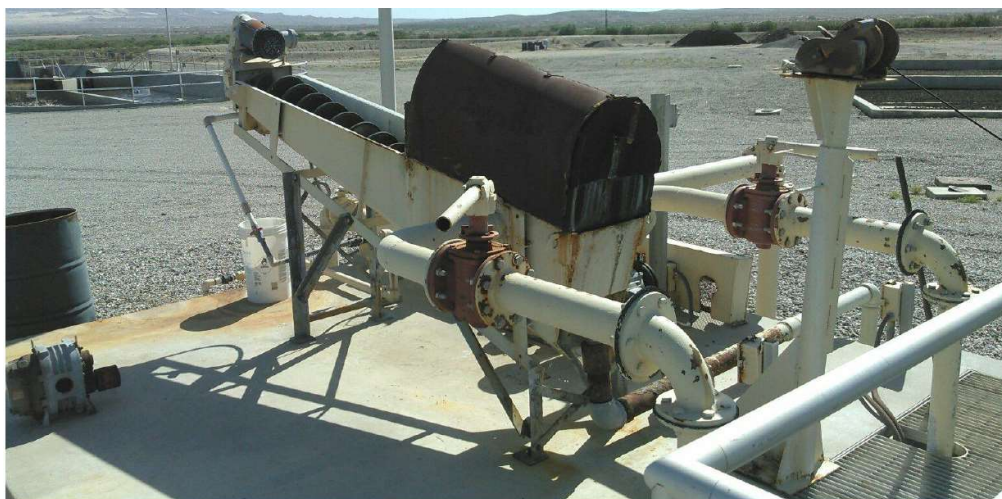
CIP ITEM No. 20: Plant Grit Removal at the Headworks

A. Project Description / Reasons for Capital Expense

Budget \$214,000

The wastewater treatment facility headworks consist of an influent flowmeter (Parshall Flume), a grit settling basin, positive displacement air blower system, and an “auger-style” grit separator. Recent improvements to the headworks include installation of a new ultrasonic flow meter unit, repair of the original bar screen, replacement of comminutor (Muffin Monster) unit, and replacement of the positive-displacement style blower unit that provides aeration to the aerobic sludge digester.

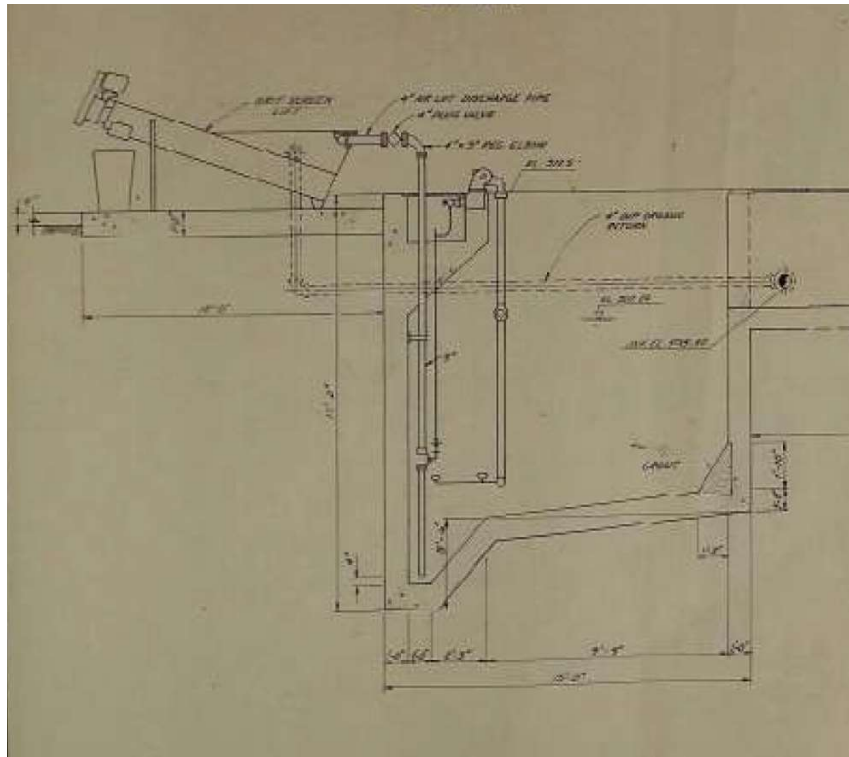
The existing “auger-style” grit separator housing and drive unit are extremely corroded (see photos below), do not adequately process settled grit, and leak raw influent wastewater onto the surface area. Furthermore, according to operations staff, the original air-lift system has not worked properly for quite some time, and should be replaced with a fluid pumping system capable of pumping settled grit and solids from the bottom of the grit chamber to the separator. Without a functional grit removal system, floating solids are transported through the WWTF facility. BWD is working with the State of California to receive Grant funding for this expenditure.



B. Project Design/Flow:

The headworks dimensions are 54” tall x 30” wide x 18 ½’ Long. The primary channel includes a Muffin Monster Grinder. There is also a by-pass stationary bar screen. The onsite

power is 240V 3 phase 60 Hz. The alternatives for this are to replace the existing failed grit separator, or no action. If nothing is done, solids and particulate matter can enter the WWTF, causing problems with the treatment process and possible effluent violations.



WWTF Headworks Drawing (profile view)

C. Cost Estimate:

The budget for this project is \$214,000

D. Project Timeline.

The grit auger is a critical component at the beginning of the waste water treatment process. The existing equipment is very close to the end of its useful life.

The project is scheduled to be completed in FY 2020-21

E. Impact of Deferral:

Replacement of the Grit Removal Auger will improve WWTP Plant operations and deferral of this improvement increases the risk of maintenance issues and/or equipment failure.

CIP ITEM No. 21: Clarifier Upgrade at WWTP

A. Project Description / Reasons for Capital Expense

Budget \$240,000

The water plant is comprised of (2) gravity settling basins (clarifiers) intended to separate and settle our stabilized solids (MLSS) from the secondary effluent stream. The clarifiers are equipped with a center-well structure, skimmer/scrapper arms, and main drive unit.

Deficiencies noted in this area: The exposed steel components in the clarifiers exhibit notable signs of corrosion and wear. Skimmer/scrapper arms should be replaced to ensure efficient collection and removal of settleable and floatable material from the effluent stream. The center-well structure and related piping should be sandblasted and recoated to extend service life, and the main drive units display significant signs of excess wear and should be completely replaced in order to ensure continued operation.



B. Cost Estimate: \$118,000

C. Project Timeline. Why is 2019 Proposed?

The clarifier is a critical component at the beginning of the waste water treatment process. The existing equipment is very close to the end of its useful life.

The project is scheduled to be completed in FY 2020-21

D. Impact of Deferral:

Replacement of the clarifier will improve WWTP Plant operations and deferral of this improvement increases the risk of maintenance issues and/or equipment failure

CIP ITEM No. 22: De Anza Pipeline Replacement Project

A. Project Description / Justification

Budget: \$430,000

The work shall include the procurement of materials and the A. installation of a new 6-inch diameter water main pipeline along De Anza Drive, Yaqui Road and Fairway Lane. The work also includes the tie-ins to the existing 6 inch water lines. The work also includes the installation of new fire hydrants along De Anza Drive and Fairway Lane.

B. Project Design / Process Flow:

The project was designed by Dynamic Consulting Engineers, Inc., and was put out to bid. Rove Engineering, Inc. was the low bidder on the project.

C. Cost Estimate:

The low bid is \$387,365 from Rove Engineering, Inc. Assuming 10% for contingencies (change orders), the budget has been set at \$430,000.

A. Project Estimated Timeline:

Rove Engineering, Inc. is set to start construction in September 2020 and be complete with the project by February 2021.

B. Impacts of Deferral:

Cannot be deferred since there is a contract in place already.

CIP ITEM No. 23: Replacement Well #2

D. Project Description / Justification

Budget: \$1,250,000

BWD has identified that a new well will need to be installed as a part of the 2018 Bond proceeds. Wells ID1-8, and ID1-10 cannot be rehabilitated again and falling groundwater levels are contributing to the problem.

E. Project Design / Process Flow:

Dudek prepared a report “Draft Working Technical Memorandum” dated June 16, 2017 that describes three separate Subbasin within the BWD service boundary. The report identifies that the Central Management Basin has the best chance for water that meets the requirements of California Code of Regulations (CCR) Title 17 and Title 22.

The BWD has already initiated preliminary review of potential new sources of supply in the Borrego Springs Subbasin and will further identify strategic sources of supply that meet Title 22 potable drinking water quality requirements.

Once a site has been selected, an exploration phase will commence. If the water quality and depth is acceptable, the land will be acquired for the wellsite and the well will be constructed to municipal standards.

F. Cost Estimate:

The well is estimated to cost \$1,250,000 to construct.

C. Project Estimated Timeline:

Due to the fact that certain BWD wells have reached the end of their useful life, it is imperative to investigate and construct the replacement well before any existing well fails. Recent award of State of California to BWD provides initial funding for the investigation, there it is time to begin the process.

Exploration and land acquisition for Replacement Well #1:	FY 2020-21
Construct Replacement Well #1:	FY 2020-21

D. Impacts of Deferral:

Construction of this well is needed before complete failure of certain wells in the distribution system to ensure maximum water availability flow, operations flexibility and emergency response for BWD Customers. Deferring installation of the well increases the likelihood experiencing these problems in the future.

CIP ITEM No. 24: Replacement of Fire Hydrants

A. Project Description / Justification

Budget: \$540,000

The District's water distribution system is aging. Some parts of the distribution system were installed in the 1960's and are starting to reach their life expectancy. The pressure in the system is over 100psi in many areas. Some fire hydrants have already been replaced, but there remains approximately 45 hydrants that still need to be replaced. These fire hydrants are substandard and beyond their useful life.

B. Project Design / Process Flow:

BWD Staff will replace the fire hydrants one at a time, including the valves from the laterals if necessary.

C. Cost Estimate:

The fire hydrants cost approximately \$12,000 each to replace. The replacement includes the laterals, valves, and risers. There are approximately 45 hydrants, so the total cost estimate is \$540,000.

E. Project Estimated Timeline: Why is the project proposed for FY 2020:

Due to the age of the hydrants, some are not functional and some are not standard. There is potential liability for the District if a fire hydrant fails or is unable to be used during a fire.

F. Impacts of Deferral:

Due to the age of the hydrants, some are not functional and some are not standard. There is potential liability for the District if a fire hydrant fails or is unable to be used during a fire.

CIP ITEM No. 25: Miscellaneous Sewer System Improvements

As part of BWD's 2018 Bond Issuance, \$500,000 was set aside for sewer system improvement projects. \$90,000 was spent in FYE 2020 on inspecting the Club Circle line to see if any repairs were necessary. Upon inspection, it was found that system repairs were not needed.

At the present time, BWD is considering various projects for which to apply the remaining \$410,000, including repairs in the oxygen injection system. Investigations are ongoing and the item will be revisited at the conclusion of the first quarter of FYE 2021.

CIP ITEM No. 26-29: Pipeline Replacement / Improvement Program

A. Project Description/ Reason for expense.

Water pipelines are out of sight and “out of mind” until there are breaks and water leaks. Many parts of the distribution system are approaching their useful life. Every year the District is proactive in replacing and installing new water pipelines in the distribution system. The District has identified and prioritized several sections of pipelines within the distribution system. They are the following:

Project
Borrego Springs Road Project
Sun Gold Pipeline Project
Deep Well Pipeline Project
West and East Star Road Project

B. Project Design/ Flow

The regularly scheduled water pipeline replacement program could be completed by in house District staff as they become available, or professionally designed, publically bid and constructed by a contractor.

C. Cost Estimate

Install new 10" C900 PVC on the west side of Borrego Springs Road
from Walking H Drive to Tilting T Drive
2150FT of 10" C900 PVC and 9 service laterals

Estimated total pipe length 2,150 feet and 9 service laterals
Estimated cost including pipe, valves, hydrants and labor \$175.00 a foot =
\$376,250

Install new 10" C900 PVC on the east side of Borrego Springs Road
from Tilting T Drive to Country Club Road
3600FT of 8" C900 PVC and 7 service laterals

Estimated total pipe length 3,600 feet and 7 service laterals

Estimated cost including pipe, valves, hydrants and labor \$175.00 a foot = \$630,000

SUN GOLD PIPELINE PROJECT

Replace all Distribution A/C pipelines in the Sun Gold area with C900 PVC

1160FT of 6" C900 PVC pipe on Falchion Drive and 8 service lateral lines
500FT of 6" C900 PVC pipe on Bartizon Drive and 3 service laterals
500FT of 6" C900 PVC pipe on Cuisse Lane and 5 service laterals
250FT of 6" C900 PVC pipe on Ballista Drive and 3 service laterals

Estimated total pipe length 2,400 feet and 19 service laterals
Estimated cost including pipe, valves, hydrants and labor \$150.00 a foot = \$361,500

1600FT of 6" C900 PVC pipe on Hauberk Drive and 12 service lateral lines
350FT of 6" C900 PVC pipe on Hauberk Court and 4 service laterals
1300FT of 6" C900 PVC pipe on Fenoval Drive and 15 service lateral lines

Estimated total pipe length 3,250 feet and 31 service laterals
Estimated cost including pipe, valves, hydrants and labor \$150.00 a foot = \$487,500

1600FT of 6" C900 PVC pipe on Trebuchet Drive and 14 service laterals
1250FT of 6" C900 PVC pipe on Velite Drive and 10 service laterals
750FT of 6" C900 PVC pipe on Quintain Drive and 2 service laterals

Estimated total pipe length 3,600 feet and 26 service laterals
Estimated cost including pipe, valves, hydrants and labor \$150.00 a foot = \$540,000

1150FT of 6" C900 PVC pipe on Arbalest Drive and 4 service laterals
400FT of 6" C900 PVC pipe on Mangonel Drive and no service laterals
600FT of 6" C900 PVC pipe on Onager Drive and 6 service laterals

Estimated total pipe length 2,150 feet and 10 service laterals
Estimated cost including pipe, valves, hydrants and labor \$125.00 a foot = \$268,750

DEEP WELL PIPELINE PROJECT

Replace all Distribution A/C pipelines in the Deep Well Area with C900 PVC

1550FT of 6" C900 PVC pipe on Anzio Drive and 9 service laterals
3700FT of 6" C900 PVC pipe on Sarasoto Drive an 18 service laterals
210FT of 6" C900 PVC pipe on Borica Court an 3 service laterals

Estimated total pipe length 5,460 feet and 30 service laterals
Estimated cost including pipe, valves, hydrants and labor \$125.00 a foot =
\$682,500

2700FT of 6" C900 PVC pipe on Sewanee Drive and 14 service laterals
380FT of 6" C900 PVC pipe on Owega Court no service laterals
1600FT of 6" C900 PVC pipe on Ynez Path and 8 service laterals

Estimated total pipe length 4,680 feet and 22 service laterals
Estimated cost including pipe, valves, hydrants and labor \$125.00 a foot =
\$585,000

2700FT of 6" C900 PVC pipe on Pecos Drive and 13 service laterals
600FT of 6" C900 PVC pipe on Utica Drive and 2 service laterals
300FT of 6" C900 PVC pipe on Neches Court and 5 service laterals
300FT of 6" C900 PVC pipe on Quanah Court and 5 service laterals
700FT of 6" C900 PVC pipe on Escuadro Drive and 2 service laterals

Estimated total pipe length 4,600 feet and 27 service laterals
Estimated cost including pipe, valves, hydrants and labor \$125.00 a foot =
\$575,000

2600FT of 6" C900 PVC pipe on Hopi Path and 7 service laterals
1750FT of 6" C900 PVC pipe on Zuni Trail and 17 service laterals

Estimated total pipe length 4,350 feet and 24 service laterals
Estimated cost including pipe, valves, hydrants and labor \$125.00 a foot =
\$543,750

WEST AND EAST STAR ROAD PROJECT

Replace Distribution A/C pipeline on West and East Star Road
4500FT of 6" C900 PVC and 26 service laterals

Estimated total pipe length 4500 feet and 26 service laterals
Estimated cost including pipe, valves, hydrants and labor \$100.00 a foot =
\$450,000

Total Estimated Cost for all Projects = \$5,947,750

D. Project Timeline

The CIP shows these projects starting in FY 2024-25 and finishing in FY 2028-29. The projects are needed to replace aging infrastructure, improve system redundancy and water flow.

CIP ITEM No. 30: Country Club Tank Rehabilitation

A. Project Description / Justification

Budget \$ 250,000

The Country Club Tank is located approximately 1-½ mile west of the intersection of Title T and Borrego Springs Road (S3). The tank has a capacity of 1.0 million gallons and is composed of coated steel. The California Department of Health Services requires the District to physically inspect the inside of the domestic water reservoirs every three years. This service is performed by a consultant that utilizes divers and provides a written report as well as a video. The tank was constructed approximately 17 years ago. The tank is in good condition currently, but it is anticipated that it will need to be recoated on a regular schedule in fiscal year 2024-25.

B. Project Design / Process Flow:

After the inspection report is delivered and the tank needs recoating, the District Engineer will prepare engineering documents and the project will be sent out for public bidding with Board approval.

C. Cost Estimate:

Without a recent dive inspection, an accurate cost estimate is difficult because the number of metal repairs necessary is unknown. Experience with past projects gives an approximate cost estimate of \$250,000 to recoat and repair the tank.

D. Project Estimated Timeline. Why is Project Proposed for 2023:

Based on experience, it is estimated that a recoating will be needed in 2023. The actual date of recoating will be determined following the periodic video inspections. Following is the estimated schedule based on this timeline:

Dive Inspection:	February 2023
Receive Dive Inspection Report:	March 2023
Engineering/design completion:	March 2023 – April 2023
Project Bidding:	April 2024 – May 2024
Repair Recoat Tank:	June 2024 – July 2024

E. Impacts of Deferral:

Following completion of planned inspections, the magnitude of the corrosion will be known and a plan to repair developed. Deferral of the necessary maintenance could lead to increased repair costs or the need for replacement of the Reservoir completely before the end of its useful life.

Item	Quan	Unit	Description	Unit Cost	Amount
1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Construction Sign, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$22,500	\$ 22,500
2	18,800	SF	Sandblast Complete Interior Including Columns, Rafters, Appurtenances, Exterior Roof Coatings to SSPC-SP 10. Remove and Legally Dispose of Spent Blast Material.	\$ 3.75	\$ 70,500
3	1	LS	Remove and replace metal components as necessary	\$ 3,500	\$ 3,500
3	18,800	SF	Recoat Interior Surfaces. This Item to be Considered Lump Sum Unless the Area is Shown to be Materially Different than shown.	\$ 5.10	\$ 95,880
4	1	LS	Coating Inspection and Testing	\$ 3,500	\$ 3,500
5	1	EA	Replace Manway Gasket	\$ 750	\$ 750
6	1	LS	Hydrostatic Testing, VOC Testing, Disinfection of Tank, Bacteriological Testing	\$ 3,800	\$ 3,800

Construction Subtotal: \$200,430

Contingency (10%): \$ 20,043

Subtotal Construction: \$220,473

Engineering/Contract Document Preparation \$ 20,000
\$

Construction Inspection: 9,527

Total Project Estimate: \$250,000



Country Club Tank Location

CIP ITEM No. 31 AND 32: Water Treatment Facility (Phase 1 and 2)

A. Project Description / Justification

Budget: \$1,785,000

The following are excerpts from “Draft Working Technical Memorandum” prepared by Dudek, written to the Borrego Water District dated June 16, 2017:

As a public water system, the BWD is regulated by the State Water Resources Control Board’s Department of Drinking Water. California regulations related to drinking water are contained within California Code of Regulations (CCR) Title 17 and Title 22. California drinking water MCLs that shall not be exceeded in the water supplied to the public are listed in CCR Title 22 Chapter 15. The BWD samples groundwater quality from water wells at intervals required by the DDW.

While none of the BWD’s wells currently exceed California drinking water MCLs, treatment alternatives for COCs are discussed herein to explore options in the event that groundwater quality were to become impaired. Non-treatment and treatment options to meet drinking water standards typically include blending, wellhead treatment, or supplementing the impaired source of supply.

The Borrego Springs Groundwater Subbasin of the Borrego Valley Groundwater Basin (BVGB) has been determined to be in overdraft. There is a potential risk associated with temporal changes in groundwater quality that may result in exceedances of California drinking water maximum contaminant levels (MCLs) in Borrego Water District (BWD) production wells due to the long-standing critical overdraft. Thus, it assesses current and

historical groundwater quality data and the inter-relationship between groundwater levels and groundwater quality. The main constituents of concern (COCs) are arsenic, nitrate, sulfate, fluoride, total dissolved solids (TDS), and radionuclides. Of primary concern is the potential for water quality degradation and the relative risk that the groundwater supply will not meet MCLs.

The USGS found that concentrations of TDS and nitrate exceed their respective water quality standard thresholds in portions of the upper aquifer of the Borrego Springs Groundwater Subbasin (for reference with depth the BVGB is comprised of three aquifers: upper, middle, and lower). The highest concentrations of both constituents were generally found in the northern portion of the Borrego Springs Groundwater Subbasin, and the concentration of TDS was found to increase as groundwater levels decline. Sulfate, another COC, was also found to increase in concentration as groundwater levels decline. In addition to nitrate, TDS, and sulfate, other potential COCs in the BVGB include arsenic and gross alpha radiation, though the latter appears to be confined to the Ocotillo Wells Groundwater Subbasin. Since the compilation of available groundwater quality data by the USGS in 2015, additional data have been collected by the BWD for its active production wells in 2016 and for seven private wells located in the South Management Area (SMA) of the Borrego Springs Groundwater Subbasin. This recent data indicates that arsenic concentrations exceed the California drinking water MCL of 10 micrograms per liter ($\mu\text{g/L}$) in portions of the lower aquifer in the SMA. Additionally, review of historical arsenic data for BWD wells located in the SMA indicates an increasing arsenic trend in well ID1-2, and a linear regression analysis indicates a good correlation of fit among arsenic concentration, groundwater production, and declining groundwater levels in well ID1-8. Based on the 2-year lag linear regression of groundwater production and arsenic data from well ID1-8, groundwater production in excess of 300 AFY at well ID1-8 is possible and further analysis is needed before conclusions can be reached. Thus, arsenic concentrations in the lower aquifer of the Borrego Springs Groundwater Subbasin are determined to be a primary COC. Because groundwater quality data for the Borrego Springs Groundwater Subbasin are limited, further data collection and evaluation is required to verify the predicted exceedance of the arsenic drinking water standards in well ID1-8 and potential for other wells in the Borrego Springs Groundwater Subbasin to exceed the arsenic drinking water standard or other COC.

B. Project Design / Process Flow:

Once it has been determined if a treatment process is necessary, an engineering report will be prepared indicating the best and most efficient method of treatment. The CIP breaks the treatment into phases. Environmental documents will be prepared and distributed. After approval, the project(s) will be sent out to public bidding and then constructed. The CIP shows these projects starting in FY 2022-23.

C. Cost Estimate:

Project costs are highly speculative at this time due to the fact that current water quality does not require treatment. Due to the falling groundwater table, this may change in the future with depth dependent water quality. The budget is \$1,785,000.

D. Project Estimated Timeline: Why is the project proposed for FY 2026 :

Since there is no immediate risk of water contamination in BWD Production wells, it is yet to be determined when and where future treatment will be necessary based on the factors outlined above. For planning purposes, it is assumed that treatment will be needed in FY 2026.

E. Impacts of Deferral:

It is risky to wait this long, but once contamination is realized, deferring the improvements is not an option. Fines, public backlash and other interventions from State regulators would occur if drinking water standards are not met.

CIP ITEM No. 33: New Production Well

G. Project Description / Justification

Budget: \$2,000,000

A new production well may need to be installed in the next five years. Wells ID1-8, and ID1-10 cannot be rehabilitated again and falling groundwater levels are contributing to the problem.

H. Project Design / Process Flow:

Dudek prepared a report “Draft Working Technical Memorandum” dated June 16, 2017 that describes three separate Subbasin within the BWD service boundary. The report identifies that the Central Management Basin has the best chance for water that meets the requirements of California Code of Regulations (CCR) Title 17 and Title 22.

The BWD has already initiated preliminary review of potential new sources of supply in the Borrego Springs Subbasin and will further identify strategic sources of supply that meet Title 22 potable drinking water quality requirements.

Once a site has been selected, an exploration phase will commence. If the water quality and depth is acceptable, the land will be acquired for the wellsite and the well will be constructed to municipal standards.

I. Cost Estimate:

The well is estimated to cost \$2,000,000 to construct.

G. Project Estimated Timeline: Why is the project proposed for FY 2025:

Due to the fact that certain BWD wells have reached the end of their useful life, it is imperative to investigate and construct the replacement well before any existing well fails. Recent award of State of California to BWD provides initial funding for the investigation, there it is time to begin the process.

Exploration and land acquisition for Replacement Well:	FY 2025-26
Construct Replacement Well #1:	FY 2025-26

H. Impacts of Deferral:

Construction of this well is needed before complete failure of certain wells in the distribution system to ensure maximum water availability flow, operations flexibility and emergency response for BWD Customers. Deferring installation of the well increases the likelihood experiencing these problems in the future.

CIP ITEM No. 34: Solar Project

A. Project Description / Justification

Budget: \$500,000

As electricity costs increase, solar generation through Photovoltaic cells becomes more efficient and cost savings increase. Borrego Springs has some of the best conditions for solar power generation in the country.

B. Project Design / Process Flow:

An engineering analysis will be prepared to determine the feasibility of the project on a cost/benefit basis for the next 25 years. If it is deemed appropriate with the relevant estimated savings, the BWD District Engineer will prepare plans and specifications for the project. The project will then go to public bidding and the lowest responsible bidder will be awarded a contract to construct the project.

C. Cost Estimate:

The well is estimated to cost \$500,000 to construct.

D. Project Estimated Timeline: Why is the project proposed for FY 2025:

This project will be reviewed if the District deems bonding to be appropriate to fund the CIP starting in FY 2025-26.

E. Impacts of Deferral:

For costs savings to be realized, the sooner this project is implemented the better.

APPENDIX B: FUTURE WATER SUPPLY PURCHASE

Description: Explanation and Description of \$1.9M Water Supply Purchase in FY2027

On January 30, 2020, pursuant to California Water Code (CWC) Sections 10733.6 and 10737.4, BWD submitted to the California Department of Water Resources (DWR) a proposed Stipulated Judgment (Judgement) for the Borrego Springs Groundwater Subbasin (Subbasin) including a Groundwater Management Plan (GMP), constituting a *Physical Solution* for DWR's review and approval to serve as an alternative to a Groundwater Sustainability Plan (GSP) for the Subbasin in compliance with the California 2014 Sustainable Groundwater Management Act (SGMA).

The pumpers of the Subbasin representing approximately 92% of annual Subbasin extractions agreed to a Settlement of water rights also applied to the California Superior Court (Court) for a Judgement. Until the Court approves the Judgement, the Subbasin pumpers have agreed to implement the *Physical Solution* under an interim Watermaster Board.

The objective of the Judgement is to assign Baseline Pumping Allocations (BPAs) to Subbasin pumpers that will be reduced on an annual basis to collectively not exceed the sustainable yield of the Subbasin by no later than 2040. The result of this means of achieving SGMA requirements is that BWD will be required to purchase BPAs from other Subbasin pumpers to meet the water demand needs of existing BWD customers. For this reason, BWD has budgeted approximately \$1,900,000 in FY 2027 to purchase additional permanent water supply and included this amount in its CIP capital need projections.