

BORREGO WATER DISTRICT

FISCAL YEAR 2019-2020

ANNUAL BUDGET

ADOPTED

May 28, 2019

SUBMITTED BY:

**GEOFF POOLE
GENERAL MANAGER**

TO:

BOARD OF DIRECTORS

**KATHY DICE
PRESIDENT**

**LYLE BRECHT
VICE-PRESIDENT**

**DAVE DUNCAN
SECRETARY/TREASURER**

**RAYMOND DELAHAY
DIRECTOR**

**HARRY EHRLICH
DIRECTOR**

**FISCAL YEAR 2019-2020
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BORREGO WATER DISTRICT

May 28, 2019

TO: Ratepayers and Investors of the Borrego Water District
FROM: Geoff Poole, General Manager – BWD
SUBJECT: Strategic Objectives for FY 2019-2020

The Borrego Water District Board of Directors has identified the following Strategic Objectives for the Agency to be pursued during Fiscal Year 2019-2020 and beyond.

- **Goal – Operate BWD finances to enhance the Financial Position/Creditworthiness of the Agency to allow for possible future BWD debt issuance:** During the last decade the BWD Board/Staff have reversed the financial position of the Agency from one on the brink of possible bankruptcy to one that is now credit worthy. The impacts of this effort was recently realized with the issuance of \$5.6 million in a private bond placement with Pacific Western Bank.

Objective – Maintain water and sewer rates and reserve fund balances at levels that provide the required debt service coverages and other related economic factors. Monitor BWD Operations and Capital Planning to ensure all BWD expenditures are prudent and necessary.

- **Goal – Implement the Groundwater Sustainability Plan (GSP) for the Borrego Springs Subbasin (Basin) with the best interest of BWD Ratepayers, the community and environment in mind:** Status: The Draft GSP for the Basin has recently concluded the 60 day review process and approval is expected during FY 2019-2020.

Objective – Numerous sections of the current GSP have impacts upon BWD Ratepayers, the community and the environment. As the Final Draft of the GSP is prepared and presented to the BWD Board for future action, the specific language of these sections will be closely evaluated to minimize the potential adverse impact to BWD ratepayers, the community and environment. Specific sections of the GSP include the Baseline Pumping Allocation which is the starting point from which future reductions are based. A BPA that reflects past water conservation is essential for BWD ratepayers. In addition, past investment made by BWD into farmland following thru the purchase of farmland and issuance of water credits must be added to the BPA for BWD and all water credit holders. In

any future transaction, BWD will pay particular attention to the cost of future farmland pricing. To benefit the environment/Basin, reducing pumping as soon as possible in terms of timing/start date and quantity is an important component of the GSP. Last and definitely not least, consider all legal alternatives and make decisions based on the long term best interest of BWD that reduce the potential for prolonged adversarial adjudication.

BWD will seek partial or full reimbursement from local pumpers and State grant programs for its past GSP development expenses that to date include:

Legal	\$ 300,716
Engineering/Finance	\$ 147,000
BWD/AC	\$ 115,000
AIR	\$ 30,000
BOND	\$ 28,000

- Goal – Commit the necessary resources to fund replacement of aging water and sewer infrastructure before catastrophic failure. Status; The Board has provided the financial resources to fund the replacement of infrastructure thru the issuance of \$5.6 million in BWD bonds. The Projects to be funded include replacement of aging water lines serving residential developments, fire hydrants and well related piping/electrical/pumping.

Objective – Maintaining BWD's financial position for creditworthiness is also impacted by how the recent Bond financed Projects are constructed, in particular 85% of bond proceeds must be spent within 3 years of issuance, which in BWD's case is July 2021. Current projections for expenditures during FY 2018-19 is \$935,000, FY 2019-20, \$3,033,750 and FY 2020-21, \$1,550,587.



BORREGO WATER DISTRICT

May 28, 2019

Board of Directors:

This Fiscal Year 2019-2020 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 these goals and priorities.

The Operations and Management (O&M) and Capital Improvements Projects (CIP) and non-O&M expenses budgets contained in this FY 2020 consolidated budget package represent management's best assessment of a budget to successfully accomplish the District's goals and priorities for FY 2020. This budget document will be used as a guideline to address the dynamics of the District's operations and the economic challenges of maintaining the District's financial stability and enabling the District to supply dependable potable water and sewer and wastewater treatment to its customers.

During Fiscal Year 2018-19 various material differences Budgeted vs. Actual were realized.

Revenue Budget:

Total Water Sales: Due to weather conditions and conservation efforts, actual water sales came in lower than budgeted.

Bulk water sales: There was an increase in actual to budget due to the construction of the New Library and Sheriff Station.

Interest Income: Bond Proceeds MMA have been accruing interest and the interest rate increased 1% this year.

Expense Budget:

Engineering Services: Half of the District Engineering Services budgeted were applied to Bond/Grant projects.

District Legal Services: Half of the District Legal Services budgeted were applied to Bond/Grant projects.

The budget shows total revenues for FY 2020 projected to be approximately \$4,400,000. This revenue budget also includes approved GSP Grant funding of \$130,000 and debt funded Capital Improvement Project funding of \$3,033,750.

The FY 2020 projected revenues assumes that monthly base service rates will increase approximately 5% (all meter sizes); residential water rates for Tier 1 (< 7 units/mo) will increase from \$3.56 to \$3.78/unit in FY 2020; Tier 2 (> 7 units/mo) = \$4.16/unit in FY 2020; Non-Residential water rates will increase from \$3.77 to \$4.00/unit in FY 2020; and revenue from sewer rates will increase 4.4% between FY 2020-FY 2021.

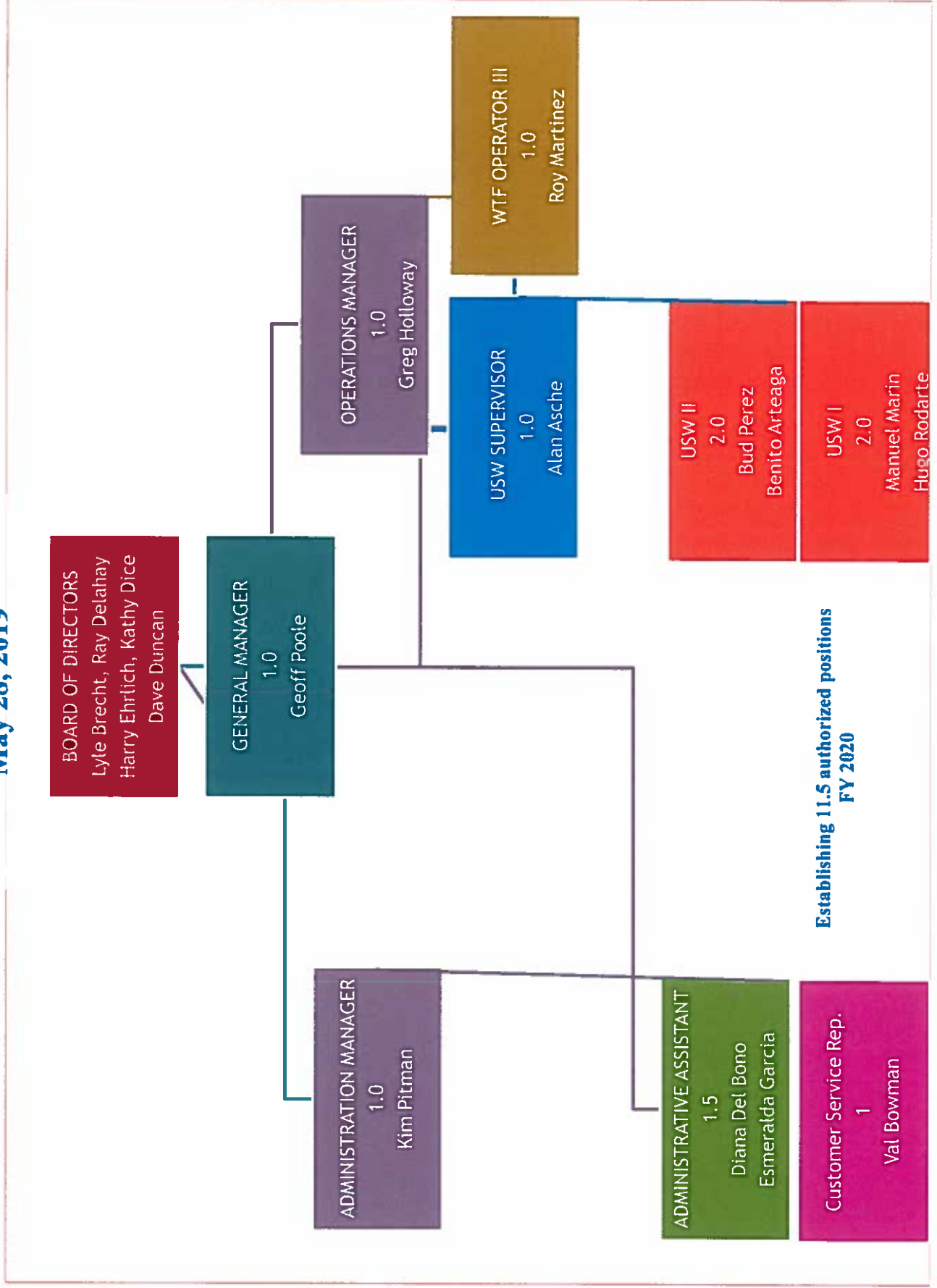
Included in this budget package is the proposed Board Resolution to adopt and approve the FY 2020 budget; an Organizational Chart establishing 11.5 authorized positions for FY 2019-2020; a detailed revenue and operations and maintenance expenses budget; CIP budget with associated justification from the District's consulting engineer, non-CIP budget items; GSP expenditures for future reimbursement; an updated District's Reserves Policy; approved Board Resolution Establishing Water & Sewer Rates for FY 2019-2020 and a projected cash flow analysis for the next eight fiscal years which includes Proposition 218 approved rate increases through FY 2021.

Thank you for your consideration.

Sincerely,

Geoff Poole
General Manager

BORREGO WATER DISTRICT ORGANIZATIONAL CHART May 28, 2019



	C	AI	AM	AN	AW
2	BWD	6/19/2018			6/11/2019
3	BUDGET CASH FLOW	ADOPTED	Actual	Actual YTD	ADOPTED
4	2019-2020	BUDGET	YTD	and Projected	BUDGET
5		<u>2018-2019</u>	<u>2018-2019</u>	<u>2018-2019</u>	<u>2019-2020</u>
6					
7	REVENUE				>3%
8	WATER REVENUE				
9	Residential Water Sales	950,994	712,994	860,994	866,507
10	Commercial Water Sales	417,885	385,541	438,541	445,791
11	Irrigation Water Sales	237,061	163,159	197,799	203,358
12	GWM Surcharge	181,749	140,296	170,916	173,911
13	Water Sales Power Portion	514,706	371,640	455,253	465,462
14	TOTAL WATER COMMODITY REVENUE:	2,302,395	1,773,630	2,123,504	2,155,031
15					>5%
16	Readiness Water Charge	1,154,976	962,444	1,155,566	1,210,230
17	Meter Install/Connect/Reconnect Fees	20,680	715	715	1,725
18	Backflow Testing/installation	5,100	300	5,400	5,100
19	Bulk Water Sales	1,200	12,398	12,598	2,440
20	Penalty & Interest Water Collection	40,000	41,030	49,030	48,000
21	TOTAL WATER REVENUE:	3,524,351	2,790,517	3,346,813	3,422,526
22					
23	PROPERTY ASSESSMENTS/AVAILABILITY CHARGES				
24	641500 1% Property Assessments	62,300	53,477	61,553	62,300
25	641502 Property Assess wtr/swr/flid	106,212	59,861	105,647	106,212
27	641501 Water avail Standby	82,376	65,978	80,030	82,330
29	641504 ID 3 Water Standby (La Casa)	33,647	20,951	33,568	33,647
30	641503 Pest standby	17,870	12,849	17,182	17,865
31	TOTAL PROPERTY ASSES/AVAIL CHARGES:	302,404	213,117	297,979	302,353
32					
33	SEWER SERVICE CHARGES				>4%
34	Town Center Sewer Holder fees	234,593	194,126	233,456	246,640
35	Town Center Sewer User Fees	88,695	74,737	90,049	97,194
36	Sewer user Fees	278,304	234,453	280,453	288,288
40	TOTAL SEWER SERVICE CHARGES:	602,840	524,557	625,407	632,122
41					
42	OTHER INCOME				
49	Interest Income	6,000	68,486	84,486	96,000
50	TOTAL OTHER INCOME:	278,000	430,729	446,729	96,000
51					
59					
60	TOTAL OPERATING INCOME RECEIVED:	4,707,595	3,974,923	4,720,560	4,453,000

	C	AI	AM	AN	AW
2	BWD	6/19/2018			6/11/2019
3	BUDGET CASH FLOW	ADOPTED	Actual	Actual YTD	ADOPTED
4	2019-2020	BUDGET	YTD	and Projected	BUDGET
5		2018-2019	2018-2019	2018-2019	2019-2020
62	EXPENSES				
63					
64	MAINTENANCE EXPENSE				
65	R & M Buildings & Equipment	180,000	182,543	205,273	180,000
66	R & M - WTF	180,000	91,929	105,557	180,000
67	Telemetry	10,000	6,949	9,691	10,000
68	Trash Removal	4,200	4,617	5,457	5,220
69	Vehicle Expense	18,000	16,711	18,641	18,000
70	Fuel & Oil	30,000	21,974	27,474	30,000
71	TOTAL MAINTENANCE EXPENSE:	422,200	324,724	372,094	423,220
72					
73	PROFESSIONAL SERVICES EXPENSE				
74	Tax Accounting (Taussig)	3,000	2,251	2,338	3,000
75	Administrative Services (ADP)	3,000	2,413	2,893	3,000
76	Audit Fees (Leaf & Cole)	16,995	16,994	16,994	17,000
77	Computer billing (Accela/Parker)/Cyber Security	25,000	19,470	21,890	31,000
78	Financial/Technical Consulting (Raftelis rate study \$52,000)	80,000	79,847	80,847	80,000
79	Engineering (Dynamic/Dudek)	60,000	9,283	21,283	24,000
80	District Legal Services (Downey Brand/BBK)	100,000	26,627	46,627	60,000
81	Grant Acquisitions (TRAC)				48,000
82	Testing/lab work (Babcock Lab/Water Quality Monitoring)	12,000	22,250	24,050	24,000
83	Regulatory Permit Fees (SWRB/DEH/D/g alerts/APCD)	25,000	34,197	34,897	28,000
84	TOTAL PROFESSIONAL SERVICES EXPENSE:	374,994	213,332	251,819	318,000
85					
86	INSURANCE EXPENSE				
87	ACWA/JPIA Program Insurance	57,000	29,479	29,479	60,000
88	ACWA/JPIA Workers Comp	17,600	12,761	17,161	18,000
89	TOTAL INSURANCE EXPENSE:	74,600	42,240	46,640	78,000
90					
91	DEBT EXPENSE				
92	Compass Bank Note 2018A	254,500	250,657	250,657	248,184
93	Compass Bank Note 2018B	143,000	140,946	140,946	140,755
94	Pacific Western Bank 2018 IPA	500,000	501,662	501,662	499,406
95	TOTAL DEBT EXPENSE:	897,500	893,265	893,265	888,345
96					
97	PERSONNEL EXPENSE				
98	Board Meeting Expense (board stipend/board secretary)	25,000	13,929	21,199	28,500
99	Salaries & Wages (gross)	890,000	748,185	894,373	930,000
100	Salaries & Wages offset account (board stipends/staff project salaries)	-60,000	(72,565)	(82,565)	(80,000)
101	Consulting services/Contract Labor	15,000	20,331	22,831	10,000
102	Taxes on Payroll	22,300	19,274	22,424	23,700
103	Medical Insurance Benefits	229,000	194,282	212,776	212,700
104	Calpers Retirement Benefits	170,170	160,674	174,274	200,000
105	Conference/Conventions/Training/Seminars	17,000	10,679	13,179	18,000
106	TOTAL PERSONNEL EXPENSE:	1,308,470	1,094,789	1,278,491	1,342,899
107					
108	OFFICE EXPENSE				
109	Office Supplies	20,000	23,446	25,149	24,000
110	Office Equipment/ Rental/Maintenance Agreements	35,000	37,233	39,351	35,000
111	Postage & Freight	15,000	11,132	15,132	15,000
112	Taxes on Property	2,334	2,383	2,383	2,383
113	Telephone/Answering Service/Cell	24,000	16,513	19,713	20,000
114	Dues & Subscriptions (ACWA/CSDA)	21,000	21,949	22,441	23,000
115	Printing, Publications & Notices	2,500	721	1,721	2,500
116	Uniforms	6,500	5,511	6,666	6,500
117	OSHA Requirements/Emergency preparedness	4,000	4,659	5,531	4,000
118	TOTAL OFFICE EXPENSE:	130,333	123,544	138,082	132,383
119					
120	UTILITIES EXPENSE				
121	Pumping-Electricity	308,000	258,399	306,120	308,000
122	Office/Shop Utilities	1,200	3,363	3,563	1,500
124	TOTAL UTILITIES EXPENSE:	309,200	261,763	309,684	307,500
125					
126	GROUNDWATER MANAGEMENT EXPENSE				
127	Net SGMA GSP & Stipulation Costs	308,000	255,344	275,344	130,000
130	TOTAL GWM EXPENSE:	308,000	255,344	275,344	130,000
137					
138	TOTAL OPERATING EXPENSES PAID:	3,885,297	3,642,692	4,009,112	3,620,347
139					
140	NET OPERATING INCOME:	822,298	332,231	711,448	832,654

	C	AI	AM	AN	AW
2	BWD	6/19/2018			6/11/2019
3	BUDGET CASH FLOW	ADOPTED	Actual	Actual YTD	ADOPTED
4	2019-2020	BUDGET	YTD	and Projected	BUDGET
5		2018-2019	2018-2019	2018-2019	2019-2020
142	CIP PROJECTS				
143					
144	WATER-Operating Cash Funded				
146					
147	Emergency System Repairs	170,000	82,641	82,641	60,000
148	Emergency Generator Mobile trailer	12,000	11,790	11,790	25,000
149	Reservoir cleaning				15,000
152					
153	TOTAL WATER CASH CIP EXPENSES:	342,000	94,431	94,431	100,000
160					
161	TOTAL CASH CIP EXPENSES:	492,000	94,431	94,431	100,000
162					
163	CASH RECAP				
164	Cash beginning of period	4,570,637	4,682,827	4,682,827	5,312,216
165	Operating Income	822,296	332,231	711,448	832,654
166	Total Non O&M Cash Funded Expenses	-342,000	(94,431)	(94,431)	(100,000)
167	CASH RESERVES AT END OF PERIOD	5,050,933	4,920,627	5,299,845	6,044,870
168	FY Reserves Target	5,380,000	5,380,000	5,380,000	5,610,000
169	Reserves Surplus/(Shortfall)	-329,067	(459,374)	(80,155)	434,870
170					
171					
172	DEBT & GRANT ACCOUNTING				
173					
174	WATER-Bond Funded CIP Expenses				
175					
176	Phase 1 Pipeline Project - 17120	165,000	78,388	100,000	415,000
177	Production Well #1 ID4-Well #9-17110	107,500	58,424	300,000	1,200,000
178	Production Well #2-17130	107,500	24,980	35,000	550,000
179	Replace 5 well discharge manifolds and electric panel upgrades-17140	112,000	493,535	500,000	150,000
180	Replace 30 fire hydrants		-	-	168,750
181	Management Consulting water (Bond CIP)		-	-	30,000
183					
184	TOTAL WATER BOND FUNDED CIP:	502,000	655,327	935,000	2,513,750
185					
186	SEWER-Bond Funded CIP Expenses				
187					
188	Clean & Video Sewer Lines-Club Circle, Foursome and Backnine				350,000
189	Sewer Forcemain Replacement & American Legion Lateral	150,000	-	-	150,000
190	Management Consulting Sewer (Bond CIP)		-	-	20,000
191					
192	TOTAL SEWER BOND FUNDED CIP:	150,000	-	-	520,000
197					
198	TOTAL DEBT FUNDED CIP EXPENSES:	752,000	655,327	935,000	3,033,750
199					
200	UNEXPENDED DEBT PROCEEDS:	4,698,000	5,031,532	4,751,859	1,718,109
201	TOTAL EXPENSES AND UNEXPENDED DEBT PROCEEDS	8,583,297		8,760,971	5,338,456
202					
203	GRANT PROCEEDS				
204	Grant sewer proceeds				414,000
205	Prop 1 CIP Grant (SDAC reimbursement 2020)	500,000	-	222,065	278,000
206	TOTAL GRANT PROCEEDS:				692,000
210					
211	SEWER-Grant Funded CIP Expenses				
212	Plant-Grit removal at the headworks				214,000
213	Clarifier Rehab				200,000
214	TOTAL WATER GRANT FUNDED CIP EXPENSES:	500,000	-	-	414,000
215					
216	TOTAL INCOME, GRANT & DEBT PROCEEDS BALANCE	10,707,595		9,472,419	5,145,000

	C	D	E	F	G
6	BWD				
7	INCOME/EXPENSE				
8	CONDENSED BUDGET				
9	2019-2020				
10	Adopted 6/11/2019				
11					
12					
13					
14		TOTAL			
15		BUDGET	WATER	ID4-WATER	SEWER
16	REVENUE				
17					
18	Water Sales	3,248,614	1,104,529	2,144,085	-
19	GWM Surcharge	173,911	59,130	114,782	-
21	1% Property Assessment	62,300	21,182	41,118	-
22	Water Availability Standby	240,053	69,718.02	135,334.98	35,000
23	Sewer Revenue	632,122	-	-	632,122
26	Water Credit Revenue	-	-	-	-
27	Other Income	-	-	-	-
28	Interest Income	96,000	32,640	48,000	15,360
33	TOTAL BUDGETED INCOME FY 2019:	4,453,000	1,287,199	2,483,320	682,482
34					
43	EXPENSE				
44					
45	Repairs & Maintenance	423,220	79,805.96	153,914.31	189,500
46	Professional Services	318,000	91,922	177,340	48,738
47	Insurance	78,000	22,547	43,499	11,955
48	Personnel Expense	930,200	268,886	518,748	142,566
49	Employee Benefits	412,700	119,296	230,152	63,252
50	Office expense	132,383	38,267	73,827	20,290
51	Utilities	307,500	88,887	171,485	47,128
52	Compass Bank Note 2018A	248,184	-	248,184	-
53	Compass Bank Note 2018B	140,755	140,755	-	-
54	Pacific Western Bank 2018 IPA	499,406	158,402.80	306,044	34,958
55	GWM	130,000	44,200	85,800	-
56	TOTAL BUDGETED EXPENSE FY 2019:	3,620,347	1,052,970	2,008,992	558,386
57					
58	UNEXPENDED DEBT PROCEEDS:	1,718,109	584,157	1,133,952	
59	TOTAL EXPENSES AND UNEXPENDED DEBT PROCEEDS:	5,338,456	1,637,127	3,142,944	
60					
61	NET BUDGETED INCOME (EXPENSE):	832,654	234,229	474,328	124,096
62					
63	TOTAL CIP CASH EXPENSE:	100,000	34,000	66,000	
64	TOTAL BOND FUNDED CIP EXPENSE:	3,033,750	-	-	-
65					
66	TOTAL BUDGETED ANNUAL NET CASH FLOW FY 2019:	732,654	200,229	408,328	124,096
67					



BORREGO WATER DISTRICT

May 28, 2019

TO: Board of Directors, Borrego Water District
FROM: Geoff Poole, General Manager
SUBJECT: Fiscal Year 2019-20 Budget and Capital Improvement Plan

Transmitted herewith is the Proposed Final Fiscal Year 2019-20 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/priorities and the District's strategic plans by which to achieve them.

2018-19 was a milestone year in which BWD has re-established its financial position to allow for Bond financing with the planned issuance of \$5.6 million in debt for Capital Improvement Plan construction, as well as additional funding to refinance existing debt. Construction of various Bond Financed Projects is underway.

2019-20 will be the year in which the Groundwater Sustainability Plan for the Borrego Spring sub basin is planned to be approved and the initial stages of implementation.

The amount budgeted in each category represents Management's best assumptions to successfully accomplish the District's objectives. A summary of the FY 2019-20 budget is below:

Budget Components for FY 2019-20 - Revenues

Water sales are projected to remain stable (FY 2019-20 = 1,600 afy). The previously approved FY 2016-2021 Prop 218 approved rates and fee increases of 6% for FY 19-20 has been included and will increase revenues by an estimated \$62,500.

Monthly Meter stand by fees are also proposed to be increased by 5% in compliance with the Board's FY 2016-2021 Prop 218 approved rates. The increase is projected to increase Meter Fee revenues by approximately \$57,600 in FY 19-20.

The past Prop 218 process undertaken by BWD also included rate increases for sewer customers in an amount of a maximum of 4% which will increase annual sewer revenues by \$24,000.

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 2019-20 – Expenses

- In FY 2019-20, BWD and the County of San Diego will continue to work on the development of the Borrego Basin Groundwater Sustainability Plan (GSP). The GSP is being conducted to comply with the 2014 Sustainable Groundwater Management Act. In March of 2017, the County of San Diego entered into a contract with Dudek as the Prime Consultant for completion of the Plan. Certain BWD expenses are planned to be incurred that are outside the scope of the GSP, so an estimated \$130,000 has been included in FY 2019-20 budget for this purpose. BWD has compiled a list of GSP related expenses since 2015 and that is now included in the Budget documents.
- All existing programs in BWD Operations, Maintenance and Administration areas are fully funded through 2019-20. The major programs in the Water Operations Enterprise include system operations and maintenance, water quality monitoring, meter testing/replacement, pipeline replacement, reporting and the inevitable emergency pipeline repairs that happen each year. When possible, BWD staff (including temporary help) will be used to perform all pipeline repairs in FY 2019-20, emergency and planned. Capital projects planned for the year include the aforementioned pipeline repairs as repair/replacement of 3 existing BWD storage tanks that are part of a State Grant application.
- In the Sewer Operations Enterprise, BWD is planning to construct a series of improvements at the Wastewater Treatment Facility to replace equipment/components that has passed its useful life. These projects are planned to be funded by State Grants. Engineering assessments are underway to evaluate the feasibility of enhancing wastewater treatment levels to tertiary which would allow for use on local irrigation demands. Other planned improvements include adding infrastructure to improve the ability to adequately maintain portions of the sewer collection system.
- 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 2019-20 Budget, detailed revenue and expenses, Capital Improvement Plan with project explanations and justifications from the District's Contract Engineer (Carlos Beltran – Dynamic Engineering), Non CIP expenses, updated Reserve Policy and a projected Cash Flow that includes 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 2019-20.

Sincerely

Geoff Poole
General Manager

CAPITAL IMPROVEMENT PROJECTS		FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2027-28	FY 2028-29
BOND CIP PROJECTS										
Water Projects funded through 2021										
1	Production Well 1 construction-ID 4 #9	\$ 1,200,000								
2	Production Well 2 Investigation and construction	\$ 550,000	\$ 1,000,000							
3	Phase One Pipeline Projects	\$ 415,000								
4	Phase Two Pipeline Projects	\$ 557,000								
5	Replace 48-60 year old fire hydrants	\$ 168,750	\$ 168,750							
6	Replace 4-5 Well Discharge Manifolds and Electric Panel Upgrades	\$ 150,000								
7	Engineering/Construction Management Consulting	\$ 30,000								
Sewer Projects funded through 2021										
8	Clean & Video Sewer Lines-Club Circle, Foursome and Backline	\$ 350,000								
9	Sewer Main replacement crossing Borrego Springs Road at La Casa	\$ 150,000								
10	Engineering/Construction Management Consulting	\$ 20,000								
TOTAL WATERSEWER BOND CIP PROJECTS FUNDED THROUGH 2020/2021:		\$ 3,033,750	\$ 1,725,750							
GRANT CIP PROJECTS										
Water Projects										
11	Replace Twin Tanks-(Prop 1 grant)	\$ 579,000								
12	Replace Wilcox Diesel Motor-(Prop. 1 grant)	\$ 59,000								
13	Replace Indianhead Reservoir-(Prop. 1 grant)	\$ 600,000								
14	Ramsa Hill #2, 1989 galv. 0.44 MG recasting -(Prop. 1 grant)	\$ 600,000								
Sewer Projects										
15	Plant-Grit removal at the headworks-(Prop 1 grant)	\$ 214,000								
16	Clarifier Upgrades/Rehabilitation -(Prop 1 Grant)	\$ 200,000								
TOTAL WATERSEWER GRANT CIP PROJECTS:		\$ 414,000	\$ 1,838,000							
FUTURE BOND/GRANT CIP PROJECTS										
Wells, Booster Stations, Reservoirs & Associated Transmission Lines										
17	Water Treatment Facility (phase 1)						\$ 635,000	\$ 250,000	\$ 650,000	
18	Country Club Tank Recasting, 1999 1.0 MG							\$ 250,000		
Water Projects										
20	Pipeline projects (deleted from original bond fund request)						\$ 222,000	\$ 296,700	\$ 255,000	\$ 205,000
21	Solar Project							\$ 500,000		
TOTAL FUTURE BOND/GRANT CIP PROJECTS:							\$ 857,000	\$ 1,046,700	\$ 205,000	\$ 205,000
CIP CASH RESERVES PROJECTS										
PIPELINE REPLACEMENT/IMPROVEMENT PROGRAM										
22	Emergency System repairs	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000
FACILITIES MAINTENANCE										
23	Stucco Building									
24	Carpet/Paint Office									
TOTAL - CASH RESERVES CAPITAL IMPROVEMENTS PROGRAM		\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000
TOTAL - CASH RESERVES SHORT LIVED ASSETS (FROM SHEET 2)		\$ 40,000	\$ 200,000	\$ 40,000	\$ 200,000	\$ 140,000	\$ 135,000	\$ 100,000	\$ 150,000	\$ 100,000
TOTAL CASH RESERVES CIP AND SHORT LIVED ASSETS ANNUAL BUDGET		\$ 100,000	\$ 260,000	\$ 100,000	\$ 260,000	\$ 200,000	\$ 195,000	\$ 160,000	\$ 210,000	\$ 160,000

May 8, 2019

Borrego Water District
806 Palm Canyon Drive
Borrego Springs, CA 92004

Attn: Geoff Poole, General Manager

Subject: Borrego Water District Capital Improvements Program

Mr. Poole,

I have reviewed the updated Capital Improvements Program (CIP) prepared for the next ten years and I concur with the projects identified in the schedule as the most essential projects for the district at the present time. The estimated construction costs identified in the CIP for these improvement projects are adequate for planning purposes.

If you have any questions please feel free to contact me at (760) 545-0162.

Sincerely,



Carlos Beltran, P.E.
Principal Engineer.

M E M O R A N D U M

DATE: 6/11/19
TO: Board of Directors BWD
FROM: Carlos Beltran, BWD District Engineer & Geoff Poole, General Manager
RE: Borrego Water District – Capital Improvement Plan Project Summary and Narratives

The following table shows the summary of the 2020-2029 projects. The CIP projects are described in detail on the following pages.

CAPITAL IMPROVEMENT PROJECTS FISCAL YEARS 2020-2029 SUMMARY

CIP #	2020/2021 BWD BOND CIP FINANCED PROJECTS-WATER	PAGE #
1	Production Well Construction ID #4-9	2
2	Production Well #2 Site Investigation and Construction	2
3	Phase One Pipeline Projects	5
4	Phase Two Pipeline Projects	5
5	Replace 45-60 Year old Fire Hydrants	7
6	Replace 4-5 Existing Well Discharge Manifolds and Electrical Panels	8
7	Engineering and Construction Management Consulting – Water	
	2020 BWD BOND CIP FINANCED PROJECTS-SEWER	
8	Clean & Video Sewer Lines-Club Circle, Foursome and Backnine	9
9	Sewer Main replacement crossing Borrego Springs Road at La Casa	10
10	Engineering/Construction Management Consulting – Sewer	
	2020/2021 GRANT FUNDED CIP PROJECTS-WATER	
11	Replace Twin Tanks	11
12	Replace Wilcox Diesel Motor	14
13	Replace Indianhead Reservoir	16
14	Replace RH #2 Tank	18
	2020/2021 GRANT FUNDED CIP PROJECTS-SEWER	
15	Plant Grit Removal at Headworks @ Wastewater Treatment Facility (WTF)	19
16	Clarifier Upgrade/Rehabilitation at WTF	21
	FUTURE POTENTIAL GRANT/BOND FUNDED PROJECTS	
17	Water Treatment Facility (phase 1)	22
18	Water Treatment Facility (phase 2)	22
19	Country Club Tank Recoating, 1999, 1.0 MG	24
20	Transmission Main from Well 16 to ID1 900 Reservoir	27
20	Well 5 Water Directly to C.C. Reservoir	27
20	Slash M Rd. West to Country Club Tank	27
20	Pipeline for Santiago and ID5	27
20	Well 5 to County Club Reservoir	27
20	Borrego Springs Rd: Walking H Dr to Country Club Rd	27
21	Solar Project	
	CASH RESERVE FUNDED PROJECTS	
22	Emergency water pipeline repairs	28
23	Stucco Building	
24	Carpet/Paint Office	

**CIP ITEM #1 and #2
Production Well #1 ID4-9 and
Production Well #2 Investigation and Construction**

A. Project Description/Justification

Budget: \$4,500,000

BWD has identified three wells that will need to be replaced within the next eight to ten years. Wells ID1-8, ID4-4 and ID1-10 cannot be rehabilitated again will need to be replaced due to age. As an alternative to replacing three wells, two high yield wells may be the most economical solution and is under consideration.

Basin water quality is a serious factor to consider when evaluating potential well sites. Consulting Engineer Dudek prepared a report "Draft Working Technical Memorandum" dated June 16, 2017 that describes three separate Subbasin within the BWD service area boundary. The report identifies that the Central Management Area (CMA) of the Basin has the highest likelihood to provide water that meets the requirements of California Code of Regulations (CCR) Title 17 and Title 22 into the future.

Replacement Well #1: BWD continued with an analysis of potential sites in the CMA and has determined replacement of well ID 4-4 on a BWD owned site located adjacent to the existing well was the logical first choice. Plans and specifications were developed in late 2018 and the project bid in early 2019, now known as Well 4-9. Southwest Drilling was the responsive low bidder and was awarded the contract in April 2019. Construction of the well has begun and the drilling is expected to conclude in mid 2019 with the well put into service in late 2019. A well of up to 1,000 feet deep with a possible flow rate of up to 900 gpm is possible once the drilling concludes. This project will be funded by the 2018 BWD bond issuance with the estimated cost at \$1,500,000.

Replacement Well #2: Evaluation of potential sites for Replacement Well continues. Sites have been located and in one case, property negotiations have begun and is currently not being disclosed. The estimated cost for this project is also \$1,500,000 and will be funded by BWD Bond proceeds.

Replacement Well #3. As previously mentioned, two high capacity wells in the proper location could potentially offset the need for three replacement wells. Once a better understanding of Well #2 is known, the need and timing of Well #3 can be better defined.

B. Cost Estimate:

The wells are estimated to cost \$1,500,000 each to construct.

C. Project Estimated Timeline: Why is the project proposed for FY 2020 and beyond:

Due to the fact that certain BWD wells have reached the end of their useful life, it is imperative to construct the replacement wells before any existing well fails. A Grant received in 2019 will fund a portion of the siting and pilot hole drilling for Replacement Well #2.

Construct Replacement Well #1 ID4-9:	FY 2019-2020
Explore and Construct Replacement Well #2:	FY 2020-2021
Explore and Construct Replacement Well #3:	TBD

D. Impacts of Deferral:

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

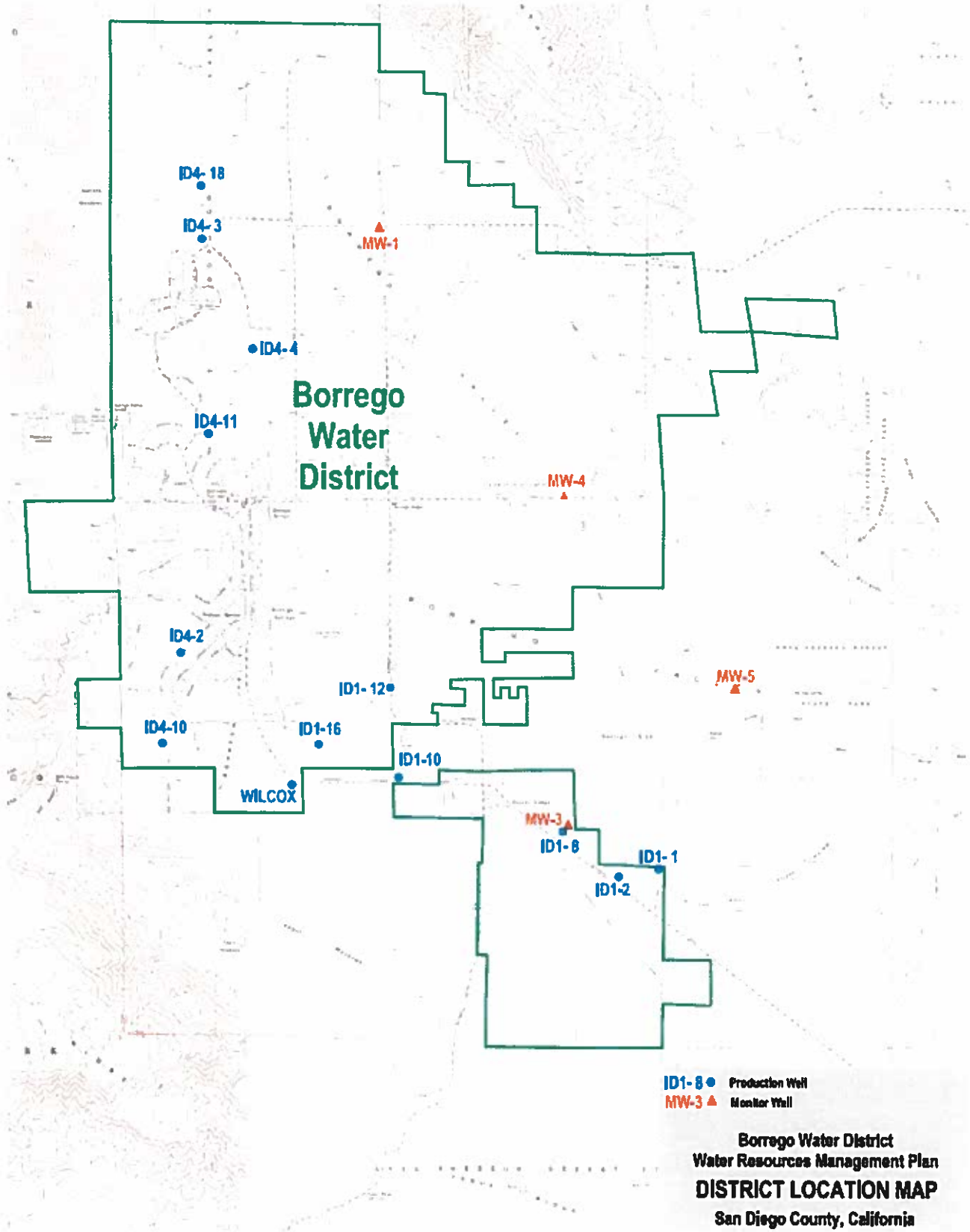


DUDEK n 0 250 500 Feet

SOURCE: NAIP 2017, SanGIS

FIGURE 1

Proposed Production Well Site Location Map



CIP ITEM # 3 and #4 Pipeline Projects Phase One and Two

A. Project Description/Justification.

Of equal importance to having adequate supplies from BWD wells, operating and maintaining the distribution system for both Water and Sewer is critical. Water and sewer pipelines are often out of sight and "out of mind" until there are breaks and water leaks. Many parts of the distribution system are approaching the end of its useful life and BWD Staff has identified and prioritized several sections of most importance and included them in the BWD bond financing. The projects of highest priority were grouped and identified as Phase One of BWD awarded the bid to A and R Construction in the amount of \$514,300, to complete Phase One of the Pipeline projects, listed below. Construction is expected to conclude in late 2019.

PHASE ONE BWD BOND FINANCED PIPELINE PROJECTS

Pipeline Projects to be completed 2019/2020:

Pipeline 1 6" Water main going west to east on T Anchor Drive from Frying Pan Road to
CIP Line 3 Double O Road
 Total Length 525 Feet

Pipeline 2 6" Water main going west to east on Weather Vane Drive from Frying Pan Road to
CIP Line 3 Double O Road
 Total Length 525 Feet

Pipeline 3 6" Water main going north and south on Double O Road from T Anchor Drive
CIP Line 3 Total Length 3,920 Feet

Pipeline 4 6" Water main going north and south on Frying Pan Road from T Anchor Drive
CIP Line 3 Total Length 3,110 Feet

PHASE TWO BWD BOND FINANCED PIPELINE PROJECTS

Pipeline Projects to be completed 2019/2020 or 2020/2021:

Pipeline 5 6" Water main going east of T Anchor Drive
CIP Line 4 Total Length 350 feet at \$100 per foot
 Estimated cost \$35,000

Pipeline 6 6" Water main going east on Weather Vane Drive
CIP Line 4 Total Length 350 feet at \$100 per foot
 Estimated cost \$35,000

Pipeline 7 6" Water main 1600 Block of De Anza Drive
CIP Line 4 Total Length 1,260 feet at \$200 per foot
 Estimated cost \$252,000

Pipeline 8 4" Water main from Catarina Drive on Fairway Lane to DeAnza Country Club
CIP Line 4 Total Length 650 feet at \$200 per foot
 Estimated cost \$130,000

Pipeline 9 6" Water main from Montezuma Road to DeAnza on Yaqui Road
CIP Line 4 Total Length 700 feet at \$150 per foot
 Estimated cost \$105,00

B. Cost Estimate: The total construction cost estimate for the projects are

Phase One Cost Estimates: These projects were bid for \$514,300 to A and R Construction

Phase Two Cost Estimates: Individual project cost estimates are shown above with each Phase Two projects.

C. Project Timelines:

Phase One Projects are anticipated to be concluded in mid FY 2019-2020.

Phase Two Projects are anticipated to be constructed in 2019-2020

D. Impacts of Deferral:

Replacement of aging infrastructure is needed to avoid catastrophic or widespread water supply outages.

CIP ITEM # 5

Replace Fire Hydrants

A. Project Description/Justification

Another aging component of the BWD water distribution system are existing fire hydrants. Staff surveyed Fire Hydrants in the District and noticed that there were approximately 45 that were 60+ years old and in need of replacement (example shown below). In many cases isolation valves for the hydrant will also be added/replaced.

CIP Line 5 Replace 45-60 year old outdated Fire Hydrants
Estimated cost \$337,500
Project Begin: FY 2020 Complete: FY 2021

B. Cost Estimate: The total construction cost estimate for hydrant replacement is \$337,500.

C. Project Timelines:

Staff and BWD District Engineer are evaluating alternatives for completion of the work which is expected to start in FY 2019-2020.

D. Impacts of Deferral:

Replacement of aging hydrant infrastructure is needed to provide adequate fire flow when needed.



CIP ITEM # 6

Replace 4-5 Well Discharge Manifolds and Electric Panel Upgrades

A. Project Description/Justification

Another aging component of the BWD water distribution system are the manifold piping and electrical connections on existing BWD wells. When BWD wells were initially constructed the design of the manifold piping coming out of the well was not done up to current standards and are suffering from being exposed to the elements in Borrego Springs for years (photo shown below). The current standards require longer pipeline sections before and after the meter for more accurate results. In addition, electrical connectors known as transfer switches were not installed. These switches make connection of wells to emergency power quick and easy in times of emergency.

Replace 4-5 Well Discharge Manifolds and Electrical Panel Upgrades

CIP Line 6 Estimated cost \$760,000

Project Begin: FY 2019 complete: FY 2020

B. Cost Estimate:

The total cost estimate for improvements is \$760,000.

C. Project Timelines:

Construction of the improvements has begun and is expected to continue into FY 2019-2020.

D. Impacts of Deferral:

Upgrades of the Well Discharge Manifolds and Electric Panels is needed to provide reliable water delivery from BWD wells and accurate metering.



CIP ITEM #8 Clean and Video Lines Club Circle/Foursome/Back Nine

A. Project Description / Justification

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 and are at the end of their expected lifetime. The collection system needs to be inspected using video after cleaning of the lines. Once the system is inspected Engineers will recommend the necessary repairs based on what is found.

B. Cost Estimate

A budget of \$350,000 was developed for the inspection and cleaning. Actual repair costs will depend on the condition of the system and type of rehabilitation or construction selected.

C. Project Timeline.

Due to the age of the Club Circle system, the materials used and degradation over time needs to be investigated further. Although no serious issues have been experienced yet, investigation of the condition of the system is needed to prevent sewer collection system issues.

The projects are proposed to begin in FY 2019-20.

D. Impact of Deferral:

Further investigative work is needed to determine the condition of the Club Circle sewer system. Deferring this item could contribute to reduced service and possible failures in extreme situations.

CIP ITEM #9

La Casa Del Zorro area sewer system

A. Project Description / Justification

BWD's Wastewater Treatment Facility services approximately 20 percent of the community of Borrego Springs. Specifically, it serves the Rams Hill residential community and the Town Center area, which includes hotels, a motel, and small business along Palm Canyon Drive. The remaining 80 percent of Borrego Springs is serviced by individual septic tank-subsurface disposal systems.

The sewer is collected and flows by gravity to a pump station located along Borrego Valley Road, approximately 0.6 miles north of Tilting T Drive. The pump station was installed within the past 10 years. The raw sewage is pumped via a sewer force main approximately 2.8 miles to a point 150 feet north of Borrego Springs Road at Yaqui Pass Road. The sewer then flows by gravity inside the La Casa Del Zorro Resort property (located at 3845 Yaqui Pass Road in Borrego Springs, CA) via an 18" PVC gravity main owned by the District and then along Borrego Springs Road to the wastewater treatment plant located at 4861 Borrego Springs Road.

There has been a history of high hydrogen sulfide gas levels and odors detected at manholes located downstream of where the sewer force main discharges into the 18-inch gravity pipeline, at or near the La Casa Del Zorro Resort, especially during the high residency season (November through March) and during holidays. A portion of the sewer collection system on near the American Legion lateral is slightly uphill and creates an area where sewer flow can become stagnant and produce excessive odors. This proposed project will remove the gravity portion of the sewermain that goes uphill.

B. Cost Estimate:

It is estimated that each cleanout will cost approximately \$5,000, therefore the project cost estimate is \$150,000.00.

C. Project Timeline: Why is 2020 Proposed?

Hydrogen sulfide contributes to odors as well as corrosion of infrastructure. Much needed maintenance on the force main is also planned for improved operations and reduced corrosion-related issues.

The projects are scheduled to be started FY 2019-20

D. Impacts of Deferral:

The proposed improvements are needed for odor control in the sewer collection system and deferral of these improvements could lead to continued odors as well as corrosion of infrastructure.

CIP ITEM #11

Replace Twin Tanks

A. Project Description / Justification

The Twin Tanks are located approximately ½ mile southwest of the intersection of Palm Canyon Drive and Montezuma Valley Road (S22). The two tanks have a capacity of 220,000 gallons each and are composed of galvanized 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 past inspection report recommended that the tanks be recoated and minor metal repairs made. The tank inspections were received in February 2017. The tanks are highly corroded. The tanks are scheduled for replacement in the 2020-2021 CIP. BWD is working with the State of California to receive Grant funding for this expenditure.

When the tanks were inspected in 2017, the divers installed a plug in the pipe that interconnects the tank because there is no valve there to allow for one tank to be taken out of service. Staff installed a permanent valve. After the inspection report was delivered, it was determined that the tanks need replacement.

There are two tanks. Twin Tank #1 is the south tank, and Twin Tank #2 is the north tank. The tanks will be replaced with a single 440,000 gallon bolted steel tank. No change in capacity is proposed. The tank will be installed at the same location as the existing tanks. The bolted steel tank will be approximately 55 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.

B. Cost Estimates:

Twin Tanks Replacement						
No.	Qua	Unit	Description	Unit Cost	Total Cost	
1 Construction Cost						
1.1	2	LS	Mobilization/ Demobilization, Temporary Facilities, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$ 25,000.00	\$ 50,000	
1.2	2	LS	Demolish existing bolted 220,000 gallon steel tank. Remove and dispose of the tank.	\$ 13,500.00	\$ 27,000	
1.3	2	LS	Provide tank submittal, stamped and signed by a Registered Engineer in the State of California. Payment after acceptance.	\$ 2,500.00	\$ 5,000	
1.4	2	LS	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.	\$ 14,000.00	\$ 28,000	

1.5	2	LS	Furnish and Install OSHA exterior locking ladder kit and railing around the roof hatch	\$ 7,500.00	\$ 15,000
1.6	2	LS	Install fusion powder coated bolted steel tank, nominal dimensions 24' high and 38' diameter. After installation, complete holiday testing of interior coating and repair all holidays to the satisfaction of the engineer.	\$ 165,000.00	\$ 330,000
1.7	2	LS	Install piping, valves, transition couplings, fittings, Tideflex valve, expansion joints, check valves, pipe supports, ductile iron risers, thrust blocks, anti-vortex hardware, and other appurtenances. Connect to existing piping.	\$ 4,200.00	\$ 8,400
1.8	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:					\$ 467,200
10% Contingency:					\$ 46,720
Total Construction Cost:					\$ 513,920
2 Admin and Engineering					
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications		\$ 40,000
2.02	1	LS	Construction Management		\$ 25,000
TOTAL PRELIMINARY PROJECT ESTIMATED COST					\$ 578,920

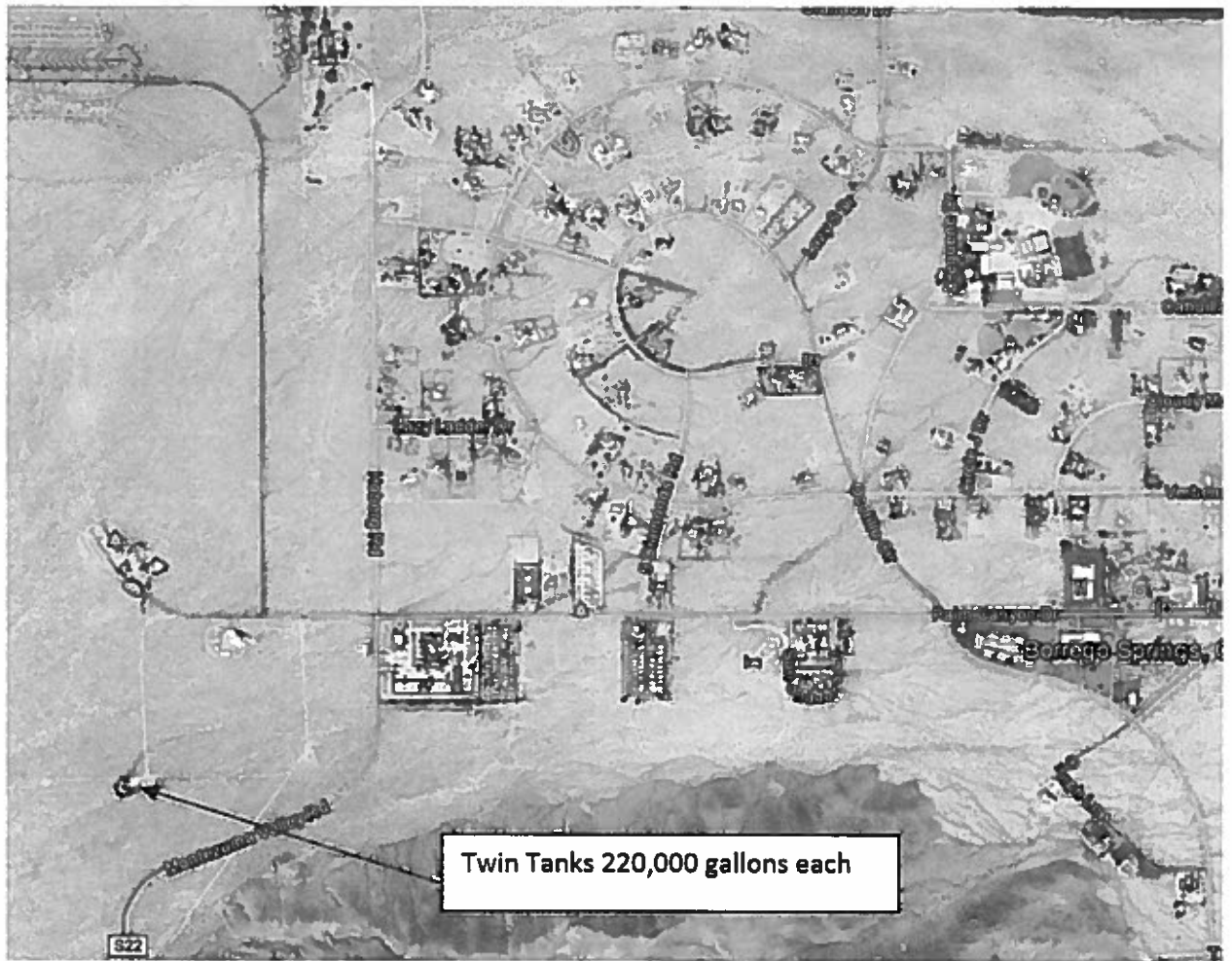
C. Project Estimated Timeline: Why is 2020-21 Proposed?

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, which is scheduled for March of 2018.

Planning Initiated:	2019-2020
Engineering/design completion:	2020-2021
Project Bidding:	2020-2021
Replace Tank:	2020-2021

D. Impacts of Deferral:

Observed corrosion in the Twin Tanks 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 #12 Replace Wilcox Diesel Motor

A. Project Description / Justification

Budget \$59,000

The District 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:

A. *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).

- B. *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.
- C. *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.
- D. *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.
- E. *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 Engine with APCD Compliant Engine						
No.	Qua	Unit	Description	Unit Cost	Total Cost	
1 Construction Cost						
1.1	1	LS	Replace Wilcox Diesel Engine	\$ 50,000.00	\$ 50,000	
				Project Construction Cost:	\$	50,000
				10% Contingency:	\$	5,000
				Total Construction Cost:	\$	55,000
2 Admin and Engineering						
2.1	1	LS	Preliminary Engineering, Engineering Plans and Specifications		\$	2,000
2.2	1	LS	Construction Management		\$	2,000
TOTAL PRELIMINARY PROJECT ESTIMATED COST					\$	59,000

D. Project Timeline. Why is 2020 Proposed?

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-2020.

Planning Initiated:	2019-2020
Bid Project:	2020-2021
Construction:	2020-2021

- 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 #13 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.

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

B. Cost Estimate: \$600,000

C. Project Estimated Timeline: Why is 2019-20 Proposed?

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, which is scheduled for December of 2019.

Planning Initiated:	2019-2020
Bid Project:	2020-2021
Construction:	2020-2021

D. 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 #14 Rams Hill #2 Tank Replacement

A. Project Description / Justification

Budget: \$600,000

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.

The interior of the galvanized steel tank will be sandblasted - including the columns, rafters, appurtenances to SSPC-SP 10. The exterior shell requires recoating; the roof will be sandblasted to SSPC-SP10 along with any areas that have corroded. The remaining exterior will be pressure washed prior to coating. The contractor is to remove and legally dispose of the spent blast material. OSHA and Cal-OSHA require a safety railing on the roof structure that will be installed on the tank. Some metal repairs inside the tank will be required. The inspection report identified corrosion on the shell, floor, center pole, roof structure and interior of the drain and level sensor lines. One rafter is missing, and there appear to be some bolts loose. The loose bolts will be replaced along with the missing rafter. Seventy percent of the bolt runs are estimated to be covered with corrosion. Some attachment hardware will need to be replaced on the shell and floor panels. The full extent of the metal repairs will not be known until after the sandblasting is complete. According to the tank inspection report, if the corrosion is left unaddressed, metal loss could lead to water leakage. The exterior of the tank is in fair condition, only a few small areas will be repainted. The estimated life of the coating is approximately 30 years if it is properly maintained. After completion of the recoating, the tanks will be filled with water. The water will be tested for Volatile Organic Compounds (VOC) and bacteria prior to putting them back into service. No change in capacity is proposed.

B. Cost Estimate: \$600,000

C. Project Timeline: Why is 2021 Proposed?

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 2020-2021

D. 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 #15 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 WTF 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 WTF, causing problems with the treatment process and possible effluent violations.

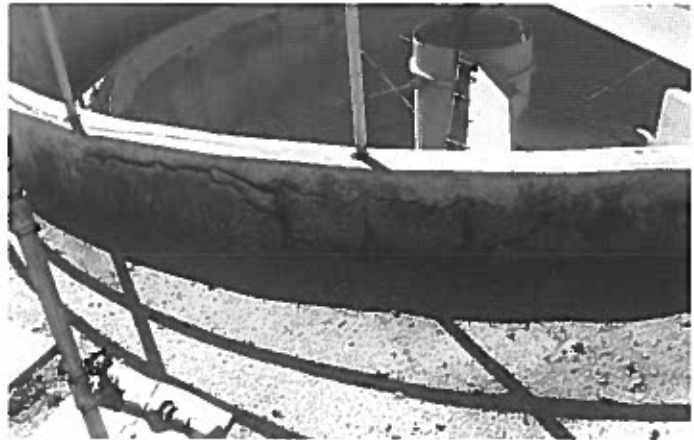
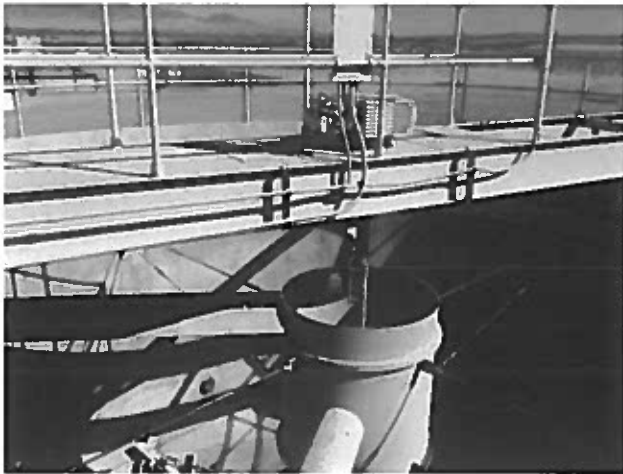
CIP ITEM #16 Clarifier Upgrade at WTF

F. Project Description / Reasons for Capital Expense

Budget \$200,000

The wastewater plant is comprised of (2) gravity settling basins (clarifiers) intended to separate and settle 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.



G. Cost Estimate: \$200,000

H. Schedule.

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 2019-20

I. Impact of Deferral:

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

CIP ITEM #17 & #18 Water Treatment Facility (Phase 1 & Phase 2)

F. Project Description / Justification

Budget: \$1,535,000

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.

G. 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 2024-25.

H. 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 \$1,535,000.

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

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 2025.

J. 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 #19

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 2026-27.

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 2027:

Based on experience, it is estimated that a recoating will be needed in 2027. 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 2026
Receive Dive Inspection Report:	March 2026
Engineering/design completion:	March 2026 – April 2026
Project Bidding:	April 2027 – May 2027
Repair Recoat Tank:	June 2027 – July 2027

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	Quantity	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



CIP ITEM #20 Transmission Pipelines

A. Project Description / Justification

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. There is a need to deliver water in a more efficient manner. The District has identified four main transmission pipelines that should be installed for a more functional system. The transmission lines would have no service laterals connected, and would serve only to deliver water to the tanks or to another part of the distributions system. These projects are not considered pipeline replacement projects; they will enhance the distribution system operation.

B. Project Design / Process Flow:

Pipelines 1, 2 and 4 are projects that can possibly be installed by District staff over time; thus, saving District funds. Pipeline 3 (Well 12 to Tilting T and Di Giorgio) is a more complex project and may require professional design and implementation.

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.

	COST	TIMELINE
Transmission line to convey well 16 water directly to ID1 900 Reservoir	\$ 222,000	FY 2025
Transmission line to convey Well 5 water directly to C.C. Reservoir	\$ 295,700	FY 2026
Transmission line to convey Well 12 water directly to Tilting T-Di Giorgio	\$ 255,000	FY 2027
Transmission line Slash M Rd. west to Country Club Tank	\$ 205,000	FY 2028
Transmission line BS Road/Walking H Drive to Country Club	\$ 205,000	FY 2029

Total \$1,182,700

D. Impacts of Deferral:

Pressure fluctuations and chlorine concentrations can vary in the operation of a pipeline coming directly from a well. Therefore, connecting water meters to these lines is not recommended and Transmission Mains from the well to the nearest reservoir is proposed. Deferral of these improvements only delays completion of the optimal configuration of service to BWD customers.

CIP ITEM #22 Emergency Water Pipeline Repairs

A. Project Description / Reasons for Capital Expense

Budget \$600,000 (average \$60,000 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.

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.

D. Timeline

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

BWD Bond Financing Use of Funds & Scheduling

Use of Funds:

The Projects identified in this CIP will be prioritized and selected BWD fully expects that substantially all 2018 Bond proceeds dedicated to Capital Improvements and deposited in the Construction Fund created under the Indenture will be expended within three years, as follows.

2018-19

Project # 1: Production Well #1 ID4-9-Construction	\$ 300,000
Project # 2: Production Well #2-Investigation	\$ 35,000
Project # 3: Phase 1 Pipeline Projects-Legal & Construction	\$ 100,000
Project # 6: Replace Well Discharge Manifolds/Electric Panel Upgrades	<u>\$ 500,000</u>
	<u>\$ 935,000</u>

2019-20

Project # 1: Production Well #1 ID4-9 – Construction	\$1,200,000
Project # 2: Production Well #2-Investigation & Construction	\$ 550,000
Project # 3: Phase 1 Pipeline Projects	\$ 415,000
Project # 5: Replace 45-60 year old Fire Hydrants	\$ 168,750
Project # 6: Replace Well Discharge Manifolds/Electirc Panel Upgrades	\$ 150,000
Project # 7: Management Consulting-Water	\$ 30,000
Project # 8: Clean & Video Sewer Lines-Club Circle/Foursome/Backnine	\$ 350,000
Project # 9: Sewer Main replacement-Borrego Springs Road @ La Casa	\$ 150,000
Project #10: Management Consulting-Sewer	<u>\$ 20,000</u>
	<u>\$3,033,750</u>

2020-21

Project # 2: Production Well #2-Construction	\$1,000,000
Project # 4: Phase 2 Pipeline Projects	\$ 557,000
Project # 5: Replace 45-60 year old Fire Hydrants	<u>\$ 168,750</u>
	<u>\$1,725,750</u>
 GRAND TOTAL	 <u>\$5,694,450</u>

CIP GRANTS APPLIED FOR AND/OR RECEIVED 2018-2019

1. In June 2018, Staff submitted all required components of both the Water (Replace Indian Head, Twin and RH#2 Tanks and Wilcox Motor) and Sewer (Grit removal, Clarifyer Rehabilitation (2)) State Grant Applications. Following is the updated Cost Estimates for each Project and the updated cost estimates that are included in the Grant Application:

WATER

Replace Rams Hill #2	\$ 600,000
Replace Twin Tanks	\$ 579,000
Replace IndianHead	\$ 600,000
Replace Wilcox Motor	\$ <u>59,000</u>
 TOTAL	 \$ <u>1,838,000</u>

SEWER

Upgrade Grit Removal/Equipment	\$ 214,000
Rehabilitate Two Clarifiers	\$ <u>200,000</u>
 TOTAL	 \$ <u>414,000</u>

TOTAL 2019-21 GRANT FUNDING POTENTIAL \$ 2,252,000

2. In late 2017 BWD applied for a Proposition One Grant in the amount of \$500,000 for Public Outreach, Impacts of the GSP on BWD wells, BWD Replacement Well Siting and Metering in the Basin. The contract was approved and BWD has submitted for over \$200,000 in reimbursements that are, at this time, anticipated to arrive early FY 2020.

TOTAL 2018-19 GRANT AWARD = \$500,000

BORREGO WATER DISTRICT
POLICY STATEMENT

SUBJECT: CASH RESERVES POLICY

NO: 2011-05-01

ADOPTED: 2011-05-25

AMENDED: 2015-05-27

AMENDED: 2016-05-25

AMENDED: 2017-05-24

AMENDED: 2018-06-19

AMENDED: 2019-05-28

I. BACKGROUND AND INTRODUCTION

Reserves are needed because of risk. Water and sewer operations are inherently risky, given the potential liability 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. 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, sometimes bond or loan covenants require a debt reserve or recommend a rate stabilization reserve.

Many 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 of capital infrastructure to the future where higher costs will be borne by ratepayers to repair or replace infrastructure that has failed catastrophically. 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.

This Board believes that operating with revenue sufficiency is required, not only to remain creditworthy 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 repair and replacement of capital infrastructure; as well as funds set aside for groundwater management purposes.

Reserves are also necessary for the District to stabilize rates due to normal revenue and cost uncertainties, and to provide a prudent amount of insurance against economic downturns and 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 upon 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 their funding levels that are based upon this District's unique operating, capital investment and financial plans. Both restricted reserves and Board 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 New Development policy in effect 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 liquid 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 is reduced. Based on industry standards, The Operating Reserve, in the case of monthly billing, should equal around 90 days of expenses (3 months). As the bill frequency is less frequent, the Operating Minimum Reserve should 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 annual expenses (O&M), 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 undue rate shock to District customers. It may also serve as collateral and reassurance when awarding a construction contract. A sound target for a Capital Reserve is to have an average years' worth of capital expenses based on the District's adopted Capital Improvement Plan (CIP). At a minimum, the Capital Reserve should be funded to at least an amount equivalent to the total annual depreciation value of the system and these funds can be used as a reasonable reinvestment amount into the system. The Capital Reserve target is a reserve equal to the inflated value of a rolling average of the subsequent 5 years of the District's Capital Improvements Plan for water infrastructure repair and replacement (R&R) and sewer and wastewater R&R.

Emergency Reserves. The purpose of the emergency reserve is to protect the District and its customers against the impacts from unanticipated emergencies that would severely impact the District's ability to deliver the water and/or sewer and wastewater treatment services to its customers. This reserve provides funding for emergency repairs or failure of essential equipment that must be immediately replaced and are unanticipated by the Capital Improvements Plan (CIP). The emergency reserve target is \$2,000,000, that should be sufficient to finance the required cash flow and liquidity until such time that adequate emergency financing can be secured from conventional outside resources.

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 2020

DEBT	\$ 900,000
SYSTEM GROWTH	Accumulated developer's charges
WORKING CAPITAL	\$1,000,000
RATE COVENANT STABILIZATION FUNDS	\$ 770,000
CONTINGENCY	\$ 300,000
CAPITAL REPAIRS	\$ 640,000
EMERGENCY	<u>\$2,000,000</u>
 FY RESERVES TARGET	 <u>\$5,610,000</u>

The Reserves Targets will continue to increase each FY based on capital structure changes and CIP spending.

RESERVES TARGETS FOR FY 2020

RESERVE	AMOUNT
System Growth	accumulated developer's charges
Debt	900,000
Working Capital	1,000,000
Rate Covenant Stabilization Funds	770,000
Contingency	300,000
Capital Reserve	640,000
Emergency	2,000,000
FY 2020 RESERVES TARGET	5,610,000

FY	CIP SPEND
2015	466,843
2016	699,260
2017	510,925
2018	799,750
2019	735,000
Capital Reserve Target	642,356

**BORREGO WATER DISTRICT
PROPOSED RATES FOR
FISCAL YEARS 2019-2021
Adopted May 28, 2019**

Sewer Rates

The District provides sewer service to areas 1, 2 and 5. Changes are being proposed for all Areas. The District's monthly sewer charges are based on one equivalent dwelling unit (EDU) usage of 250 gallons per day, for a typical single family residence. Non-Residential projected EDU requirements are determined on a case-by-case basis. Sewer customers in area 2 (TCS) are charged a fixed monthly holder fee, and a monthly user fee based on number of EDU's

Sewer service charges are proposed to change as shown in the following table:

	Current Rates FY 2019	FY 2020 Projected	FY 2021 Projected
Sewer Area 1	\$41.94	\$43.62	\$45.37
Sewer Area 5	\$48.78	\$50.73	\$52.76
TCS User	\$48.78	\$50.73	\$52.76
TCS Holder	\$26.78	\$27.85	\$28.97
BSR	\$26.78	\$27.85	\$28.97
BSR Usage	\$1.97	\$2.05	\$2.13

Water Rates

The District's water rates have two components: 1) a **Fixed Meter Charge** based on the customer's meter size, to recover a portion of the District's fixed costs of operating, maintaining and delivering water, and 2) a **Commodity Charge**, determined by the amount of water used. It is proposed that the fixed charges, applicable to all customers account for 33% of the District's ongoing expenses, and 67% of such expenses should be funded on a consumption basis. It is further proposed that the Fixed Meter Charge increase at the rate of 5% FY 2020 and the Commodity Charge increase at the rate of 6% per year for the next two years, in order to meet future increases in expenses, provide reserves, and provide sufficient reserves to meet any future debt obligations, and to allow for additional annual increases to pass through inflation. The proposed rates would consider two tiers, calculated to address the costs incurred by the District to deliver water, the difference based on basic domestic (i.e., indoor) water usage, and outdoor irrigation.

Fixed water meter charges are proposed to change as shown in the following table:

Meter size	Current Rates FY 2019	FY 2020 5% Projected	FY 2021 Projected
¾"	\$39.21	\$41.17	\$44.07
1"	\$50.87	\$53.41	\$57.17
1 ½"	\$80.01	\$84.01	\$89.91
2"	\$114.97	\$120.72	\$129.19
3"	\$208.22	\$218.63	\$233.97
4"	\$313.14	\$328.80	\$351.85
6"	\$604.54	\$634.77	\$679.27

Commodity Rates are proposed to change as shown in the following table:

Residential	Current Rates FY 2019	FY 2020 Projected	FY 2021 Projected
Tier 1 1-7	\$3.56	\$3.78	\$4.01
Tier 2 >7	\$3.92	\$4.16	\$4.41
Non-Residential	Current Rates	FY 2020 Projected	FY 2021 Projected
Tier1	\$3.77	\$4.00	\$4.24

Other Rates and Fees

Any rates or fees associated with water or sewer service that are not addressed in this notice shall remain in full force and effect as previously adopted by the Board of Directors.

Pass Through Costs

Pursuant to AB 3030, the District Board will also authorize the pass-through of future rate and charge increases by San Diego Gas & Electric for electricity rates associated with storing, treating, pumping, and delivering water. This authorization will be in effect for five years, until June 30, 2021. The Board will hold a public hearing to review the proposed increases prior to enacting any such changes.

RESOLUTION NO. 2019-05-02

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
BORREGO WATER DISTRICT ESTABLISHING WATER AND
SEWER SERVICE RATES FOR FY 2019-2020**

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

WHEREAS, the Board has determined that the District is facing increasing costs for the administration, operation, maintenance and improvements of the water and sewer systems and services, the District's water and sewer rates need to be increased in order for the District to pay for its costs of providing service; 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 held a public meeting to discuss the budget and rate increase **for FY 2019-2020** on May 28, 2019.

WHEREAS, the Board approved the budget and rate increase at the May 28, 2019 Board Meeting.

WHEREAS, On May 31, 2019, a notice regarding the rate increase will be mailed to all of the District's affected ratepayers.

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 improvements of the District 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. These increases will be effective July 1, 2019 and beginning with the August, 2019 billing.

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.

The increased rates and charges set forth herein shall become effective July 1, 2019 and beginning with the August, 2019 billing.

PASSED, ADOPTED AND APPROVED at a special meeting of the Board of Directors of the Borrego Water District held on 28th day of May, 2019.

President of the Board of Directors
Of Borrego Water District

ATTEST:



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

RESOLUTION NO. 2019-05-01

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 2019-2020

WHEREAS, the Board of Directors has reviewed and considered the Budget as presented for Fiscal Year 2019-2020 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

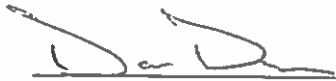
WHEREAS, the Budget establishes the basis for incurring liability and making expenditures on behalf of the District.

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 2019-2020.

PASSED, ADOPTED AND APPROVED at a regular meeting of the Board of Directors of the Borrego Water District held on May 28, 2019.

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

STATE OF CALIFORNIA)
) ss.

