BEAUMONT-CHERRY VALLEY WATER DISTRICT
560 Magnolia Avenue, Beaumont, CA 92223

NOTICE AND AGENDA
REGULAR MEETING OF THE BOARD OF DIRECTORS
Wednesday, June 10, 2020 - 6:00 p.m.

TELECONFERENCE NOTICE

This meeting is hereby noticed pursuant to
California Government Code Section 54950 et. seq. and
California Governor's Executive Orders N-29-20 and N-33-20
The BCVWD Board of Directors will attend via teleconference
To access the teleconference:
*Please dial **712-770-4010** and Enter Code **754421***

Meeting materials are available on the BCVWD's website:
https://bcvwd.org/document-category/regular-board-agendas/

Call to Order: President Covington

Pledge of Allegiance: Director Slawson

Invocation: Director Williams

Roll Call

Teleconference Verification

Public Comment

PUBLIC COMMENT:
At this time, any person may address the Board of Directors on matters within its jurisdiction. However, state law prohibits the Board from discussing or taking action on any item not listed on the agenda. Any non-agenda matters that require action will be referred to Staff for a report and possible action at a subsequent meeting. **Please limit your comments to three minutes.** Sharing or passing time to another speaker is not permitted.

ACTION ITEMS
Action may be taken on any item on the agenda. Information on the following items is included in the full Agenda Packet.

1. Closed Session

a. CONFERENCE WITH LEGAL COUNSEL – Anticipated Litigation
Significant exposure to litigation
Pursuant to Government Code Section 54956.9(d)(2)
One Potential Case

2. Adjustments to the Agenda

3. **Consent Calendar:** All matters listed under the Consent Calendar are considered by the Board of Directors to be routine and will be enacted in one motion. There will be no discussion of these items prior to the time the Board considers the motion unless members of the Board, the administrative staff, or the public request specific items to be discussed and/or removed from the Consent Calendar.

    a. April 2020 Budget Variance Report (pages 5 - 9)
    b. April 2020 Cash/Investment Balance Report (page 10)
    c. May 2020 Check Register (pages 11 - 26)
    d. May 2020 Invoices Pending Approval (pages 27 - 28)
    e. Minutes of the Regular Meeting of May 13, 2020 (pages 29 - 41)
    f. Minutes of the Regular Meeting of May 28, 2020 (pages 42 - 55)

4. **San Gorgonio Pass Water Agency (SGPWA) and Sites Project Authority Phase 2 Participation Agreement, Associated Costs and Presentation by Jeff Davis, General Manager of SGPWA** (pages 56 - 72)

5. **Resolution 2020- ____: Adopting Regulations Regarding the Payment of the Cost of the Candidate's Statement for the November 2020 Consolidated Election** (pages 73 - 75)

6. **Approval of the Notices of Election of 2020 for submission to the Registrars of Voters of the County of San Bernardino and the County of Riverside regarding the November 3, 2020 Consolidated Election** (pages 76 - 77)

7. **2019 External Audit and Comprehensive Annual Financial Report** (pages 78 - 188)

8. **Discussion of Cash Flows as related to the ongoing COVID-19 Local State of Emergency** (Handout)

9. **Review of Allocation of Water Supply Credits for Riverside County Assessor's Parcel No. 401-071-039, located on Rancho Drive, north of Orchard Street and south of Bonita Dirve in the community of Cherry Valley** (pages 189 - 228)

10. **Update of Annexation request for Properties Associated with Parcel Map 28348 and Update and Extension of "Will Serve Letter" for Development located on Parcels 1 and 9 of Parcel Map 28348** (pages 229 - 410)

11. **Resolution 2020-__ Amending Part 11 of the District's Rules and Regulations Governing Water Service Relating to Cross Connections *and* Resolution 2020-__ Adopting a Cross-Connection Control Program** (pages 411 - 443)

12. **Resolution 2020-__ Approval of Water Supply Assessment for Legacy Highlands Development Project located south of Highway 60 and west of Beaumont Avenue (Highway 79) (Tentative Tract Map No. 31570)** (pages 444 - 530)

13. **BCVWD Board Meeting Transition to Zoom Video based meetings in July provided the California Governor's Stay At Home Order is still in Place** (No Staff Report)

14. **Status of Local Emergency regarding the Impact of the Respiratory Illness Pandemic COVID-19 pursuant to Resolution 2020-07** (No Staff Report)

15. Reports For Discussion

a. Ad Hoc Committees
b. General Manager
c. Directors' Reports
d. Legal Counsel Report

16. Announcements

All meetings will be held via teleconference until further notice, unless otherwise indicated.

- Engineering Workshop: Thursday, June 25, 2020 at 6:00 p.m.
- Finance and Audit Committee Meeting: Wednesday, July 1, 2020 at 3:00 p.m. (*note date change due to holiday*)
- Collaborative Agencies Committee Meeting: Wednesday, July 1 at 5:00 p.m. (*teleconference pending*)
- District offices will be closed on Thursday, July 2, 2020 in observance of Independence Day
- Regular Board Meeting: Wednesday, July 8, 2020 at 6:00 p.m.
- Engineering Workshop: Thursday, July 23, 2020 at 6:00 p.m.
- Personnel Committee Meeting: Monday, July 27, 2020 at 5:30 p.m.
- Beaumont Basin Watermaster Committee: Wednesday, August 5, 2020 at 10 a.m.

17. Action List for Future Meetings

- Water supply for BCVWD and the region

18. Adjournment

NOTICES

AVAILABILITY OF AGENDA MATERIALS - Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Beaumont-Cherry Valley Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, at 560 Magnolia Avenue, Beaumont, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available on the District website at the same time as they are distributed to Board Members: website: www.bcvwd.org.

REVISIONS TO THE AGENDA - In accordance with §54954.2(a) of the Government Code (Brown Act), revisions to this Agenda may be made up to 72 hours before the Board Meeting, if necessary, after mailings are completed. Interested persons wishing to receive a copy of the set Agenda may pick one up at the District's Main Office, located at 560 Magnolia Avenue, Beaumont, California, up to 72 hours prior to the Board Meeting.

REQUIREMENTS RE: DISABLED ACCESS - In accordance with §54954.2(a), requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting, should be made to the District Office, at least 48 hours in advance of the meeting to ensure availability of the requested service or accommodation. The District Office may be contacted by telephone at (951) 845-9581, email at info@bcvwd.org or in writing to the Beaumont-Cherry Valley Water District, 560 Magnolia Avenue, Beaumont, California 92223.

CERTIFICATION OF POSTING

I certify that on or before June 7, 2020, a copy of the foregoing notice was posted near the regular meeting place of the Board of Directors of Beaumont-Cherry Valley Water District and to its website at least 72 hours in advance of the meeting (Government Code §54954.2(a)).

Erica Gonzales Erica Gonzales 2020.06.05 16:29:35 -07'00' for

Yolanda Rodriguez
Director of Finance and Administration

General Ledger

Budget Variance Revenue

User: wclayton
Printed: 5/28/2020 11:03:28 AM
Period 04 - 04
Fiscal Year 2020

Beaumont-Cherry Valley Water District
560 Magnolia Avenue
Beaumont CA 92223
(951) 845-9581
www.bcvwd.org

Account Number	Description	Budget	Period Amt	End Bal	Variance	% Avail/ Uncollect
50	**GENERAL**					
01-50-510-490001	Interest Income - Bonita Vista	$ 1,600.00	$ 197.43	$ 464.93	$ 1,135.07	70.94%
01-50-510-490011	Interest Income-Fairway Canyon	$ 46,829.00	$ -	$ -	$ 46,829.00	100.00%
01-50-510-490021	Interest Income - General	$ 800,000.00	$ 166,912.45	$ 329,410.02	$ 470,589.98	58.82%
	Interest Income	**$ 848,429.00**	**$ 167,109.88**	**$ 329,874.95**	**$ 518,554.05**	**61.12%**
01-50-510-481001	Fac Fees-Wells	$ 580,800.00	$ -	$ 96,800.00	$ 484,000.00	83.33%
01-50-510-481006	Fac Fees-Water Rights (SWP)	$ 367,500.00	$ -	$ 61,250.00	$ 306,250.00	83.33%
01-50-510-481012	Fac Fees-Water Treatment Plant	$ 276,300.00	$ -	$ 46,050.00	$ 230,250.00	83.33%
01-50-510-481018	Fac Fees-Local Water Resources	$ 145,500.00	$ -	$ 24,250.00	$ 121,250.00	83.33%
01-50-510-481024	Fac Fees-Recycld Wtr Facilties	$ 420,600.00	$ -	$ 86,867.92	$ 333,732.08	79.35%
01-50-510-481030	Fac Fees-Transmission (16")	$ 470,400.00	$ -	$ 78,400.00	$ 392,000.00	83.33%
01-50-510-481036	Fac Fees-Storage	$ 602,400.00	$ -	$ 100,400.00	$ 502,000.00	83.33%
01-50-510-481042	Fac Fees-Booster	$ 41,700.00	$ -	$ 6,950.00	$ 34,750.00	83.33%
01-50-510-481048	Fac Fees-Pressure Reducng Stns	$ 21,300.00	$ -	$ 3,550.00	$ 17,750.00	83.33%
01-50-510-481054	Fac Fees-Misc Projects	$ 18,600.00	$ -	$ 3,100.00	$ 15,500.00	83.33%
01-50-510-481060	Fac Fees-Financing Costs	$ 91,500.00	$ -	$ 15,755.28	$ 75,744.72	82.78%
01-50-510-485001	Front Footage Fees	$ -	$ -	$ 178,921.00	$ (178,921.00)	0.00%
	Non-Operating Revenue	**$ 3,036,600.00**	**$ -**	**$ 702,294.20**	**$ 2,334,305.80**	**76.87%**
01-50-510-410100	Sales	$ 5,161,164.00	$ 219,523.58	$ 1,021,763.60	$ 4,021,157.40	77.91%
01-50-510-410151	Agricultural Irrigation Sales	$ 20,469.00	$ -	$ 1,842.72	$ 18,157.28	88.71%
01-50-510-410171	Construction Sales	$ 92,930.00	$ 1,820.61	$ (1,481.64)	$ 92,282.64	99.30%
01-50-510-413001	Backflow Admin Charges	$ 44,000.00	$ 5,310.09	$ 15,981.33	$ 28,018.67	63.68%
01-50-510-413011	Fixed Meter Charges	$ 3,358,743.00	$ 359,590.72	$ 1,223,259.78	$ 2,058,534.22	61.29%
01-50-510-413021	Meter Fees	$ 325,000.00	$ 41,116.00	$ 264,683.99	$ 60,316.01	18.56%
01-50-510-415001	SGPWA Importation Charges	$ 3,452,007.00	$ 154,305.37	$ 535,259.66	$ 1,763,094.34	51.07%
01-50-510-415011	SCE Power Charges	$ 1,591,355.00	$ 80,208.40	$ 346,677.35	$ 1,289,176.65	81.01%
01-50-510-417001	2nd Notice Penalties	$ 100,665.00	$ -	$ 18,045.00	$ 82,620.00	82.07%
01-50-510-417011	3rd Notice Charges	$ 35,000.00	$ -	$ 10,540.00	$ 24,460.00	69.89%
01-50-510-417021	Account Reinstatement Fees	$ 44,000.00	$ -	$ 3,650.00	$ 40,350.00	91.70%
01-50-510-417031	Lien Processing Fees	$ 4,000.00	$ -	$ 900.00	$ 3,100.00	77.50%
01-50-510-417041	Credit Check Processing Fees	$ 10,000.00	$ 1,070.00	$ 3,145.00	$ 6,855.00	68.55%
01-50-510-417051	Returned Check Fees	$ 3,000.00	$ 650.00	$ 1,675.00	$ 1,325.00	44.17%
01-50-510-417061	Custmr Damages/Upgrade Charges	$ 22,000.00	$ -	$ 15,112.83	$ 6,887.17	31.31%
01-50-510-417071	After Hours Call Out Charges	$ 650.00	$ -	$ -	$ 650.00	100.00%
01-50-510-417081	Bench Test Fees	$ 90.00	$ -	$ 30.00	$ 60.00	66.67%
01-50-510-417091	Credit Card Processing Fees	$ 45,000.00	$ 4,116.00	$ 18,253.24	$ 26,746.76	59.44%
01-50-510-419011	Development Income	$ 60,000.00	$ 13,486.61	$ 45,739.06	$ 14,260.94	23.77%
01-50-510-419031	Well Maintenance Reimbursemnt	$ 7,500.00	$ -	$ -	$ 7,500.00	100.00%
01-50-510-419061	Miscellaneous Income	$ 100.00	$ 35,000.00	$ 39,157.26	$ (39,057.26)	-39057.26%
	Operating Revenue	**$ 14,377,673.00**	**$ 916,197.38**	**$ 3,564,234.18**	**$ 9,506,494.82**	**66.12%**
01-50-510-471001	Rent - 12303 Oak Glen	$ 2,400.00	$ 200.00	$ 800.00	$ 1,600.00	66.67%
01-50-510-471011	Rent - 13695 Oak Glen	$ 2,400.00	$ 200.00	$ 800.00	$ 1,600.00	66.67%
01-50-510-471021	Rent - 13697 Oak Glen	$ 2,400.00	$ 200.00	$ 800.00	$ 1,600.00	66.67%
01-50-510-471031	Rent - 9781 Avenida Miravilla	$ 2,400.00	$ 200.00	$ 800.00	$ 1,600.00	66.67%
01-50-510-471101	Util - 12303 Oak Glen	$ 2,688.00	$ 252.87	$ 1,184.49	$ 1,503.51	55.93%
01-50-510-471111	Util - 13695 Oak Glen	$ 2,158.00	$ 308.09	$ 823.16	$ 1,334.84	61.86%
01-50-510-471121	Util - 13697 Oak Glen	$ 3,631.00	$ 542.75	$ 1,473.20	$ 2,157.80	59.43%
01-50-510-471131	Util - 9781 Avenida Miravilla	$ 1,948.00	$ 478.15	$ 1,044.93	$ 903.07	46.36%
	Rent/Utilities	**$ 20,025.00**	**$ 2,381.86**	**$ 7,725.78**	**$ 12,299.22**	**61.42%**
Revenue Total		**$ 18,282,727.00**	**$ 1,085,689.12**	**$ 4,604,129.11**	**$ 12,371,653.89**	**67.67%**

General Ledger

Budget Variance Expense

User: wclayton
Printed: 5/28/2020 11:03:52 AM
Period 04 - 04
Fiscal Year 2020

Beaumont-Cherry Valley Water District
560 Magnolia Avenue
Beaumont CA 92223
(951) 845-9581
www.bcvwd.org

Account Number	Description	Budget	Period Amt	End Bal	Variance	Encumbered	% Avail/ Uncollect
10	**BOARD OF DIRECTORS**						
01-10-110-500101	Board of Directors Fees	$ 53,400.00	$ 4,400.00	$ 12,600.00	$ 40,800.00	$ -	76.40%
01-10-110-500115	Social Security	$ 3,324.00	$ 272.80	$ 781.20	$ 2,542.80	$ -	76.50%
01-10-110-500120	Medicare	$ 779.00	$ 63.80	$ 182.70	$ 596.30	$ -	76.55%
01-10-110-500140	Life Insurance	$ 125.00	$ -	$ -	$ 125.00	$ -	100.00%
01-10-110-500143	EAP Program	$ 75.00	$ -	$ -	$ 75.00	$ -	100.00%
01-10-110-500145	Workers' Compensation	$ 776.00	$ 24.87	$ 70.11	$ 705.89	$ -	90.97%
01-10-110-500175	Training/Education/Mtgs/Travel	$ 9,000.00	$ -	$ -	$ 9,000.00	$ -	100.00%
	Board of Directors Personnel	**$ 67,479.00**	**$ 4,761.47**	**$ 13,634.01**	**$ 53,844.99**	**$ -**	**79.80%**
01-10-110-550042	Supplies-Other	$ 1,030.00	$ -	$ 188.64	$ 841.36	$ -	81.69%
	Board of Directors Materials & Supplies	**$ 1,030.00**	**$ -**	**$ 188.64**	**$ 841.36**	**$ -**	**81.69%**
01-10-110-550012	Election Expenses	$ 10,000.00	$ -	$ -	$ 10,000.00	$ -	100.00%
01-10-110-550051	Advertising/Legal Notices	$ 1,400.00	$ -	$ 220.00	$ 1,180.00	$ -	84.29%
	Board of Directors Services	**$ 11,400.00**	**$ -**	**$ 220.00**	**$ 11,180.00**	**$ -**	**98.07%**
Expense Total	**BOARD OF DIRECTORS**	**$ 79,909.00**	**$ 4,761.47**	**$ 14,042.65**	**$ 65,866.35**	**$ -**	**82.43%**
20	**ENGINEERING**						
01-20-210-500105	Labor	$ 568,262.00	$ 35,678.27	$ 98,397.55	$ 469,864.45	$ -	82.68%
01-20-210-500115	Social Security	$ 39,710.00	$ 410.62	$ 4,242.77	$ 35,467.23	$ -	89.32%
01-20-210-500120	Medicare	$ 9,294.00	$ 523.21	$ 1,551.14	$ 7,742.86	$ -	83.31%
01-20-210-500125	Health Insurance	$ 104,544.00	$ 664.39	$ 9,104.84	$ 95,439.16	$ -	91.29%
01-20-210-500140	Life Insurance	$ 2,784.00	$ 28.80	$ 251.40	$ 2,532.60	$ -	90.97%
01-20-210-500143	EAP Program	$ 288.00	$ 4.56	$ 19.97	$ 268.03	$ -	93.07%
01-20-210-500145	Workers' Compensation	$ 8,489.00	$ 247.06	$ 709.55	$ 7,779.45	$ -	91.64%
01-20-210-500150	Unemployment Insurance	$ 19,324.00	$ -	$ -	$ 19,324.00	$ -	100.00%
01-20-210-500155	Retirement/CalPERS	$ 93,299.00	$ 5,770.98	$ 15,244.92	$ 78,054.08	$ -	83.66%
01-20-210-500165	Uniforms & Employee Benefits	$ 350.00	$ -	$ -	$ 350.00	$ -	100.00%
01-20-210-500175	Training/Education/Mtgs/Travel	$ 6,000.00	$ -	$ 180.39	$ 5,819.61	$ -	96.99%
01-20-210-500180	Accrued Sick Leave Expense	$ 28,287.00	$ 390.56	$ 1,893.50	$ 26,393.50	$ -	93.31%
01-20-210-500185	Accrued Vacation Leave Expense	$ 20,202.00	$ -	$ -	$ 20,202.00	$ -	100.00%
01-20-210-500187	Accrual Leave Payments	$ 14,745.00	$ -	$ 3,344.00	$ 11,401.00	$ -	77.32%
01-20-210-500195	CIP Related Labor	$ (225,000.00)	$ (18,532.46)	$ (38,939.86)	$ (186,060.14)	$ -	82.69%
	Engineering Personnel	**$ 690,578.00**	**$ 25,185.99**	**$ 96,000.17**	**$ 594,577.83**	**$ -**	**86.10%**
01-20-210-540048	Permits, Fees & Licensing	$ 2,060.00	$ -	$ -	$ 2,060.00	$ -	100.00%
	Engineering Materials & Supplies	**$ 2,060.00**	**$ -**	**$ -**	**$ 2,060.00**	**$ -**	**100.00%**
01-20-210-550030	Membership Dues	$ 800.00	$ -	$ 300.00	$ 500.00	$ -	62.50%
01-20-210-550051	Advertising/Legal Notices	$ 2,000.00	$ -	$ -	$ 2,000.00	$ -	100.00%
01-20-210-580031	Outside Engineering	$ 61,800.00	$ -	$ -	$ 61,800.00	$ -	100.00%
01-20-210-580032	CIP Related Outside Engineering	$ (41,280.00)	$ -	$ -	$ (41,280.00)	$ -	100.00%
	Engineering Services	**$ 23,320.00**	**$ -**	**$ 300.00**	**$ 23,020.00**	**$ -**	**98.71%**
Expense Total	**ENGINEERING**	**$ 715,958.00**	**$ 25,185.99**	**$ 96,300.17**	**$ 619,657.83**	**$ -**	**86.55%**
30	**FINANCE & ADMIN SERVICES**						
01-30-310-500105	Labor	$ 1,140,773.00	$ 105,565.75	$ 294,170.65	$ 846,602.35	$ -	74.21%
01-30-310-500110	Overtime	$ 1,185.00	$ 232.47	$ 718.00	$ 467.00	$ -	39.41%
01-30-310-500111	Double Time	$ 500.00	$ -	$ 90.30	$ 409.70	$ -	81.94%
01-30-310-500115	Social Security	$ 87,852.00	$ 2,091.88	$ 16,240.76	$ 71,611.24	$ -	81.51%
01-30-310-500120	Medicare	$ 20,557.00	$ 1,544.41	$ 4,874.19	$ 15,682.81	$ -	76.29%
01-30-310-500125	Health Insurance	$ 287,496.00	$ 15,692.27	$ 62,755.60	$ 224,740.40	$ -	78.17%
01-30-310-500130	CalPERS Health Admin Costs	$ 3,000.00	$ 159.21	$ 647.04	$ 2,352.96	$ -	78.43%
01-30-310-500140	Life Insurance	$ 6,876.00	$ 70.42	$ 1,056.33	$ 5,819.67	$ -	84.64%
01-30-310-500143	EAP Program	$ 860.00	$ 15.96	$ 100.73	$ 759.27	$ -	88.29%
01-30-310-500145	Workers' Compensation	$ 16,632.00	$ 630.36	$ 1,798.28	$ 14,833.72	$ -	89.19%
01-30-310-500150	Unemployment Insurance	$ 38,808.00	$ 3,472.00	$ 3,472.00	$ 35,336.00	$ -	91.05%
01-30-310-500155	Retirement/CalPERS	$ 213,002.00	$ 21,941.72	$ 63,419.09	$ 149,582.91	$ -	70.23%
01-30-310-500161	Estim Current Yr OPEB Expense	$ 107,150.00	$ -	$ -	$ 107,150.00	$ -	100.00%
01-30-310-500165	Uniforms & Employee Benefits	$ 1,000.00	$ -	$ 23.71	$ 976.29	$ -	97.63%
01-30-310-500175	Training/Education/Mtgs/Travel	$ 25,000.00	$ (2,600.00)	$ 5,867.96	$ 19,132.04	$ -	76.53%
01-30-310-500180	Accrued Sick Leave Expense	$ 58,662.00	$ 174.20	$ 4,493.21	$ 54,168.79	$ -	92.34%
01-30-310-500185	Accrued Vacation Leave Expense	$ 90,288.00	$ 154.38	$ 3,904.12	$ 86,383.88	$ -	95.68%
01-30-310-500187	Accrual Leave Payments	$ 115,720.00	$ -	$ 31,676.07	$ 84,043.93	$ -	72.63%
01-30-310-550024	Employment Testing	$ 206.00	$ -	$ -	$ 206.00	$ -	100.00%
01-30-315-500105	Labor	$ 140,662.00	$ 14,577.60	$ 40,088.40	$ 100,573.60	$ -	71.50%
01-30-315-500115	Social Security	$ 12,380.00	$ 904.47	$ 4,069.18	$ 8,310.82	$ -	67.13%
01-30-315-500120	Medicare	$ 2,896.00	$ 211.53	$ 951.67	$ 1,944.33	$ -	67.14%
01-30-315-500125	Health Insurance	$ 26,136.00	$ 2,114.24	$ 8,456.96	$ 17,679.04	$ -	67.64%
01-30-315-500140	Life Insurance	$ 912.00	$ 13.96	$ 149.23	$ 762.77	$ -	83.64%

Account Number	Description	Budget	Period Amt	End Bal	Variance	Encumbered	% Avail/ Uncollect
01-30-315-500143	EAP Program	$ 72.00	$ 1.52	$ 9.23	$ 62.77	$ -	87.18%
01-30-315-500145	Workers' Compensation	$ 2,032.00	$ 82.50	$ 226.88	$ 1,805.12	$ -	88.83%
01-30-315-500150	Unemployment Insurance	$ 4,783.00	$ -	$ -	$ 4,783.00	$ -	100.00%
01-30-315-500155	Retirement/CalPERS	$ 15,604.00	$ 1,393.43	$ 4,201.97	$ 11,402.03	$ -	73.07%
01-30-315-500175	Training/Education/Mtgs/Travel	$ 4,120.00	$ -	$ -	$ 4,120.00	$ -	100.00%
01-30-315-500180	Accrued Sick Leave Expense	$ 8,029.00	$ -	$ -	$ 8,029.00	$ -	100.00%
01-30-315-500185	Accrued Vacation Leave Expense	$ 14,597.00	$ -	$ -	$ 14,597.00	$ -	100.00%
01-30-315-500187	Accrual Leave Payments	$ 35,678.00	$ -	$ 25,510.80	$ 10,167.20	$ -	28.50%
01-30-315-500195	CIP Related Labor	$ (32,875.00)	$ -	$ -	$ (32,875.00)	$ -	100.00%
01-30-320-500105	Labor	$ 66,992.00	$ 6,240.00	$ 16,900.00	$ 50,092.00	$ -	74.77%
01-30-320-500110	Overtime	$ 569.00	$ -	$ 97.50	$ 471.50	$ -	82.86%
01-30-320-500115	Social Security	$ 4,590.00	$ 73.41	$ 756.54	$ 3,833.46	$ -	83.52%
01-30-320-500120	Medicare	$ 1,075.00	$ 90.48	$ 250.24	$ 824.76	$ -	76.72%
01-30-320-500125	Health Insurance	$ 26,136.00	$ 1,239.86	$ 4,959.44	$ 21,176.56	$ -	81.02%
01-30-320-500140	Life Insurance	$ 444.00	$ 5.98	$ 64.57	$ 379.43	$ -	85.46%
01-30-320-500143	EAP Program	$ 72.00	$ 1.52	$ 9.23	$ 62.77	$ -	87.18%
01-30-320-500145	Workers' Compensation	$ 968.00	$ 35.31	$ 97.47	$ 870.53	$ -	89.93%
01-30-320-500150	Unemployment Insurance	$ 2,278.00	$ -	$ -	$ 2,278.00	$ -	100.00%
01-30-320-500155	Retirement/CalPERS	$ 11,866.00	$ 783.24	$ 1,605.29	$ 10,260.71	$ -	86.47%
01-30-320-500165	Uniforms & Employee Benefits	$ 125.00	$ -	$ -	$ 125.00	$ -	100.00%
01-30-320-500175	Training/Education/Mtgs/Travel	$ 9,350.00	$ -	$ 77.93	$ 9,272.07	$ 2,385.00	73.66%
01-30-320-500176	District Professional Developm	$ 19,000.00	$ -	$ -	$ 19,000.00	$ -	100.00%
01-30-320-500177	Gen Safety Training & Supplies	$ 14,385.00	$ 500.00	$ 3,181.05	$ 11,203.95	$ -	77.89%
01-30-320-500180	Accrued Sick Leave Expense	$ 3,066.00	$ -	$ 143.00	$ 2,923.00	$ -	95.34%
01-30-320-500185	Accrued Vacation Leave Expense	$ 3,160.00	$ -	$ 117.00	$ 3,043.00	$ -	96.30%
	Finance & Admin Services Personnel	**$ 2,614,669.00**	**$ 177,414.08**	**$ 607,231.62**	**$ 2,007,437.38**	**$ 2,385.00**	**76.68%**
01-30-310-550006	Cashiering Shortages/Overages	$ 50.00	$ -	$ (0.60)	$ 50.60	$ -	101.20%
01-30-310-550018	Employee Medical/First Aid	$ 300.00	$ -	$ -	$ 300.00	$ -	100.00%
01-30-310-550042	Office Supplies	$ 13,315.00	$ 341.74	$ 3,630.29	$ 9,684.71	$ -	72.74%
01-30-310-550046	Office Equipment	$ 5,000.00	$ 173.87	$ 173.87	$ 4,826.13	$ -	96.52%
01-30-310-550048	Postage	$ 5,150.00	$ 220.00	$ 693.95	$ 4,456.05	$ -	86.53%
01-30-310-550066	Subscriptions	$ 2,060.00	$ 537.60	$ 537.60	$ 1,522.40	$ -	73.90%
01-30-310-550072	Misc Operating Expenses	$ 1,030.00	$ -	$ -	$ 1,030.00	$ -	100.00%
01-30-310-550078	Bad Debt Expense	$ 3,000.00	$ -	$ -	$ 3,000.00	$ -	100.00%
01-30-310-550084	Depreciation	$ 2,681,000.00	$ 236,740.27	$ 947,629.31	$ 1,733,370.69	$ -	64.65%
01-30-315-501511	Phones - 560 Magnolia	$ 28,840.00	$ 1,262.85	$ 8,587.93	$ 20,252.07	$ -	70.22%
01-30-315-501531	Phones - 851 E. 6th	$ 3,914.00	$ 99.66	$ 399.86	$ 3,514.14	$ -	89.78%
01-30-315-501561	Phones - 815 E. 12th	$ 3,914.00	$ 319.68	$ 1,281.93	$ 2,632.07	$ -	67.25%
01-30-315-550044	Printing/Toner & Maint	$ 17,510.00	$ 1,190.51	$ 6,711.86	$ 10,798.14	$ -	61.67%
01-30-320-550042	Office Supplies	$ 2,000.00	$ -	$ 463.75	$ 1,536.25	$ -	76.81%
	Finance & Admin Services Materials & Supplies	**$ 2,767,083.00**	**$ 240,886.18**	**$ 970,109.75**	**$ 1,796,973.25**	**$ -**	**64.94%**
01-30-310-500190	Temporary Labor	$ 25,000.00	$ -	$ -	$ 25,000.00	$ -	100.00%
01-30-310-550001	Bank/Financial Service Fees	$ 20,600.00	$ 724.45	$ 2,583.79	$ 18,016.21	$ -	87.46%
01-30-310-550008	Transaction/Return Fees	$ 3,090.00	$ 72.86	$ 329.17	$ 2,760.83	$ -	89.35%
01-30-310-550010	Transaction/Credit Card Fees	$ 45,320.00	$ 4,092.87	$ 17,630.11	$ 27,689.89	$ -	61.10%
01-30-310-550014	Credit Check Fees	$ 10,300.00	$ -	$ 1,307.70	$ 8,992.30	$ -	87.30%
01-30-310-550030	Membership Dues	$ 43,260.00	$ (2,478.99)	$ 15,444.00	$ 27,816.00	$ -	64.30%
01-30-310-550036	Notary & Lien Fees	$ 2,060.00	$ -	$ 20.00	$ 2,040.00	$ -	99.03%
01-30-310-550050	Utility Billing Service	$ 70,040.00	$ 722.29	$ 19,144.97	$ 50,895.03	$ -	72.67%
01-30-310-550051	Advertising/Legal Notices	$ 4,120.00	$ -	$ -	$ 4,120.00	$ -	100.00%
01-30-310-550054	Property, Auto& Gen Liab Insur	$ 82,400.00	$ 7,411.09	$ 29,644.36	$ 52,755.64	$ -	64.02%
01-30-310-580001	Accounting & Audit	$ 36,050.00	$ 21,000.00	$ 23,500.00	$ 12,550.00	$ -	34.81%
01-30-310-580011	General Legal	$ 154,500.00	$ 4,926.50	$ 17,082.78	$ 137,417.22	$ -	88.94%
01-30-310-580036	Other Professional Services	$ 78,000.00	$ 4,000.00	$ 17,109.08	$ 60,890.92	$ -	78.07%
01-30-315-550030	Membership Dues	$ 2,060.00	$ -	$ -	$ 2,060.00	$ -	100.00%
01-30-315-580016	Computer Hardware	$ 20,600.00	$ 7.96	$ 1,813.20	$ 18,786.80	$ 1,319.94	84.79%
01-30-315-580021	IT/Software Support	$ 5,150.00	$ -	$ -	$ 5,150.00	$ -	100.00%
01-30-315-580026	License/Maintenance/Support	$ 150,000.00	$ 24,058.66	$ 53,711.46	$ 96,288.54	$ 3,260.00	62.02%
01-30-320-550025	Employee Retention	$ 2,500.00	$ -	$ 145.20	$ 2,354.80	$ -	94.19%
01-30-320-550030	Membership Dues	$ 1,470.00	$ -	$ -	$ 1,470.00	$ -	100.00%
01-30-320-550051	Advertising/Legal Notices	$ 1,000.00	$ -	$ 214.39	$ 785.61	$ -	78.56%
01-30-320-580036	Other Professional Services	$ 37,000.00	$ -	$ 7,125.00	$ 29,875.00	$ -	80.74%
	Finance & Admin Services Services	**$ 794,520.00**	**$ 64,537.69**	**$ 206,805.21**	**$ 587,714.79**	**$ 4,579.94**	**73.39%**
Expense Total	**FINANCE & ADMIN SERVICES**	**$ 6,176,272.00**	**$ 482,837.95**	**$ 1,784,146.58**	**$ 4,392,125.42**	**$ 6,964.94**	**71.00%**
40	**OPERATIONS**						
410	**Source of Supply Personnel**						
01-40-410-500105	Labor	$ 359,300.00	$ 27,065.55	$ 73,924.67	$ 285,375.33	$ -	79.43%
01-40-410-500110	Overtime	$ 19,656.00	$ 1,064.63	$ 3,530.76	$ 16,125.24	$ -	82.04%
01-40-410-500111	Double Time	$ 1,713.00	$ -	$ -	$ 1,713.00	$ -	100.00%
01-40-410-500113	Standby/On-Call	$ 9,800.00	$ 1,050.00	$ 2,800.00	$ 7,000.00	$ -	71.43%
01-40-410-500115	Social Security	$ 27,487.00	$ 1,984.29	$ 5,470.31	$ 22,016.69	$ -	80.10%
01-40-410-500120	Medicare	$ 6,434.00	$ 473.75	$ 1,319.03	$ 5,114.97	$ -	79.50%
01-40-410-500125	Health Insurance	$ 130,680.00	$ 7,577.91	$ 30,096.29	$ 100,583.71	$ -	76.97%
01-40-410-500140	Life Insurance	$ 2,412.00	$ 29.14	$ 311.87	$ 2,100.13	$ -	87.07%
01-40-410-500143	EAP Program	$ 360.00	$ 6.14	$ 37.26	$ 322.74	$ -	89.65%
01-40-410-500145	Workers' Compensation	$ 26,047.00	$ 958.01	$ 2,641.62	$ 23,405.38	$ -	89.86%
01-40-410-500150	Unemployment Insurance	$ 53,173.00	$ 1,272.00	$ 1,272.00	$ 51,901.00	$ -	97.61%

Account Number	Description	Budget	Period Amt	End Bal	Variance	Encumbered	% Avail/ Uncollect
01-40-410-500155	Retirement/CalPERS	$ 89,944.00	$ 6,378.31	$ 19,311.09	$ 70,632.91	$ -	78.53%
01-40-410-500165	Uniforms & Employee Benefits	$ 2,786.00	$ 200.00	$ 490.51	$ 2,295.49	$ -	82.39%
01-40-410-500175	Training/Education/Mtgs/Travel	$ 6,000.00	$ -	$ 2,075.00	$ 3,925.00	$ -	65.42%
01-40-410-500180	Accrued Sick Leave Expense	$ 17,418.00	$ (12.72)	$ 3,094.74	$ 14,323.26	$ -	82.23%
01-40-410-500185	Accrued Vacation Leave Expense	$ 23,785.00	$ 3,182.13	$ 5,462.22	$ 18,322.78	$ -	77.04%
01-40-410-500187	Accrual Leave Payments	$ 9,626.00	$ -	$ -	$ 9,626.00	$ -	100.00%
01-40-410-500195	CIP Related Labor	$ (25,800.00)	$ -	$ -	$ (25,800.00)	$ -	100.00%
01-40-410-550024	Employment Testing	$ 206.00	$ -	$ 75.00	$ 131.00	$ -	63.59%
440	**Transmission & Distribution Personnel**						
01-40-440-500105	Labor	$ 910,902.00	$ 71,149.95	$ 182,886.97	$ 728,015.03	$ -	79.92%
01-40-440-500110	Overtime	$ 40,809.00	$ 4,598.97	$ 9,349.61	$ 31,459.39	$ -	77.09%
01-40-440-500111	Double Time	$ 8,252.00	$ 267.84	$ 393.99	$ 7,858.01	$ -	95.23%
01-40-440-500113	Standby/On-Call	$ 24,700.00	$ 1,800.00	$ 5,400.00	$ 19,300.00	$ -	78.14%
01-40-440-500115	Social Security	$ 71,607.00	$ 5,473.64	$ 15,063.84	$ 56,543.16	$ -	78.96%
01-40-440-500120	Medicare	$ 16,764.00	$ 1,299.29	$ 3,558.55	$ 13,205.45	$ -	78.77%
01-40-440-500125	Health Insurance	$ 333,780.00	$ 19,304.24	$ 75,732.92	$ 258,047.08	$ -	77.31%
01-40-440-500140	Life Insurance	$ 6,240.00	$ 80.95	$ 879.24	$ 5,360.76	$ -	85.91%
01-40-440-500143	EAP Program	$ 918.00	$ 17.39	$ 112.02	$ 805.98	$ -	87.80%
01-40-440-500145	Workers' Compensation	$ 51,086.00	$ 2,045.98	$ 5,497.81	$ 45,588.19	$ -	89.24%
01-40-440-500155	Retirement/CalPERS	$ 203,424.00	$ 16,104.30	$ 49,746.04	$ 153,677.96	$ -	75.55%
01-40-440-500165	Uniforms & Employee Benefits	$ 5,893.00	$ 400.00	$ 2,637.92	$ 3,255.08	$ -	55.24%
01-40-440-500175	Training/Education/Mtgs/Travel	$ 3,090.00	$ -	$ 60.00	$ 3,030.00	$ -	98.06%
01-40-440-500180	Accrued Sick Leave Expense	$ 49,544.00	$ 7,378.52	$ 16,121.50	$ 33,422.50	$ -	67.46%
01-40-440-500185	Accrued Vacation Leave Expense	$ 66,253.00	$ 4,433.28	$ 14,187.93	$ 52,065.07	$ -	78.59%
01-40-440-500187	Accrual Leave Payments	$ 46,097.00	$ -	$ 4,946.09	$ 41,150.91	$ -	89.27%
01-40-440-500195	CIP Related Labor	$ (61,920.00)	$ (9,084.25)	$ (17,347.44)	$ (44,572.56)	$ -	71.98%
01-40-440-550024	Employment Testing	$ 412.00	$ -	$ -	$ 412.00	$ -	100.00%
450	**Inspections Personnel**						
01-40-450-500105	Labor	$ 41,427.00	$ 78.54	$ 684.89	$ 40,742.11	$ -	98.35%
01-40-450-500110	Overtime	$ 7,204.00	$ -	$ 78.54	$ 7,125.46	$ -	98.91%
01-40-450-500111	Double Time	$ 394.00	$ -	$ -	$ 394.00	$ -	100.00%
01-40-450-500115	Social Security	$ 3,041.00	$ 4.92	$ 47.70	$ 2,993.30	$ -	98.43%
01-40-450-500120	Medicare	$ 712.00	$ 1.15	$ 11.16	$ 700.84	$ -	98.43%
01-40-450-500125	Health Insurance	$ 12,552.00	$ 72.27	$ 293.51	$ 12,258.49	$ -	97.66%
01-40-450-500140	Life Insurance	$ 276.00	$ -	$ 1.99	$ 274.01	$ -	99.28%
01-40-450-500143	EAP Program	$ 34.00	$ -	$ 0.25	$ 33.75	$ -	99.26%
01-40-450-500145	Workers' Compensation	$ 2,924.00	$ 2.30	$ 13.92	$ 2,910.08	$ -	99.52%
01-40-450-500155	Retirement/CalPERS	$ 12,292.00	$ 160.32	$ 709.51	$ 11,582.49	$ -	94.23%
460	**Customer Svc & Meter Reading Personnel**						
01-40-460-500105	Labor	$ 173,375.00	$ 18,020.87	$ 48,408.36	$ 124,966.64	$ -	72.08%
01-40-460-500110	Overtime	$ 13,807.00	$ 1,668.98	$ 3,276.16	$ 10,530.84	$ -	76.27%
01-40-460-500111	Double Time	$ 2,152.00	$ -	$ -	$ 2,152.00	$ -	100.00%
01-40-460-500115	Social Security	$ 14,222.00	$ 1,205.53	$ 3,518.82	$ 10,703.18	$ -	75.26%
01-40-460-500120	Medicare	$ 3,330.00	$ 295.91	$ 842.63	$ 2,487.37	$ -	74.70%
01-40-460-500125	Health Insurance	$ 78,408.00	$ 3,554.73	$ 18,886.04	$ 59,521.96	$ -	75.91%
01-40-460-500140	Life Insurance	$ 1,140.00	$ 16.03	$ 182.14	$ 957.86	$ -	84.02%
01-40-460-500143	EAP Program	$ 216.00	$ 5.33	$ 27.00	$ 189.00	$ -	87.50%
01-40-460-500145	Workers' Compensation	$ 12,236.00	$ 590.68	$ 1,694.57	$ 10,541.43	$ -	86.15%
01-40-460-500155	Retirement/CalPERS	$ 47,651.00	$ 4,200.17	$ 12,870.39	$ 34,780.61	$ -	72.99%
01-40-460-500165	Uniforms & Employee Benefits	$ 1,600.00	$ 529.38	$ 529.38	$ 1,070.62	$ -	66.91%
01-40-460-500175	Training/Education/Mtgs/Travel	$ 412.00	$ -	$ 39.95	$ 372.05	$ -	90.30%
01-40-460-500180	Accrued Sick Leave Expense	$ 7,934.00	$ 523.60	$ 1,845.04	$ 6,088.96	$ -	76.75%
01-40-460-500185	Accrued Vacation Leave Expense	$ 14,722.00	$ 143.99	$ 2,460.27	$ 12,261.73	$ -	83.29%
01-40-460-500187	Accrual Leave Payments	$ 17,029.00	$ -	$ -	$ 17,029.00	$ -	100.00%
01-40-460-500195	CIP Related Labor	$ (10,320.00)	$ (787.21)	$ (1,533.70)	$ (8,786.30)	$ -	85.14%
01-40-460-550024	Employment Testing	$ 206.00	$ -	$ -	$ 206.00	$ -	100.00%
470	**Maintenance & General Plant Personnel**						
01-40-470-500105	Labor	$ 43,917.00	$ 38.46	$ 10,027.14	$ 33,889.86	$ -	77.17%
01-40-470-500110	Overtime	$ 3,616.00	$ -	$ -	$ 3,616.00	$ -	100.00%
01-40-470-500111	Double Time	$ 482.00	$ -	$ -	$ 482.00	$ -	100.00%
01-40-470-500115	Social Security	$ 2,981.00	$ 2.39	$ 622.13	$ 2,358.87	$ -	79.13%
01-40-470-500120	Medicare	$ 700.00	$ 0.56	$ 145.50	$ 554.50	$ -	79.21%
01-40-470-500125	Health Insurance	$ 19,620.00	$ -	$ 3,579.00	$ 16,041.00	$ -	81.76%
01-40-470-500140	Life Insurance	$ 312.00	$ 0.12	$ 39.65	$ 272.35	$ -	87.29%
01-40-470-500143	EAP Program	$ 53.00	$ 0.02	$ 6.60	$ 46.40	$ -	87.55%
01-40-470-500145	Workers' Compensation	$ 3,102.00	$ 1.14	$ 293.57	$ 2,808.43	$ -	90.54%
01-40-470-500155	Retirement/CalPERS	$ 10,963.00	$ 201.03	$ 2,042.31	$ 8,920.69	$ -	81.37%
	Operations Personnel	**$ 3,083,600.00**	**$ 207,030.45**	**$ 632,783.78**	**$ 2,450,816.22**	**$ -**	**79.48%**
410	**Source of Supply Materials & Supplies**						
01-40-410-501101	Electricity - Wells	$ 1,591,355.00	$ 83,867.67	$ 370,809.67	$ 1,220,545.33	$ -	76.70%
01-40-410-501201	Gas - Wells	$ 225.00	$ 14.30	$ 59.17	$ 165.83	$ -	73.70%
01-40-410-510011	Treatment & Chemicals	$ 90,000.00	$ 19,640.30	$ 21,845.78	$ 68,154.22	$ (383.78)	76.15%
01-40-410-510021	Lab Testing	$ 90,000.00	$ 11,616.00	$ 19,744.00	$ 70,256.00	$ -	78.06%
01-40-410-510031	Small Tools, Parts & Maint	$ 7,200.00	$ -	$ 648.60	$ 6,551.40	$ -	90.99%
01-40-410-520021	Maint & Rpr-Telemetry Equip	$ 10,300.00	$ 154.02	$ 154.02	$ 10,145.98	$ -	98.50%
01-40-410-520031	Maint & Rpr-General Equipment	$ -	$ -	$ -	$ -	$ -	0.00%
01-40-410-520061	Maint & Rpr-Pumping Equipment	$ 128,750.00	$ 26,773.91	$ 39,590.27	$ 89,159.73	$ 1,532.55	68.06%
01-40-410-550066	Subscriptions	$ 3,000.00	$ -	$ 1,070.00	$ 1,930.00	$ -	64.33%
440	**Transmission & Distribution Materials & Supplies**						
01-40-440-510031	Small Tools, Parts & Maint	$ 16,500.00	$ 189.32	$ 1,784.65	$ 14,715.35	$ -	89.18%
01-40-440-520071	Maint & Rpr-Pipelines&Hydrants	$ 80,000.00	$ 11,410.11	$ 23,154.87	$ 56,845.13	$ 12,465.00	55.48%

Account Number	Description	Budget	Period Amt	End Bal	Variance	Encumbered	% Avail/ Uncollect
01-40-440-520081	Maint & Rpr-Pressure Regulatrs	$ 7,725.00	$ -	$ 3,419.06	$ 4,305.94	$ -	55.74%
01-40-440-540001	Backflow Program	$ 7,725.00	$ -	$ 182.10	$ 7,542.90	$ -	97.64%
01-40-440-540024	Inventory Adjustments	$ 3,090.00	$ -	$ -	$ 3,090.00	$ -	100.00%
01-40-440-540036	Line Locates	$ 3,605.00	$ -	$ 668.55	$ 2,936.45	$ -	81.45%
01-40-440-540042	Meters Maintenance & Services	$ 154,500.00	$ 18,253.90	$ 56,783.01	$ 97,716.99	$ 13,323.10	54.62%
01-40-440-540078	Reservoirs Maintenance	$ 54,500.00	$ -	$ -	$ 54,500.00	$ -	100.00%
470	**Maintenance & General Plant Materials & Supplies**						
01-40-470-501111	Electricity - 560 Magnolia	$ 28,016.00	$ 1,242.95	$ 5,405.98	$ 22,610.02	$ -	80.70%
01-40-470-501121	Electricity - 12303 Oak Glen	$ 2,575.00	$ 252.87	$ 1,184.49	$ 1,390.51	$ -	54.00%
01-40-470-501131	Electricity - 13695 Oak Glen	$ 1,904.00	$ 79.23	$ 364.68	$ 1,539.32	$ -	80.85%
01-40-470-501141	Electricity - 13697 Oak Glen	$ 2,903.00	$ 100.69	$ 559.31	$ 2,343.69	$ -	80.73%
01-40-470-501151	Elec - 9781 Avenida Miravilla	$ 1,890.00	$ 70.91	$ 306.62	$ 1,583.38	$ -	83.78%
01-40-470-501161	Electricity - 815 E. 12th	$ 6,180.00	$ 332.72	$ 1,446.83	$ 4,733.17	$ -	76.59%
01-40-470-501171	Electricity - 851 E. 6th	$ 4,200.00	$ -	$ 474.65	$ 3,725.35	$ -	88.70%
01-40-470-501321	Propane - 12303 Oak Glen	$ 118.00	$ -	$ -	$ 118.00	$ -	100.00%
01-40-470-501331	Propane - 13695 Oak Glen	$ 2,000.00	$ 228.86	$ 458.48	$ 1,541.52	$ -	77.08%
01-40-470-501341	Propane - 13697 Oak Glen	$ 2,000.00	$ 442.06	$ 793.13	$ 1,206.87	$ -	60.34%
01-40-470-501351	Propane-9781 Avenida Miravilla	$ 1,600.00	$ 348.62	$ 820.45	$ 779.55	$ -	48.72%
01-40-470-501411	Sanitation - 560 Magnolia	$ 2,987.00	$ -	$ 964.10	$ 2,022.90	$ -	67.72%
01-40-470-501461	Sanitation - 815 E. 12th	$ 4,172.00	$ -	$ 1,595.44	$ 2,576.56	$ -	61.76%
01-40-470-501471	Sanitation - 11083 Cherry Ave	$ 3,296.00	$ -	$ 1,085.88	$ 2,210.12	$ -	67.05%
01-40-470-501611	Maint & Repair- 560 Magnolia	$ 25,000.00	$ 2,339.93	$ 9,413.91	$ 15,586.09	$ -	62.34%
01-40-470-501621	Maint & Repair- 12303 Oak Glen	$ 1,236.00	$ 52.80	$ 117.42	$ 1,118.58	$ -	90.50%
01-40-470-501631	Maint & Repair- 13695 Oak Glen	$ 1,200.00	$ 517.00	$ 517.00	$ 683.00	$ -	56.92%
01-40-470-501641	Maint & Repair- 13697 Oak Glen	$ 1,200.00	$ -	$ -	$ 1,200.00	$ -	100.00%
01-40-470-501651	Maint & Rpr-9781 Ave Miravilla	$ 1,545.00	$ 52.80	$ 52.80	$ 1,492.20	$ -	96.58%
01-40-470-501661	Maint & Repair- 815 E. 12th	$ 5,150.00	$ 1,653.52	$ 2,529.82	$ 2,620.18	$ -	50.88%
01-40-470-501671	Maint & Repair- 851 E. 6th	$ 1,500.00	$ 218.91	$ 803.54	$ 696.46	$ -	46.43%
01-40-470-501691	Maint & Rpr- Buildgs (General)	$ 20,000.00	$ 3,154.80	$ 6,461.61	$ 13,538.39	$ -	67.69%
01-40-470-510001	Auto/Fuel	$ 82,000.00	$ 4,793.63	$ 22,441.02	$ 59,558.98	$ -	72.63%
01-40-470-520011	Maint & Rpr-Safety Equipment	$ 17,510.00	$ 160.96	$ 5,500.98	$ 12,009.02	$ -	68.58%
01-40-470-520031	Maint & Rpr-General Equipment	$ 47,380.00	$ 4,120.98	$ 15,301.07	$ 32,078.93	$ -	67.71%
01-40-470-520041	Maint & Rpr-Fleet	$ 51,500.00	$ 822.21	$ 8,817.29	$ 42,682.71	$ -	82.88%
01-40-470-520091	Maint & Rpr-Communicatn Equip	$ 5,665.00	$ -	$ -	$ 5,665.00	$ -	100.00%
	Operations Materials & Supplies	**$ 2,573,202.00**	**$ 192,905.98**	**$ 627,330.25**	**$ 1,945,871.75**	**$ 26,936.87**	**74.57%**
410	**Source of Supply Services**						
01-40-410-500501	State Project Water Purchases	$ 3,752,050.00	$ -	$ 1,244,481.00	$ 2,507,569.00	$ -	66.83%
01-40-410-540084	State Mandates & Tariffs	$ 72,100.00	$ 7,291.45	$ 30,143.94	$ 41,956.06	$ -	58.19%
440	**Transmission & Distribution Services**						
01-40-440-550051	Advertising/Legal Notices	$ 4,000.00	$ -	$ 1,670.00	$ 2,330.00	$ -	58.25%
470	**Maintenance & General Plant Services**						
01-40-470-540030	Landscape Maintenance	$ 82,000.00	$ 2,142.58	$ 10,937.21	$ 71,062.79	$ -	86.66%
01-40-470-540072	Rechrg Facs, Cnyns&Ponds Maint	$ 178,440.00	$ 14,827.62	$ 61,050.42	$ 117,389.58	$ -	65.79%
	Operations Services	**$ 4,088,590.00**	**$ 24,261.65**	**$ 1,348,282.57**	**$ 2,740,307.43**	**$ -**	**67.02%**
Expense Total	**OPERATIONS**	**$ 9,745,392.00**	**$ 424,198.08**	**$ 2,608,396.60**	**$ 7,136,995.40**	**$ 26,936.87**	**72.96%**
50	**GENERAL**						
01-50-510-502001	Rents/Leases	$ 24,580.00	$ 2,025.00	$ 8,100.00	$ 16,480.00	$ -	67.05%
01-50-510-510031	Small Tools, Parts & Maint	$ 515.00	$ -	$ -	$ 515.00	$ -	100.00%
01-50-510-540066	Property Damages & Theft	$ 15,450.00	$ -	$ 53.16	$ 15,396.84	$ -	99.66%
01-50-510-550040	General Supplies	$ 11,330.00	$ 479.58	$ 4,900.96	$ 6,429.04	$ -	56.74%
01-50-510-550060	Public Ed./Community Outreach	$ 137,000.00	$ -	$ 75,597.67	$ 61,402.33	$ -	44.82%
01-50-510-550072	Misc Operating Expenses	$ 1,030.00	$ -	$ -	$ 1,030.00	$ -	100.00%
01-50-510-550074	Local State of Emergency Expen	$ 15,000.00	$ 4,531.51	$ 11,587.73	$ 3,412.27	$ -	22.75%
	General Materials & Supplies	**$ 204,905.00**	**$ 7,036.09**	**$ 100,239.52**	**$ 104,665.48**	**$ -**	**51.08%**
01-50-510-550096	Beaumont Basin Watermaster	$ 43,260.00	$ -	$ 23,498.00	$ 19,762.00	$ -	45.68%
01-50-510-550097	SAWPA Basin Monitoring Program	$ 19,000.00	$ 5,598.66	$ 5,598.66	$ 13,401.34	$ -	70.53%
	General Services	**$ 62,260.00**	**$ 5,598.66**	**$ 29,096.66**	**$ 33,163.34**	**$ -**	**53.27%**
Expense Total	**GENERAL**	**$ 267,165.00**	**$ 12,634.75**	**$ 129,336.18**	**$ 137,828.82**	**$ -**	**51.59%**
Expense Total	**ALL EXPENSES**	**$ 16,984,696.00**	**$ 949,618.24**	**$ 4,632,222.18**	**$ 12,352,473.82**	**$ 33,901.81**	**72.53%**

Beaumont-Cherry Valley Water District
Cash Balance & Investment Report
As of April 30, 2020

Cash Balance Per Account

Account Name	Account Ending #	Balance	Prior Month Balance
Wells Fargo			
General	4152	$892,076.32	$1,136,179.97
Total Cash		**$892,076.32**	**$ 1,136,179.97**

Investment Summary

Account Name	Market Value	Prior Month Balance	Actual % of Total	Policy % Limit	Maturity	Par Amount	Rate	2020 Interest to Date
Ca. State Treasurer's Office: Local Agency Investment Fund	$24,842,555.88	$24,718,151.66	40%	No Limit	Liquid	N/A	1.44	$262,965.18 (1)
CalTRUST Short Term Fund	$36,606,724.52	$36,346,572.15	60%	No Limit	Liquid	N/A	1.23	$205,005.80
Total Investments	**$61,449,280.40**	**$61,064,723.81**						**$467,970.98**
Total Cash & Investments	**$ 62,341,356.72**	**$ 62,200,903.78**						

The investments above are in accordance with the District's investment policy. 5/14/2020

BCVWD will be able to meet its cash flow obligations for the next 6 months. 5/14/2020

(1) 4th Quarter 2019 Interest received in 2020

Accounts Payable

Checks by Date - Detail by Check Date

User: wclayton
Printed: 5/27/2020 2:55 PM

Beaumont-Cherry Valley Water District
560 Magnolia Avenue
Beaumont CA 92223
(951) 845-9581
www.bcvwd.org

Check No	Vendor No / Invoice No	Vendor Name / Description	Check Date / Reference	Void Checks	Check Amount
10206	UB*03777	Alison Lee and Associates	05/06/2020		
		Refund Check			29.69
Total for Check Number 10206:				0.00	29.69
10207	UB*03779	Peter Almeyda	05/06/2020		
		Refund Check			172.00
Total for Check Number 10207:				0.00	172.00
10208	UB*03780	Reuben Duran Ashley Warren	05/06/2020		
		Refund Check			99.10
		Refund Check			33.58
		Refund Check			35.25
		Refund Check			46.81
Total for Check Number 10208:				0.00	214.74
10209	UB*03769	Pasquale Baldi	05/06/2020		
		Refund Check			28.01
Total for Check Number 10209:				0.00	28.01
10210	UB*03776	Suzanne Birchard	05/06/2020		
		Refund Check			41.63
		Refund Check			1,126.83
		Refund Check			138.71
		Refund Check			53.92
Total for Check Number 10210:				0.00	1,361.09
10211	UB*03775	Cr&R Inc	05/06/2020		
		Refund Check			121.64
Total for Check Number 10211:				0.00	121.64
10212	UB*03636	Cortni Fike	05/06/2020		
	05062020	Reissue-Refund Check			3.97
	05062020	Reissue-Refund Check			41.82
	05062020	Reissue-Refund Check			5.53
	05062020	Reissue-Refund Check			11.55
Total for Check Number 10212:				0.00	62.87
10213	UB*03770	Frank Ma	05/06/2020		
		Refund Check			29.47
		Refund Check			1.13
		Refund Check			2.35
		Refund Check			0.81
Total for Check Number 10213:				0.00	33.76

10214	UB*03781	Tiffanie Maher	05/06/2020		
		Refund Check			8.53
		Refund Check			24.82
		Refund Check			11.89
		Refund Check			38.80
Total for Check Number 10214:				0.00	84.04
10215	UB*03771	Mcdonalds Corp.	05/06/2020		
		Refund Check			8.11
		Refund Check			109.48
		Refund Check			76.49
		Refund Check			164.62
		Refund Check			54.87
Total for Check Number 10215:				0.00	413.57
10216	UB*03778	Jason Medlock	05/06/2020		
		Refund Check			10.19
		Refund Check			7.31
		Refund Check			19.95
		Refund Check			21.27
Total for Check Number 10216:				0.00	58.72
10217	UB*03774	Miles Preservation Inc	05/06/2020		
		Refund Check			18.01
Total for Check Number 10217:				0.00	18.01
10218	UB*03772	Ron Pace	05/06/2020		
		Refund Check			0.01
		Refund Check			0.02
		Refund Check			0.05
		Refund Check			0.02
Total for Check Number 10218:				0.00	0.10
10219	UB*03773	VPM Rents Inc	05/06/2020		
		Refund Check			2.68
		Refund Check			5.44
		Refund Check			1.29
		Refund Check			0.92
Total for Check Number 10219:				0.00	10.33
10220	10001	Action True Value Hardware	05/06/2020		
	48180	Safety Glasses/Gloves - Wells			18.83
	48180	Anti Siphon Valve - Service Relocation			38.77
	48180	PVC Valve - 9th/11th St Rplcmnt			17.23
	48180	(20) Bandanas - COVID-19			107.54
	48180	Rubber Gloves - Cherry Yard			14.00
	48180	Couplings/Adaptors/Primer/Valve/PVC Pipe - 9th/11th St Rplcmnt			41.75
	48180	3/4 Anti Siphon Valves - Service Repair			18.30
	48180	(5) Screwdrivers - Meter Change Outs			17.19
	48180	Washers - Well 4			11.30
Total for Check Number 10220:				0.00	284.91

10221	10901	Ameritas Life Insurance Corp.	05/06/2020		
	00001	Ameritas Dental April 2020			1,696.72
	00001	Ameritas Dental May 2020			1,696.72
	00002	Ameritas Vision May 2020			391.32
	00002	Ameritas Vision April 2020			391.32
Total for Check Number 10221:				0.00	4,176.08
10222	10893	Anthem Blue Cross EAP	05/06/2020		
	78710	Anthem EAP May 2020			62.00
Total for Check Number 10222:				0.00	62.00
10223	10695	B-81 Paving Inc	05/06/2020		
	20012	Repave Pipeline Replacement Areas - 9th/11th St Rplcmnt			31,399.50
	20015	(2) Districtwide Repairs - Main Line			404.25
	20015	Repave Pipeline Replacement Areas - 9th/11th St Rplcmnt			2,367.75
	20015	(3) Districtwide Repairs - Meter Service Lines			4,974.75
	20017	(1) Districtwide Repair - Meter Service Line			1,732.50
	20017	Re-Pave Pipeline Replacement Areas - 9th/11th St Rplcmnt			6,410.25
Total for Check Number 10223:				0.00	47,289.00
10224	10855	Badger Meter, Inc	05/06/2020		
	1357139	(158) 5/8" Meters - Inventory			24,855.77
	1358719	(20) 2" Meters - Inventory			15,128.10
	1358719	(10) 1.5" Meters - Inventory			5,322.85
Total for Check Number 10224:				0.00	45,306.72
10225	10519	CalFire	05/06/2020		
	1282258	Weed Abatement South of Bogart Park on District Property			4,437.79
	1282277	Weed Abatement - NCRF Phase I and II			9,207.78
Total for Check Number 10225:				0.00	13,645.57
10226	10774	Jesus Camacho	05/06/2020		
	161832	(16) Truck Washes - May 2020			165.00
Total for Check Number 10226:				0.00	165.00
10227	10822	Canon Financial Services, Inc	05/06/2020		
	21350075	BW Meter Usage 03/01-03/31/2020 - 560 Magnolia			54.17
	21350075	CLR Meter Usage 03/01-03/31/2020 - 560 Magnolia			525.97
	21350075	Contract Charge 04/01-04/30/2020 - 560 Magnolia			329.33
	21350076	Contract Charge 04/01-04/30/2020 - 12th & Palm			235.78
	21350076	BW Meter Usage 02/01-03/31/2020 - 12th & Palm			0.54
	21350076	CLR Meter Usage 02/01-03/31/2020 - 12th & Palm			44.72
Total for Check Number 10227:				0.00	1,190.51
10228	10351	Cherry Valley Nursery & Landscape Supply	05/06/2020		
	0124212	(1) Square Foot of Sod - Service Line Repair			5.39
Total for Check Number 10228:				0.00	5.39
10229	10902	Colonial Life	05/06/2020		
	5374368-0416754	Col Life Premiums April 2020			2,730.16
	5374368-0416754	Col Life Premiums April 2020 (Pending Billing)			104.24
Total for Check Number 10229:				0.00	2,834.40

10230	10772	CV Strategies	05/06/2020		
	5469	Strategic Communication Services - Feb 2020			18,597.50
	5482	Strategic Communication Services Printing (200) Brochures			352.94
	5525	Strategic Communication Services - March 2020			13,361.25
Total for Check Number 10230:				0.00	32,311.69
10231	10354	Eric Dahlstrom	05/06/2020		
	523624	Safety Boots - E Dahlstrom			134.99
Total for Check Number 10231:				0.00	134.99
10232	10561	Knute Dahlstrom	05/06/2020		
	524403	Safety Boots - K Dahlstrom			200.00
Total for Check Number 10232:				0.00	200.00
10233	10390	Dangelo Company	05/06/2020		
	S1401996.001	Black Weld Coupling - Inventory			12.20
	S1401996.001	2" Air VAC - Inventory			555.07
	S1402541.001	(2) 8" Weld Flanges - Inventory			68.68
	S1402541.001	(26) 8" Bolts Sets - Inventory			187.67
	S1402541.002	(5) 8" Mega Lugs - Inventory			292.82
Total for Check Number 10233:				0.00	1,116.44
10234	10900	Frahm Bros.	05/06/2020		
	10054-7	Block Wall Footing/Wall/Sealer - Well 25			60,976.00
Total for Check Number 10234:				0.00	60,976.00
10235	10809	Inner-City Auto Repair & Tires	05/06/2020		
	001110	Alternator/Oil/Filter - Unit 12/OD 58,261			347.21
	001110	Labor for Alternator/Oil/Filter - Unit 12/OD 58,261			125.00
	001170	Labor Repair & Recharge Air Compressor Sys - CAT Dozer/OD 3,000			698.00
	001170	Repair & Recharge Air Compressor Sys - CAT Dozer/OD 3,000			105.35
	001171	Labor Repair & Recharge Air Compressor Sys - CAT Loader/OD 5,500			698.00
	001171	Repair & Recharge Air Compressor Sys - CAT Loader/OD 5,500			105.35
	1081	Oil/Filter/Brakes/Tires - Unit 37/OD 21,086			675.92
	1081	Labor for Oil/Filter/Brakes/Tires - Unit 37/OD 21,086			125.00
Total for Check Number 10235:				0.00	2,879.83
10236	10429	Legend Pump & Well Service Inc	05/06/2020		
	56238	Remove and Reinstall Motor - Well 29			4,424.00
Total for Check Number 10236:				0.00	4,424.00
10237	10281	Luther's Truck and Equipment	05/06/2020		
	43980	Air Gauge/Air Valve/Air Can - Unit 8/OD 65,322			1,154.21
	43980	Labor for Air Gauge/Air Valve/Air Can - Unit 8/OD 65,322			968.00
Total for Check Number 10237:				0.00	2,122.21
10238	10103	Merlin Johnson Construction Inc	05/06/2020		
	061295	9th/11th St Pipeline Replacement Contract			93,026.73
	061296	Weld and Re-Pipe Discharge Line - Well 4			1,026.34
Total for Check Number 10238:				0.00	94,053.07

10239	10045	Pacific Alarm Service Inc	05/06/2020		
	R155377	Alarm Equip/Rent/Service/Monitor 815 E 12th St			76.00
Total for Check Number 10239:				0.00	76.00
10240	10317	Robertson's Ready Mix	05/06/2020		
	676572	Sand and Base for District Wide Use			689.41
	676572	Sand and Base for District Wide Use			689.42
Total for Check Number 10240:				0.00	1,378.83
10241	10689	Safety Compliance Company	05/06/2020		
	182295	Safety Meeting - COVID-19 - 4/9/2020			250.00
Total for Check Number 10241:				0.00	250.00
10242	10770	Sulzer Electro-Mechanical Services, Inc	05/06/2020		
	WI007573	Emergency Repairs to Well 29 Motor Repair			6,876.24
	WI007573	Labor - Emergency Repairs to Well 29 Motor Repair			6,639.85
Total for Check Number 10242:				0.00	13,516.09
10243	10903	The Lincoln National Life Insurance Company	05/06/2020		
	04202020	Life & ADD EE/ER Insurance April 2020			448.78
	05012020	Life & ADD EE/ER Insurance May 2020			464.26
Total for Check Number 10243:				0.00	913.04
10244	10385	Waterline Technologies, Inc. - PSOC	05/06/2020		
	5490246	Chlorine - Well 25			1,197.00
	5490313	Back Up Chlorine Pump			586.20
Total for Check Number 10244:				0.00	1,783.20
10245	10651	Weldors Supply and Steel, Inc	05/06/2020		
	15502	Oxygen Tank - Unit 5			14.95
Total for Check Number 10245:				0.00	14.95
Total for 5/6/2020:				0.00	333,718.49
ACH	10288	CalPERS Health Fiscal Services Division	05/08/2020		
	04152020	Active Employees Health Ins May 2020			51,831.73
	04152020	Admin Fee for Retired Emp Health Ins May 2020			14.60
	04152020	Admin Fee for Health Insurance May 2020			139.95
	04152020	Retired Employees Health Ins May 2020			2,370.00
Total for this ACH Check for Vendor 10288:				0.00	54,356.28
Total for 5/8/2020:				0.00	54,356.28
ACH	10030	Southern California Edison	05/13/2020		
	2039374889Apr	Electricity 3/24-4/22/2020 - 13697 Oak Glen Rd			100.69
	2039374889Apr	Electricity 3/24-4/22/2020 - Wells			8,352.56
	2039374889Apr	Electricity 3/24-4/22/2020 - 13695 Oak Glen Rd			79.23
	2039374889Apr	Electricity 3/24-4/22/2020 - 560 Magnolia Ave			1,242.95
	2039374889Apr	Electricity 3/24-4/22/2020 - 9781 Avenida Miravilla			70.91
	2039374889Apr	Electricity 3/24-4/22/2020 - 815 E 12th Ave			332.72
	2039374889Apr	Electricity 3/24-4/22/2020 - 12303 Oak Glen Rd			252.87
	2039374889Apr	Electricity 3/24-4/22/2020 - 851 E 6th St			133.59
	2039374889Mar	Electricity - Wells (Prior Month)			68,119.63
Total for this ACH Check for Vendor 10030:				0.00	78,685.15

ACH	10042	Southern California Gas Company	05/13/2020		
	07132135000Apr	Monthly Gas Charges 03/26-04/24/2020 - April 2020			14.30
Total for this ACH Check for Vendor 10042:				0.00	14.30
ACH	10052	Home Depot Credit Services	05/13/2020		
	4302020	Multisurface Cleaner - COVID-19			21.51
	4302020	Heavy Duty Trash Bags			111.93
	4302020	Wet Patch/Roof Edge/Lumber - Well 12			499.06
	4302020	(2) Weed Eaters/String/(2) Gas Cans/Oil - Landscaping			832.95
	4302020	Evaporative Cooler Motor - District Well Buildings			333.97
	4302020	Febreze Air Freshener/Trash Bags			135.47
	4302020	Gloves - Superintendent/T&D Supervisor			36.54
	4302020	(4) Gas Cans/(3) Weed Eaters/Line/Utility Knife - Landscaping			1,309.63
	4302020	LED Wall Pack Outdoor Light - Well Buildings			150.81
	4302020	Gloves/Pencils/(2) Screwdrivers/Level/Right Angle - Unit 14			98.47
Total for this ACH Check for Vendor 10052:				0.00	3,530.34
ACH	10132	South Coast AQMD	05/13/2020		
	3638773	Flat Fee for Last Fiscal Year Emissions - Fac 120877 - 560 Mag			137.63
	3639206	Flat Fee for Last Fiscal Year Emissions - Fac 129302 - Well 16			137.63
	3639207	Flat Fee for Last Fiscal Year Emissions - Fac 129305 - Well 21			137.63
	3639948	Flat Fee for Last Fiscal Year Emissions - Fac 140810 - Well 23			137.63
Total for this ACH Check for Vendor 10132:				0.00	550.52
ACH	10138	ARCO Business Solutions	05/13/2020		
	HW201 May	ARCO Fuel Charges 04/12-05/11/2020			3,805.48
Total for this ACH Check for Vendor 10138:				0.00	3,805.48
ACH	10147	Online Information Services, Inc	05/13/2020		
	991855	188 Credit Reports for April 2020			537.60
Total for this ACH Check for Vendor 10147:				0.00	537.60
Total for 5/13/2020:				0.00	87,123.39
ACH	10085	CalPERS Retirement System	05/14/2020		
	1001562122	PR Batch 00001.05.2020 CalPERS 1% ER Paid			177.30
	1001562122	PR Batch 00001.05.2020 CalPERS 8% EE Paid			2,208.00
	1001562122	PR Batch 00001.05.2020 CalPERS 8% ER Paid			1,020.35
	1001562122	PR Batch 00001.05.2020 CalPERS 7% EE Deduction			1,241.19
	1001562122	PR Batch 00001.05.2020 CalPERS ER Paid Classic			8,277.51
	1001562122	PR Batch 00001.05.2020 CalPERS ER Paid Classic			491.68
	1001562123	PR Batch 00001.05.2020 CalPERS ER PEPRA			2,879.49
	1001562123	PR Batch 00001.05.2020 CalPERS 7.5% EE PEPRA			2,868.80
Total for this ACH Check for Vendor 10085:				0.00	19,164.32
ACH	10087	EDD	05/14/2020		
	0-144-591-392	PR Batch 00001.05.2020 CA SDI			1,015.38
	0-144-591-392	PR Batch 00001.05.2020 State Income Tax			3,913.75
	05122020	1st Quarter 2020 Unemployment Benefits			1,272.00
	05122020	1st Quarter 2020 Unemployment Benefits			3,472.00
Total for this ACH Check for Vendor 10087:				0.00	9,673.13

ACH	10094	U.S. Treasury	05/14/2020		
	270053593559313	PR Batch 00001.05.2020 Federal Income Tax			10,525.92
	270053593559313	PR Batch 00001.05.2020 FICA Employee Portion			6,323.54
	270053593559313	PR Batch 00001.05.2020 FICA Employer Portion			6,323.54
	270053593559313	PR Batch 00001.05.2020 Medicare Employer Portion			1,479.23
	270053593559313	PR Batch 00001.05.2020 Medicare Employee Portion			1,479.23
Total for this ACH Check for Vendor 10094:				0.00	26,131.46
ACH	10141	Ca State Disbursement Unit	05/14/2020		
	DUXYPHW6658	PR Batch 00001.05.2020 Garnishment			288.46
	DUXYPHW6658	PR Batch 00001.05.2020 Garnishment			360.05
Total for this ACH Check for Vendor 10141:				0.00	648.51
ACH	10203	Voya Financial	05/14/2020		
	VB1450-0001	PR Batch 00001.05.2020 Deferred Comp			450.00
Total for this ACH Check for Vendor 10203:				0.00	450.00
ACH	10264	CalPERs Supplemental Income Plans	05/14/2020		
	1001562128	PR Batch 00001.05.2020 CalPERS 457 %			130.84
	1001562128	PR Batch 00001.05.2020 CalPERS 457			590.00
	1001562128	PR Batch 00001.05.2020 457 Loan Repayment			177.19
Total for this ACH Check for Vendor 10264:				0.00	898.03
ACH	10895	Basic Pacific	05/14/2020		
	INV PP10-2020	PR Batch 00001.05.2020 Adjustment to FSA			35.08
	INV PP10-2020	PR Batch 00001.05.2020 Flexible Spending Account			333.33
Total for this ACH Check for Vendor 10895:				0.00	368.41
Total for 5/14/2020:				0.00	57,333.86
ACH	10781	Umpqua Bank	05/15/2020		
	10034	US Postal Service			
		(4) Rolls of Stamps			220.00
	10052	Home Depot Credit Services			
		Motor Leads - Well 4A			108.07
		LED Wall Pack Outdoor Lighting - Well Buildings			897.33
	10135	Big Time Design			
		(40) Face Masks - COVID-19			215.50
	10138	ARCO Business Solutions			
		Face Masks/Hand Sanitizer - COVID-19			162.96
		Face Masks/Hand Sanitizer - COVID-19			216.78
		Hand Sanitizer - COVID-19			109.14
		Face Masks - COVID-19			54.57
	10174	GFOA			
		Webinar Training - COVID-19			35.00
	10224	Legal Shield			
		Monthly Prepaid Legal for Employees April 2020			161.45
	10228	Consolidated Electrical Distributors Inc			
		Wire Replacement - Well 4A			24.24
	10303	Grainger Inc			
		Chlorinator Motor - Well 25			400.20
	10318	Dell Marketing LP			
		(1) Laptop/(6) Mouses/(6) Carriers for Remote Work - COVID-19			1,722.30
	10382	Beaumont Power Equipment Inc			
		Face Masks - COVID-19			64.59
	10397	Wal-Mart			
		Bath Tissue - 12th & Palm			31.03

10409	Stater Bros		
	Paper Towels		5.38
10420	Amazon.com		
	Hand Sanitizer - COVID-19		258.30
	Sanitizer Wipes - COVID-19		204.60
10424	Top-Line Industrial Supply, LLC		
	Orange Lotion - Unit 34		27.97
	Anti-Bacterial Soap - COVID-19		24.86
10455	Advance Refrigeration & Ice Systems, Inc		
	Repair Ice Machine - 12th & Palm		254.41
	Repair Ice Machine - 12th & Palm		1,025.91
10526	Verizon		
	Monthly Phone Service 04/01-04/30/2020		972.85
10544	Western Municipal Water District		
	2019 Groundwater Extraction Report Filing		1,000.00
10546	Frontier Communications		
	04/10-05/09/2020 April FIOS/FAX 12th/Palm		319.68
	03/25-04/24/2020 April FIOS/FAX 560 Magnolia Ave		290.00
	03/25-04/24/2020 April FIOS/FAX 841 E 6th St		99.66
10573	O'Reilly Auto Parts		
	Freon for AC - Dozer Loader		113.42
10596	Tractor Supply Co		
	Herbicide - Weed Control		107.74
10604	JotForm, Inc		
	Annual Subscription for Cloud Storage		390.00
10623	WP Engine		
	Web Host for BCVWD Website April 2020		30.00
10692	MMSoft Design		
	Network Monitoring Software April 2020		250.51
	Increase Network Monitoring Software April 2020		11.91
10761	BLS*Spamtitan		
	Monthly Web Filter License April 2020		71.88
	Email Filtering - Districtwide April 2020		47.94
10784	Autodesk, Inc		
	Auto CAD Software - 851 E 6th St April 2020		710.00
10790	Microsoft		
	Monthly Microsoft Office License - April 2020		500.00
	Monthly Microsoft Exchange - April 2020		264.00
10801	PK Safety Supply		
	Eye Wash Stations - Well 16/21		2,209.20
10840	Ready Fresh (Arrowhead)		
	Water - April 2020 - 851 E 6th		58.91
10882	TT Technologies		
	Roll Pin for Boring Machine		73.66
10885	Mediaion.com		
	Credit for Fraud Transaction - Feb 2020		-39.99
10896	BlueBeam, Inc.		
	(2) Annual License Maintenance		198.00
	(2) Application License for Project Coordination for Eng		698.00
10897	El Rancho Market		
	Ice for Field Crew		38.25
10898	Pride Plumbing Services		
	District Housing Repair - Kitchen Sink/Disposal/Wasteline		517.00
10899	Touchboards		
	Lockable Corkboard Sign for Outside Main Office		1,083.80
10904	Radwell International, Inc.		
	New Handheld Programmer for District's Reservoir Water Levels		154.02
10905	SA Company		
	(24) Face Shields - COVID-19		381.42
Total for this ACH Check for Vendor 10781:		0.00	16,776.45
Total for 5/15/2020:		0.00	16,776.45

10246	UB*03790	Shawn Gutierrez and Andrea Soderlind	05/20/2020		
		Refund Check			113.26
Total for Check Number 10246:				0.00	113.26
10247	UB*03796	Arthur Castro	05/20/2020		
		Refund Check			175.54
Total for Check Number 10247:				0.00	175.54
10248	UB*03795	Jonathon Gonzales	05/20/2020		
		Refund Check			37.55
		Refund Check			8.39
		Refund Check			4.02
		Refund Check			7.70
		Refund Check			27.07
		Refund Check			1.39
		Refund Check			3.74
		Refund Check			1.93
Total for Check Number 10248:				0.00	91.79
10249	UB*03794	Inland Empire Resource Conservation District	05/20/2020		
		Refund Check			2,035.52
Total for Check Number 10249:				0.00	2,035.52
10250	UB*03786	Jennifer Kisa	05/20/2020		
		Refund Check			64.08
Total for Check Number 10250:				0.00	64.08
10251	UB*03784	Jack Chen and Kuo Chen	05/20/2020		
		Refund Check			99.29
Total for Check Number 10251:				0.00	99.29
10252	UB*03793	Lawrence Mcdowns	05/20/2020		
		Refund Check			7.93
		Refund Check			9.37
Total for Check Number 10252:				0.00	17.30
10253	UB*03798	Crissy McGuire	05/20/2020		
		Refund Check			154.13
Total for Check Number 10253:				0.00	154.13
10254	UB*03792	Jennelle & Virginia Nickerson	05/20/2020		
		Refund Check			66.47
Total for Check Number 10254:				0.00	66.47
10255	UB*03791	Trika Ormsby	05/20/2020		
		Refund Check			5.42
		Refund Check			10.85
		Refund Check			26.80
		Refund Check			3.88
		Refund Check			11.31
		Refund Check			37.18
		Refund Check			11.82
		Refund Check			5.27
Total for Check Number 10255:				0.00	112.53

10256	UB*03789	Daeshawn Page	05/20/2020		
		Refund Check			13.65
		Refund Check			5.13
		Refund Check			8.28
		Refund Check			20.95
		Refund Check			4.49
Total for Check Number 10256:				0.00	52.50
10257	UB*03799	Taunie Penna	05/20/2020		
		Refund Check			644.35
Total for Check Number 10257:				0.00	644.35
10258	UB*03783	XiaoJuan Qu	05/20/2020		
		Refund Check			38.27
		Refund Check			46.69
		Refund Check			10.94
Total for Check Number 10258:				0.00	95.90
10259	UB*03787	Chaojin Rong	05/20/2020		
		Refund Check			53.94
		Refund Check			57.53
		Refund Check			21.31
Total for Check Number 10259:				0.00	132.78
10260	UB*03797	Rick & Jennifer Smith	05/20/2020		
		Refund Check			0.58
		Refund Check			0.36
		Refund Check			0.19
		Refund Check			92.42
Total for Check Number 10260:				0.00	93.55
10261	UB*03788	David Soda	05/20/2020		
		Refund Check			14.46
Total for Check Number 10261:				0.00	14.46
10262	UB*03785	Johnny Trujillo	05/20/2020		
		Refund Check			18.91
Total for Check Number 10262:				0.00	18.91
10263	UB*03782	Brianna Wenzel	05/20/2020		
		Refund Check			106.46
Total for Check Number 10263:				0.00	106.46
10264	10099	A & A Fence Co. Inc	05/20/2020		
	23128	Posts for 12th and Michigan Yard			30.62
	23128	Gates for 12th and Michigan Yard			689.60
Total for Check Number 10264:				0.00	720.22

10265	10000	A C Propane Co	05/20/2020		
	228639	Propane Refill Apr 2020 - 9781 Avenida Miravilla			348.62
	228640	Propane Refill Apr 2020 - 13697 Oak Glen Rd			442.06
	228641	Propane Refill Apr 2020 - 13695 Oak Glen Rd			228.86
Total for Check Number 10265:				0.00	1,019.54
10266	10792	A-1 Financial Services	05/20/2020		
	06012020	June 2020 Rent - 851 E 6th St - Eng Office			2,025.00
Total for Check Number 10266:				0.00	2,025.00
10267	10879	Aquafit Chlorination Systems	05/20/2020		
	20B-05500	(128) Chlorine Tablets - District Wells			18,443.30
Total for Check Number 10267:				0.00	18,443.30
10268	10695	B-81 Paving Inc	05/20/2020		
	20013	Grind and Cap 3" 161'x12' - 9th/11th St Rplcmnt			15,939.00
Total for Check Number 10268:				0.00	15,939.00
10269	10272	Babcock Laboratories Inc	05/20/2020		
	CD00089	(6) Haloacetic Acids			756.00
	CD00089	(5) Trihalomethanes			395.00
	CD00492	(15) Coliforms Lab Sample			630.00
	CD00493	(5) Coliforms Wells			210.00
	CD00638	(1) Coliforms Wells			105.00
	CD00662	(1) Nitrate Reservoir			16.00
	CD00662	(1) Nitrate Well			16.00
	CD00679	(2) Coliform Lab Samples - 9th/11th St Pipeline Rplcment			84.00
	CD00680	(15) Coliforms Lab Sample			630.00
	CD00917	(25) Pesticide/Metal Lab Samples			4,375.00
	CD00923	(8) Pesticide/Metal Lab Samples			1,770.00
	CD00970	(2) Coliform Lab Samples - 9th/11th St Pipeline Rplcmnt			84.00
	CD00984	(14) Pesticide/Metal Lab Samples			1,285.00
	CD01383	(15) Coliforms Lab Sample			630.00
	CD02034	(15) Coliforms Lab Sample			630.00
	CD02056	(3) Coliforms Wells			126.00
	CD02328	(1) Coliforms Wells			42.00
Total for Check Number 10269:				0.00	11,784.00
10270	10271	Beaumont Ace Home Center	05/20/2020		
	4302020	Paint Supplies - Well 24			33.38
	4302020	PVC Pipe/Primer/Tape/Elb/Coupling/Cement - Bmt Ave/Mag Alley			198.13
	4302020	Bait Stations - Well Sites			51.69
	4302020	Lysol Cleaner/Dawn Dish Soap - COVID-19			9.35
	4302020	Union/Nipple - Service Repair			10.92
	4302020	Gal Muriatic Acid - Chlorinators - Various Wells			34.44
	4302020	Cooling Pad/Pump - Well 23			167.64
	4302020	Brush/Wire Brush/Chip Brush/Paint - Well 23			56.71
	4302020	Key - Storage Bins - 12th & Palm			5.79
	4302020	Primer - Well 24			26.61

	4302020	Enamel/Chip Brushes - Hydrant Painting/Graffiti Removal			67.25
	4302020	Cleaning Foam - Unit 37 - COVID-19			5.92
	4302020	Chip Brush/2.5" Blade/Paint Tray - Well 24/Canyon Buildings			203.84
	4302020	5 Gallon Cooler - Unit 5			52.79
	4302020	Union/Nipple - Service Repair			10.93
	4302020	Box of Rags - Unit 42			18.31
	4302020	Gloves/Cleaners/Dish Soap - COVID-19			22.69
	4302020	3/4 Adapter/Bushing/Elbow - Well 4A Sample Site			20.01
	4302020	Galvanized Pipe/Elbow/PVC Pipe - 9th/11th St Rplcmnt			40.89
	4302020	Spray Primer/Refinishing Tool - Hydrant Painting/Graffiti Remova			34.41
	4302020	Wall Clock/Wall Anchors - 12th/Palm			41.78
	4302020	Spray Bottle/Disposable Gloves - COVID-19			18.48
	4302020	Adapter/Nipple/Elbow - Well 6 Chlorinator			15.44
	4302020	Cleaner/Coupling/Bushing/Nipple - Bmt Ave/Mag Alley			26.44
	4302020	Pulley/Motor Clamps - Well 23			23.91
	4302020	PVC Nipple - Well 3 Chloronator			1.60
	4302020	Primer/Cement/Elbows/Bushings - Bmt Ave/Mag Alley			49.68
	4302020	Spray Primer/Scraper/Spray Paint - Hydrant Painting			24.28
	4302020	Gal Muriatic Acid - Chlorinators - Various Wells			77.50
	4302020	4 Barrel Bolt - Portable Restroom			12.49
	4302020	5 Gal Cooler - Unit 5			52.80
	4302020	Pillow Block/Dura Cool - Swamp Coolers - Various Wells			133.57
	4302020	Hose/Hose Hanger/Hose Nozzle/Coupling/Clamp - Well 16			74.31
	4302020	Chlorine - Well 4A			36.60
	4302020	Spray Primer/Spray Paint - New Blow Off 11th/Bmt Ave			28.62
	4302020	50 Extension Cord			75.43
	4302020	Appliance Cord/Connector/Hex Key/Hose Shut Off/Garden Valve - We			84.53
	4302020	Plastic Grid/Cover/Frame - Well 23			13.24
Total for Check Number 10270:				0.00	1,862.40
10271	10774	Jesus Camacho	05/20/2020		
	161833	(17) Truck Washes - May			175.00
Total for Check Number 10271:				0.00	175.00
10272	10614	Cherry Valley Automotive	05/20/2020		
	29241	Labor to Repair AC and Ignition Coil - Unit 16/OD 115,662			240.00
	29241	Repair AC and Ignition Coil - Unit 16/OD 115,662			130.74
	29250	Labor for Oil/Filter/Freon/Blower Motor - Unit 13/OD 156,982			210.00
	29250	Oil/Filter/Freon/Blower Motor - Unit 13/OD 156,982			161.30
Total for Check Number 10272:				0.00	742.04
10273	10016	City of Beaumont	05/20/2020		
	2617-01 Mar-Apr	Monthly Sewer Charges - 03/01-05/01/2020 Mar-Apr 2020			54.08
Total for Check Number 10273:				0.00	54.08
10274	10266	Cozad & Fox Inc.	05/20/2020		
	17472	Preliminary & Final Design - Noble Water Tank No.2 & Trans Pipe			1,216.00
	17472	Preliminary & Final Design - Noble Water Tank No.2 & Trans Pipe			1,216.00
	17530	Preliminary & Final Design - Noble Water Tank No.2 & Trans Pipe			1,167.56
	17530	Preliminary & Final Design - Noble Water Tank No.2 & Trans Pipe			1,167.56
	17533	WQMP/CEQA Update - Noble Tank No.2 & Transmission Pipeline			679.95
	17533	WQMP/CEQA Update - Noble Tank No.2 & Transmission Pipeline			679.95
Total for Check Number 10274:				0.00	6,127.02

10275	10390	Dangelo Company	05/20/2020		
	S1403179.001	Replace Broken Riser on Air Vac			79.19
Total for Check Number 10275:				0.00	79.19
10276	10600	Gaucho Gophers & Landscape Management	05/20/2020		
	05042020	NCRF 1 Rodent Control - April 2020			1,000.00
Total for Check Number 10276:				0.00	1,000.00
10277	10337	Hilltop Geotechnical, Inc	05/20/2020		
	17342	Compaction Testing - 9th/11th St Pipeline Rplcmnt			1,406.11
Total for Check Number 10277:				0.00	1,406.11
10278	10465	Image Source	05/20/2020		
	25AR1127645	Xerox 3610 Usage Charges 04/01-04/30/2020			9.82
	25AR1127645	Xerox 3610 Contract Charges 05/01-05/31/2020			66.55
Total for Check Number 10278:				0.00	76.37
10279	10398	Infosend, Inc	05/20/2020		
	170994	April 2020 Billing Charges for Utility Billing			124.42
	170994	April 2020 Supply Charges for Utility Billing			97.15
	170995	April 2020 Postage Charges for Utility Billing			500.72
Total for Check Number 10279:				0.00	722.29
10280	10273	Inland Water Works Supply Co.	05/20/2020		
	S1033602.003	(1) Romac Saddle - Repairs at Magnolia Alley			102.32
	S1033900.001	(1) 8" X 6" Flex Couplings - Repairs at Magnolia Alley			816.76
	S1034075.001	(2) 2" x 7.5" Clamps 235-263 - Inventory			130.67
	S1034075.001	(404) 3/4" x 1/16" Meter Gaskets - Stock			110.92
	S1034075.001	(8) 2" x Close Nipples - Inventory			23.23
	S1034075.001	(30) .75 x 2" Mtr Connections - Inventory			467.26
	S1034075.001	(6) 2" x 3" Galv Nipples - Inventory			34.85
	S1034075.001	(1) 2" x 2.5 Nipple - Inventory			4.50
	S1034075.001	(3) 4" x 7.5" Clamps 495-535 - Inventory			300.65
	S1034075.001	(6) 2" x 7.5" FC Clamp 795-835 - Inventory			651.37
	S1034075.001	(20) 8" Megalug Kits - Inventory			1,155.42
	S1034075.001	(1500) 3/4" x 1/8" Meter Gaskets - Stock			411.82
	S1034075.001	(5) 2" x 6" Nipples - Inventory			29.29
	S1034075.001	(10) 6"-8" Bolt & Nut Set - Inventory			84.48
	S1034075.001	(4) 8" Weld Flanges - Inventory			147.20
	S1034075.001	(16) 10"-12" Bolts - Inventory			371.70
	S1034075.001	(8) 2" Ball Valves - Inventory			1,450.44
	S1034075.002	(10) 4" Mega Lug Kits for DIP - Inventory			760.39
	S1034075.003	(14) 1" Meter Adapters - Inventory			317.25
	S1034075.003	(3) 2" x 6" Galv Nipples - Inventory			17.58
	S1034075.003	(5) 2" x 2.5" Galv Nipples - Inventory			22.43
	S1034075.003	(6) 2" x 5.5" Galv Nipples - Inventory			45.40
	S1034075.004	(1096) 3/4" x 1/16" Meter Gaskets - Stock			300.90
	S1034075.005	(30) .75" Mtr Curb Lockwings - Inventory			2,154.14
	S1034075.006	(4) 2 "x 7.5" FC Clamp 235-263 - Inventory			261.35
	S1034075.006	(6) 4" x 7.5" FC Clamp 520-560 - Inventory			513.61
	S1034075.006	(3) 4" x 7.5" FC Clamp 495-535 - Inventory			300.66
	S1034075.006	(16) 1" Adapter MIP x Comp - Inventory			362.56
	S1034170.001	90' 4" DIP - Inventory			2,058.58
	S1034234.001	(30) 6" x 4" CI Gate Cap - Inventory			601.89
	S1034234.001	(30) 8" x 6" CI Gate Cap - Inventory			728.60

	S1034234.001	(30) 6" x 18" Galv Slip Can - Inventory			429.56
	S1034234.001	(30) 8" x 18" Galv Slip Can - Inventory			475.18
	S1034246.001	(20) 36 Meter Box - Inventory			287.22
	S1034246.001	(12) 36 2 PC Lid - Inventory			117.43
	S1034246.001	(20) 38 Meter Box - Inventory			584.40
	S1034246.001	(12) 36 Reading Lid - Inventory			63.36
	S1034246.001	(20) 38 Reading Lid - Inventory			163.32
	S1034246.001	(20) 38 2 PC Reading Lid - Inventory			420.95
	S1034246.002	(8) 2 PC Lid - Inventory			78.29
	S1034246.002	(8) Reading Lid - Inventory			42.24
Total for Check Number 10280:				0.00	17,400.17
10281	10809	Inner-City Auto Repair & Tires	05/20/2020		
	1093	Labor to Install New Tires - Unit 17/OD 68,930			100.00
	1093	New Tires - Unit 17/OD 68,930			880.77
	1111	Labor for Oil Filter/Oil/Brake Pads - Unit 11/OD 162,778			270.00
	1111	Oil Filter/Oil/Brake Pads - Unit 11/OD 162,778			177.47
Total for Check Number 10281:				0.00	1,428.24
10282	10202	Kaboo Leasing Co.	05/20/2020		
	922973	Welding a New Discharge Line at Well 21			660.00
Total for Check Number 10282:				0.00	660.00
10283	10678	Lawyers Title Company	05/20/2020		
	620650166	Title Report for NCRF			750.00
Total for Check Number 10283:				0.00	750.00
10284	10281	Luther's Truck and Equipment	05/20/2020		
	44266	Damaged Plug/Fender - Dump Truck			132.92
	44266	Labor - Bit Inspection/Damaged Plug/Fender - Dump Truck			312.00
	44267	Labor - Bit Inspection - Equipment Trailer			125.00
Total for Check Number 10284:				0.00	569.92
10285	10674	Michael Baker International	05/20/2020		
	1072621	CEQA/GeoTech/Pot Holing - 2017 Pipeline Rplcmnt Proj			6,393.37
	1072621	CEQA/GeoTech/Pot Holing - 2017 Pipeline Rplcmnt Proj			6,393.36
	1072621	CEQA/GeoTech/Pot Holing - 2017 Pipeline Rplcmnt Proj			6,393.37
Total for Check Number 10285:				0.00	19,180.10
10286	10045	Pacific Alarm Service Inc	05/20/2020		
	R 155677	Alarm Equip/Rent/Service/Monitor 560 Magnolia			411.13
	R 155678	Alarm Equip/Rent/Service/Monitor 11083 Cherry Av			59.50
Total for Check Number 10286:				0.00	470.63
10287	10632	Quinn Company	05/20/2020		
	PCA00179737	Compressors for Dozer and Loader			1,775.64
	PCA00179737	(4) Filters for Dozer and Loader			109.71
	WOG00007605	Labor-Perform Annual Maint on Well 24			625.00
	WOG00007605	Well 24 Oil Samples			174.00
	WOG00007605	Annual PM on Well 24			368.47
	WOG00007673	Parts-Diagnostic on Generator - Well 21			259.14
	WOG00007673	Labor-Diagnostic on Generator - Well 21			900.00
Total for Check Number 10287:				0.00	4,211.96

10288	10223	Richards, Watson & Gershon	05/20/2020		
	226296	Legal Services Mar Board Approval 05/13/2020			4,774.50
	226297	Legal Services Mar Board Approval 05/13/2020			152.00
Total for Check Number 10288:				0.00	4,926.50
10289	10277	Rio Stone Building Materials	05/20/2020		
	16807	Pour Concrete Cross Gutter - 9th/11th St Pipeline Rplcmnt			175.01
Total for Check Number 10289:				0.00	175.01
10290	10317	Robertson's Ready Mix	05/20/2020		
	697355	Sand and Base Pipelines and Hydrant Maint			1,165.24
	697355	Sand and Base Meter Maint			1,165.25
Total for Check Number 10290:				0.00	2,330.49
10291	10491	Rogers, Anderson, Malody & Scott, LLP	05/20/2020		
	63291	Audit Services FY 2019 - April 2020			21,000.00
Total for Check Number 10291:				0.00	21,000.00
10292	10689	Safety Compliance Company	05/20/2020		
	182872	Safety Meeting - Snake Safety - 4/29/2020			250.00
	183007	Safety Meeting - Heat Illness - 5/6/2020			250.00
Total for Check Number 10292:				0.00	500.00
10293	10881	T.R. Holliman and Associates, Inc	05/20/2020		
	2019-001-01	Prof Consulting May 2020 - Recycled Water Implementation Rd Map			6,450.00
Total for Check Number 10293:				0.00	6,450.00
10294	10743	Townsend Public Affairs, Inc	05/20/2020		
	15925	Consulting Services - May 2020			4,000.00
Total for Check Number 10294:				0.00	4,000.00
10295	10255	Unlimited Services Building Maintenance	05/20/2020		
	0413373-IN	May 2020 Janitorial Services - 851 E 6th			150.00
	0413374-IN	May 2020 Janitorial Services - 560 Magnolia			845.00
	0413571-IN	May 2020 Janitorial Services - 815 E 12th			160.00
Total for Check Number 10295:				0.00	1,155.00
10296	10421	Vulcan Materials Company	05/20/2020		
	72578042	Temp Asphalt - Meter Maint & Maint			1,092.72
	72578042	Temp Asphalt - Maint & Repair Pipelines			1,092.71
Total for Check Number 10296:				0.00	2,185.43
10297	10651	Weldors Supply and Steel, Inc	05/20/2020		
	15502	Oxygen Tank - Unit 5			11.55
Total for Check Number 10297:				0.00	11.55
10298	10599	West Coast Technology	05/20/2020		
	0009977-IN	Spare Hard Drive for SAN Storage			1,355.94
Total for Check Number 10298:				0.00	1,355.94
Total for 5/20/2020:				0.00	155,025.32

ACH	10085	CalPERS Retirement System	05/28/2020		
	1001570324	PR Batch 00002.05.2020 CalPERS 8% ER Paid			1,020.35
	1001570324	PR Batch 00002.05.2020 CalPERS 8% EE Paid			2,397.13
	1001570324	PR Batch 00002.05.2020 CalPERS 7% EE Deduction			1,241.19
	1001570324	PR Batch 00002.05.2020 CalPERS 1% ER Paid			177.30
	1001570324	PR Batch 00002.05.2020 CalPERS ER Paid Classic			9,126.11
	1001570325	PR Batch 00002.05.2020 CalPERS ER PEPRA			2,861.08
	1001570325	PR Batch 00002.05.2020 CalPERS 7.5% EE PEPRA			2,850.46
Total for this ACH Check for Vendor 10085:				0.00	19,673.62
ACH	10087	EDD	05/28/2020		
	1-848-261-152	PR Batch 00002.05.2020 State Income Tax			3,928.48
	1-848-261-152	PR Batch 00002.05.2020 CA SDI			1,006.95
Total for this ACH Check for Vendor 10087:				0.00	4,935.43
ACH	10094	U.S. Treasury	05/28/2020		
	270054991235014	PR Batch 00002.05.2020 Federal Income Tax			10,575.13
	270054991235014	PR Batch 00002.05.2020 FICA Employer Portion			6,290.28
	270054991235014	PR Batch 00002.05.2020 Medicare Employer Portion			1,472.88
	270054991235014	PR Batch 00002.05.2020 FICA Employee Portion			6,290.28
	270054991235014	PR Batch 00002.05.2020 Medicare Employee Portion			1,472.88
Total for this ACH Check for Vendor 10094:				0.00	26,101.45
ACH	10141	Ca State Disbursement Unit	05/28/2020		
	2O3JUPX6658	PR Batch 00002.05.2020 Garnishment			288.46
	2O3JUPX6658	PR Batch 00002.05.2020 Garnishment			360.05
Total for this ACH Check for Vendor 10141:				0.00	648.51
ACH	10203	Voya Financial	05/28/2020		
	VB1450-PP11	PR Batch 00002.05.2020 Deferred Comp			450.00
Total for this ACH Check for Vendor 10203:				0.00	450.00
ACH	10264	CalPERs Supplemental Income Plans	05/28/2020		
	1001570327	PR Batch 00002.05.2020 CalPERS 457 %			130.84
	1001570327	PR Batch 00002.05.2020 CalPERS 457			540.00
	1001570327	PR Batch 00002.05.2020 457 Loan Repayment			177.19
Total for this ACH Check for Vendor 10264:				0.00	848.03
ACH	10895	Basic Pacific	05/28/2020		
	INV PP11-2020	PR Batch 00002.05.2020 Flexible Spending Account			333.33
Total for this ACH Check for Vendor 10895:				0.00	333.33
Total for 5/28/2020:				0.00	52,990.37
		Report Total (115 checks):		0.00	757,324.16

Beaumont-Cherry Valley Water District
Board of Directors Meeting
June 10, 2020

Item 2d

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Approval of Pending Invoices**

Staff Recommendation

Approve the pending invoice totaling $6,249.85.

Background

Staff has reviewed the pending invoice and found the services rendered were acceptable to the District.

Fiscal Impact

There is a $6,249.85 impact to the District which will be paid from the 2020 budget.

Attachment(s)

- Richards Watson Gershon Invoice # 226673

T 213.626.8484
F 213.626.0078
Fed. I.D. No. 95-3292015

350 South Grand Avenue
37th Floor
Los Angeles, CA 90071

CONFIDENTIAL

This material is subject to the attorney-client privilege and/or attorney work product protection, or otherwise is privileged or confidential. Do not disclose the contents hereof. Do not file with publicly-accessible records.

DAN JAGGERS, GENERAL MANAGER
Beaumont- Cherry Valley Water District
560 Magnolia Avenue
Beaumont, Ca 92223-2258

May 8, 2020
Invoice # 226673

Re: [redacted] GENERAL COUNSEL SERVICES

For professional services rendered through April 30, 2020:

Current Legal Fees.....$6,210.00
Current Client Costs Advanced.....$39.85

TOTAL CURRENT FEES AND COSTS.....**$6,249.85**

Balance Due From Previous Statement $4,774.50

TOTAL BALANCE DUE FOR THIS MATTER..... **$11,024.35**

TERMS: PAYMENT DUE UPON RECEIPT

PLEASE RETURN THIS PAGE WITH YOUR REMITTANCE TO

RICHARDS, WATSON & GERSHON
350 South Grand Avenue, 37th Floor
Los Angeles, CA 90071

BEAUMONT-CHERRY VALLEY WATER DISTRICT
560 Magnolia Avenue, Beaumont, CA 92223

MINUTES OF REGULAR MEETING
OF THE BOARD OF DIRECTORS
Wednesday, May 13, 2020 at 6:00 p.m.

Meeting held via teleconference pursuant to
California Government Code Section 54950 et. seq. and
California Governor's Executive Order N-29-20

Call to Order: *President Covington began the meeting at 6:05 p.m.*

Pledge of Allegiance: President Covington

President Covington led the pledge.

Invocation: Director Slawson

Invocation was given by Director Slawson

Announcement of Teleconference Participation

Director of Finance and Administration Yolanda Rodriguez clarified that this meeting is conducted via teleconference pursuant to California Government Code Section 54953, and under Executive Order N-29-20 and N-33-20 of the Governor of California.

The teleconference capabilities of this meeting have been identified in the Notice and Agenda for this meeting, pursuant to the Brown Act and the Governor's Executive Order. Under the Governor's Executive Order and the Gathering Guidelines of the California Department of Health due to the danger of COVID-19, the teleconference locations are not publicly accessible. The public's right to comment and participate in the meeting is being assured via teleconference capabilities.

The Beaumont-Cherry Valley Water District (BCVWD) will use sound discretion and make reasonable efforts to adhere as closely as reasonably possible to the provisions of the Brown Act, and other applicable local laws regulating the conduct of public meetings, in order to maximize transparency and provide the public access to meetings.

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Roll Call:

Directors present:	Covington, Hoffman, Slawson, Williams
Directors absent:	Ramirez
Staff present:	General Manager Dan Jaggers Director of Finance and Administration Yolanda Rodriguez Senior Engineer Mark Swanson Assistant Director of Operations James Bean Senior Finance and Administrative Analyst William Clayton Engineering Assistant Daniel Baguyo Administrative Assistant Erica Gonzales Information Technology Manager Robert Rasha
Legal Counsel	James Markman

Members of the public who registered attendance: Michelle Staples, Dan Haskins, Katie Hallberg, and Dr. Blair Ball were in attendance on the teleconference.

Director of Finance and Administration Yolanda Rodriguez verified that all members of the Board of Directors have indicated that they are able to hear the other directors clearly on the teleconference. No directors expressed any reason to believe, based on voice recognition or otherwise, that those persons representing themselves to be directors are not truly so.

Public Comment: None.

1. **Adjustments to the Agenda**: None.

   General Manager Jaggers drew attention to a handout related to Item 4: Resolution 2020-__: Authorizing an Amendment to the BCVWD Fiscal Year 2020 Operating Budget. He advised that it should be available on the website prior to introduction of the agenda item. Director Hoffman requested email of the handout.

2. **Consent Calendar:**
   The following Consent Calendar items were approved with one motion:

   a. March 2020 Budget Variance Report
   b. March 2020 Cash/Investment Balance Report
   c. Quarterly Statement of Cash Flows for March 31, 2020
   d. April 2020 Check Register
   e. April 2020 Invoices Pending Approval
   f. Minutes of the Regular Meeting of April 8, 2020
   g. Minutes of the Regular Meeting of April 23, 2020

MOVED: Hoffman	SECONDED: Williams	APPROVED 4-0
AYES:	Covington, Hoffman, Slawson, Williams	
NOES:	None.	
ABSTAIN:	None.	
ABSENT:	Ramirez	

3. Noble Creek Recharge Facility Phase I Fencing Project Status Review and Consideration of Approving an Additional Expenditure for Land Surveying Services

General Manager Jaggers advised that the right-of-way and property lines will be surveyed. Bids from three survey companies fell within his purchasing ability, he explained. He updated the Board on the fencing plans and alignment.

In response to Director Hoffman, Mr. Jaggers said the fencing contractor is ready to proceed. The survey bids were reviewed yesterday, and staff will most likely choose the lowest most responsible bidder. The survey companies are also ready to begin. He said he expects completion of the survey work and acquisition of project materials over the next 30 days.

Director Hoffman requested some clarification on the fencing locations; Mr. Jaggers explained.

President Covington asked about survey costs and costs related to changes in fence alignment. Mr. Jaggers explained staff is waiting for clarifications from one entity and said he is not prepared to speak to costs; but noted the survey cost is under $10,000. Discussions with the fencing contractor noted that any additions are minor and within the contingency, he said. President Covington requested an update in June.

4. Resolution 2020-10: Authorizing an Amendment to the BCVWD Fiscal Year 2020 Operating Budget

President Covington introduced the item and reminded the Board that this action was anticipated at the beginning of the year. Mr. Jaggers confirmed the location of a handout on the District's website.

Director of Finance and Administration Yolanda Rodriguez reminded the Board that the 2020 Operating Budget and Five-Year Capital Improvement Budget were adopted by the Board at the December 18, 2019 meeting. The Operating Budget showed a deficit of $394,012 and the Board approved a contribution from operating reserves to balance the budget. Ms. Rodriguez noted that the Board adopted a new rate structure along with the 2019 Water Financial Plan and Utility Rate Study effective March 1, 2020.

The new budget reallocates revenue and expenses as a result of the Rate Study, Rodriguez stated. There is an increase in projected water sales revenues of $197,790, she explained, and detailed the affected budget line items and transfers.

The original adopted budget of $17,014,195 is now proposed to be adjusted to $16,984,696 and includes capital replacement reserves, Ms. Rodriguez explained.

General Manager Jaggers reminded the Board that these activities and strategy were discussed with budget adoption in December. This budget represents that plan, he said. Jaggers noted that approximately 9 percent of the first-year increase was related to the increase in pass-through fees for San Gorgonio Pass Water Agency (SGPWA) increased wholesale water rate for imported water, resulting in $1,153,653 in additional revenue. In addition, he continued, calculated depreciation is $2.681 million; but only $790,431 is covered in this budget. The

past practice of the District has been to put as much as possible aside for capital replacement to avoid debt moving forward, Ms. Rodriguez added, but in 2020 to minimize impact to the ratepayers, only 29.6 percent has been set aside. Moving forward, she noted, as much as possible should be allocated for capital replacement to create long-term sustainability for the District.

Director Williams indicated she appreciated the detailed information. President Covington noted that the Board was cognizant of the coming amendments. He asked how the COVID-19 issue may impact the budget, as all these projections were based on a normal scenario.

Ms. Rodriguez noted it is early to anticipate what kind of impact on cash flow the District may experience. Staff is looking at activity now related to COVID-19 and month-by-month impact and may need to revisit the budget based on impact and other governor mandates. There will be more on this later in the agenda, she noted.

Mr. Jaggers pointed to Item 10 on the agenda. Due to the bi-monthly billing cycle for most residential customers, he said, tracking costs run two months out. Staff is closely monitoring production which translates to sales, among a number of things affecting cash flow projection, Jaggers explained.

The Board adopted Resolution 2020-10 Authorizing a Mid-Year Amendment to the Fiscal Year 2020 Operating Budget and authorized staff to set aside an allocation of funds for the ongoing costs of the Other Post-Employment Benefits (OPEB) and the Unfunded Pension Liability accounts by the following roll call vote:

MOVED: Williams	SECONDED: Slawson	APPROVED 4-0
AYES:	Covington, Hoffman, Slawson, Williams	
NOES:	None.	
ABSTAIN:	None.	
ABSENT:	Ramirez	

5. Resolution 2020-11: Proclaiming the Week of May 17, 2020 to May 23, 2020 as Special Districts Week, and Letter of Support for Assembly Concurrent Resolution 179 Proclaiming Special District Week in the State of California

General Manager Jaggers gave background on the event promoted by the California Special Districts Association.

President Covington asked if this event would be on the agenda each year since the dates change. Mr. Jaggers advised that if this becomes an annual activity, it would be moved forward as an ongoing activity.

The Board adopted Resolution 2020-11 Proclaiming the Week of May 17 to May 23, 2020 as Special Districts Week within the Beaumont-Cherry Valley Water District and approved the letter of support for Assembly Concurrent Resolution 179 Proclaiming Special Districts Week in the State of California by the following roll call vote:

MOVED: Slawson	SECONDED: Williams	APPROVED 4-0
AYES:	Covington, Hoffman, Slawson, Williams	
NOES:	None.	
ABSTAIN:	None.	
ABSENT:	Ramirez	

6. 9th and 11th Street Pipeline Replacement Project Construction and Cost Update

Senior Engineer Mark Swanson reminded the Board that this project was originally started in early 2019 in conjunction with the City of Beaumont's ongoing Beaumont Avenue rehabilitation project.

Staff identified 600 feet of pipeline to be replaced along Beaumont Avenue, and a plan was developed to identify the project scope and cost for a hybrid project – the District provided materials and a contractor to provide the installation. As of today, the total cost is at $186,272.50 which is about $31,000 under the Board-approved budget, Swanson explained.

The 9th and 11th street components are substantially complete, Swanson reported. He noted that project costs had not included abandonment of the alley at 9th and 10th behind the post office, and this work will be identified under maintenance rather than capital improvement. The costs incurred were $47,984. The alley is also substantially complete, he advised. Final numbers are expected to be available for the June Board meeting, Swanson noted.

Mr. Jaggers added detail on the alley project and the affected residences.

Public Comment: Dr. Blair Ball commented that he appreciated that much of the work is being done in house by field workers and thanked staff for allowing that to happen.

President Covington concurred with Dr. Ball's comments and noted that Beaumont Avenue had been in poor condition.

7. Comment Letter regarding the State Water Resources Control Board Hexavalent Chromium Maximum Contaminant Levels (MCL) Economic Feasibility White Paper

General Manager Jaggers advised that the District will have three wells adversely affected by Hexavalent Chromium if the 10 parts per billion (ppb) maximum contaminant level (MCL) is reinstated. He explained the history of the regulations.

In order to comply with the MCL, BCVWD turned off two wells and plumbed the third into the non-potable water system, Jaggers said. In May of 2017, the Court invalidated the MCL on the basis that California Department of Public Health (CDPH) had not properly considered the economic feasibility of complying with the MCL. In response, the State Water Resources Control Board (SWRCB) has been developing options for evaluating economic feasibility during the MCL process, Jaggers continued.

The SWRCB has issued a white paper discussing the economic feasibility analysis, Jaggers explained. It summarizes the challenges faced by the SWRCB

in considering the economic feasibility and presents the perspective of the staff regarding the problems with developing a standardized framework for determining if the proposed MCL is economically feasible, Jaggers said; i.e. they are uncertain as to how to proceed and have proposed a non-holistic approach.

The Association of California Water Agencies has provided comments and encourages districts to submit comments on the white paper, due on May 15, Jaggers explained. He explained the points made in the draft letter for Board approval. The MCL could adversely affect the District with millions of dollars of expense if not properly set, Jaggers warned.

President Covington opined that it appears to be a boilerplate white paper with emphasis on the difficulty of the economic feasibility, almost saying it is impossible to determine a formula. He acknowledged the importance of the comments.

President Covington noted that Director Slawson is still chairing the San Gorgonio Regional Water Alliance and suggested a similar letter with multiple agencies signing. Director Slawson confirmed he is still the chair, but the group has not been meeting, therefore there is no opportunity to sign a letter.

Mr. Jaggers added that he passed along the information to the City of Banning and is in communication with staff there. The City is a partner in some wells, he reminded.

The Board approved the comment letter to the State Water Resources Control Board (SWRCB) and directed staff to forward the letter under the signature of President John Covington a by the following roll call vote:

MOVED: Williams	SECONDED: Hoffman	APPROVED 4-0
AYES:	Covington, Hoffman, Slawson, Williams	
NOES:	None.	
ABSTAIN:	None.	
ABSENT:	Ramirez	

8. Yucaipa Valley Water District April 14, 2020 Agenda Item IV. D. Consideration of Initiating Sphere of Influence and Annexation Proceeding for Various Properties to the Yucaipa Valley Water District (Merlin Properties, APN 413-290-041 & 042)

General Manager Jaggers explained that the Yucaipa Valley Water District (YVWD) Board of Directors took action on a Merlin Properties item at its April 14 Board meeting. Mr. Jaggers had attended the meeting via teleconference and requested postponement to allow BCVWD to analyze its interest.

Staff's investigation shows that in 2003, the then-property owner Fred Reidman approached the BCVWD Board and obtained a water service Will-Serve Letter (WSL) and authorization for annexation. The property was subsequently annexed into the BCVWD on August 17, 2006 (LAFCO 2004-48-5) but it appears that the Riverside Local Agency Formation Commission (LAFCO) inadvertently provided incomplete information to the YVWD.

At the time YVWD took action, they believed the property was in neither the YVWD nor BCVWD sphere of influence or boundary, Jaggers noted.

Subsequent to the annexation, Jaggers continued, Desert Lawn Drive was realigned, and an easement provided by the Reidman family. This subdivided the property into three, causing alteration of Assessor's Parcel Numbers.

With the annexation, BCVWD proceeded with construction of facilities and master planning to provide water and non-potable water service to the project and has prepared to service the property, Jaggers continued. The property has an overlier water right, which would convert to service the property per the Beaumont Basin adjudication, so would not result in need for additional imported water supply.

A significant amount has been invested in facilities including non-potable water line installed across the frontage in 2009, and facilities along Cherry Valley Boulevard, Jaggers explained. What remains to be completed is extension from that existing facility of approximately 1,459 feet of additional pipe to connect, he continued. Jaggers noted that BCVWD has moved forward in good faith, and he recommended the District continue to work with the developer to provide service and move forward with the existing facilities.

The developer will need to come to the Board with an update for their WSL, but due to its overlier water right, Jaggers said he sees no significant reason why that would not be supported by the Board.

Legal Counsel James Markman advised the Board that the YVWD process was based on an erroneous conclusion and BCVWD had asked for a delay in order understand it. BCVWD was contacted by the attorneys for the developer to set a meeting to discuss with YVWD. The findings show that BCVWD has spent money bringing infrastructure to the project and that investment would clearly be stranded if BCVWD was not the service provider, Markman stated. Under the Service Duplication Act as well as the fact that the water service that BCVWD can supply is equivalent to the service from YVWD, there is no reason for a de-annexation, Markman stated. The link to provision of sewer service in order to capture the opportunity to provide water service is not a correct way to proceed when the property is already in the BCVWD service area. Mr. Markman indicated agreement with General Manager Jaggers' recommendation to proceed in working with the developer on the WSL update and provision of water service.

Public Comment: Michelle Staples, Attorney for the Merlin project: Ms. Staples indicated that her understanding is that the water service would not be equivalent from BCVWD and there are issues that project engineer Dan Haskins can explain. A significant problem is the sewer service, she continued. The only way the project will be able to receive sewer service from YVWD is to also receive water service from them because of their sustainability policy; they need the water and sewer linked in order to be able to provide recycled water. Also, she pointed out, when ownership changes the new owner often neglects to notify the sewer supplier creating administrative issues.

The YVWD can set the terms to provide service, she noted, and said the bottom line is, if the property is not able to get sewer service from YVWD then it cannot get water service, and the project will not move forward. She asked for the Board's consideration.

Public Comment: Dan Haskins, Land Engineering: Mr. Haskins questioned whether the water service infrastructure mentioned by Mr. Jaggers contained potable or non-potable water. He acknowledged a potable line at the corner of

Cherry Valley Boulevard and Desert Lawn Drive to which the Merlin project would be required to install about 3,000 feet of line as currently planned based on the District's 2016 master plan.

Mr. Haskins indicated that one of the issues with extending potable water to that point is the creation of a dead end on that line; fire department approval of that is questionable for 179 homes. He anticipates the potential for doubling the length of the line at substantial additional expense. The YVWD currently has a 12-inch line in Desert Lawn Drive that is within 400 feet of the Merlin property, he continued, and they have a readily available circulating line in a nearby tract. This would appropriately meet the California fire code, Haskins posited, and City of Calimesa Fire Department requirements for a looped system.

Haskins stated that the YVWD service is a more cost effective and code compliant design for potable water. For non-potable, YVWD currently has a line in Desert Lawn Drive at the same distance (400 feet) from the Merlin property. Water and sewer are readily available from YVWD, he concluded.

Mr. Jaggers responded and noted that it appears that BCVWD was left out of the loop on the project planning and no opportunity was provided for BCVWD to weigh in at a point when it would be more economically feasible. This created a condition of economic unbalancing, Jaggers stated. The District has made investments in infrastructure that would have provided an economic opportunity for this project, including plans that were shared with Mr. Haskins, he said.

Others seem to have created a condition putting BCVWD at an unfair position, Jaggers continued. Mr. Jaggers pointed out that the project engineer did not timely contact LAFCO to determine if the project was in BCVWD's SOI or service area.

Mr. Haskins clarified that his firm did not contract with the Reidman family until August of 2019 and did not approach any utility until December of 2019. Many of the questions regarding line construction were prior to any meeting with YVWD. It was the City of Calimesa that contacted YVWD to request a meeting, not the project, he said. There was no malicious intent on the part of the project engineers to suggest a specific agency serve the project, he stated. He also noted that the District's boundary maps show the Reidman project outside of BCVWD territory, creating confusion for both.

In 2008, Haskins pointed out, it went back to LAFCO to convert the area back to YVWD, so there was a weighted understanding on the part of the project that this was to be served by YVWD.

Legal Counsel Markman stated that everyone has a due diligence obligation: including the City of Calimesa, YVWD, the engineers and the developer, to understand through some records. The fact that there is a WSL issued to this project owner's father, that indicates annexation to the BCVWD. The BCVWD spent money putting in facilities to reach this property as well as some property on the other side within its service area. Once that happens, it is the YVWD that is trying to generate a service duplication. BCVWD would have a stranded investment that would have to be calculated, in addition to the service duplication which is prohibited by law. The legal position is of classic service duplication.

Mr. Markman also pointed out that it is a shame that the only agency that can provide sewer service is somehow finding reasons to say that they won't do so, because they want to provide water service opportunity and the water rights

conversion that goes with it. They are linking the two services and vetoing the movement of this project, as they could very easily offer the sewer service without de-annexation from BCVWD.

In addition, Markman continued, it will not necessarily be cheaper for de-annexation, as it may generate a service duplication lawsuit. Mr. Markman noted he would not advise the Board to accept de-annexation, as the ratepayers would have to absorb the cost of the stranded infrastructure. He said he is certain there is a way to address the looped system and provide water and sewer service, but there are some legal barriers to moving in the direction requested.

Director Williams indicated she would like more information at the next meeting. Director Hoffman suggested tabling the item to allow time to get more feedback and do more research. President Covington noted this is not an action item; it is an update to a previous agenda item.

Director Slawson posited there needs to be a lot more communication and information shared between a few different entities before this is discussed again. This is a complicated situation and the problems must be solved, he stated.

President Covington acknowledged a lack of due diligence; granted there were many stops and starts to the project and it is an odd situation, he said. He stressed that the project is located in BCVWD's service area and BCVWD has made a tremendous investment in the area. When this item came up in April, Covington continued, BCVWD asked for a delay in YVWD action but was rejected. Without the efforts of BCVWD staff, the situation could have been made worse with the project moving forward with YVWD providing service in BCVWD's boundary, Covington pointed out. As this moves forward, BCVWD and the associated parties must meet and figure out where this is going to go, Covington stated. He thanked staff for their work.

Public Comment: Ms. Katie Hallberg with Yucaipa Valley Water District pointed to legal counsel's comment suggesting that YVWD had initiated the service bundling requirement to benefit the District and explained this requirement has been in place since 2008 and was adopted by the Board after two years of discussion due to multiple issues with unbundled services. She indicated the District respects everything being done and there is obviously a lot of confusion on all parts, including receipt of different information from LAFCO. She assured the Board that YVWD wants to work together.

Mr. Jaggers added that notes in the file indicate that Mr. Reidman was in discussions for sewer service well prior to the approval of bundled activity in 2008, and the developer at that time had made some comments about sewer-only service. Mr. Markman assured that he did not mean to infer that YVWD instituted the requirement for this development. With that approach, he noted, this property, for which there is no other option for sewer service because the City of Beaumont cannot provide it, and assuming BCVWD had all the infrastructure there, and YVWD was not in there for water service – that bundled service only policy would freeze that development. Markman said he understands the reasons for wanting both services to come from one entity, but such a policy does not necessary apply to all situations.

9. Update: Well 21 Inspection and Findings regarding the Pumping Motor and Appurtenances

Assistant Director of Operations James Bean updated the Board on the Well 21 pumping unit repair and well rehabilitation project. Currently, the pumping unit has been removed and inspected. The 400 hp motor was purchased last year, so it is in good condition. The column pipe was heavily corroded and pitted and requires replacement.

The tube and shaft are not in great condition but are reusable, Bean continued. He is awaiting quotes in order to evaluate costs before moving forward with a recommendation for replacement or reuse. The pumping unit was completely destroyed and must be replaced, he advised.

Mr. Bean said the well itself is in good shape and will likely not need chemical treatment.

When this was brought previously to the Board, staff presented a worst-case scenario, Bean noted, but now it looks like the project may require significantly less and will be well within the expense amount that was discussed.

President Covington asked about any COVID-19 delays in project completion. Mr. Bean said at this point there does not appear to be any delay. The pump company has advised that equipment will be in on a timely basis. With summer coming, staff wants to get this equipment online as quickly as possible, he added.

Mr. Jaggers clarified that three quotes were solicited from well vendors. Staff had identified vibration from the unit and is proactively catching these issues before there is catastrophic failure.

10. Review of District Staffing Activities and Cash Flows as related to the ongoing COVID-19 Local State of Emergency

Mr. Jaggers advised that the District has five or six positions that are currently funded but unstaffed through attrition and some planned activities. Before staffing decisions are made, staff is striving to get a current picture. The District has needs especially with the AMR/AMI deployment and those may have to be satisfied in the short term with temporary staff, he said.

As previously noted, Jaggers continued, staff is sensitive to impacts and cash flow funding impacts are yet to be realized. Any FEMA money that may be available is also uncertain, he added.

Director of Finance and Administration Yolanda Rodriguez presented the results of a recent Raftelis Financial Consultants study for the American Water Works Association, the *Financial Impact of the COVID-19 Crisis on U.S. Drinking Water Utilities*. She compared the study to BCVWD expectations.

She advised that staff is monitoring cash receipts and expecting a decline. With the moratorium on shut offs, the District is not receiving revenue from customers who are unable to pay, she explained. A 4.8 percent increase in indoor water use is also anticipated due to the stay-at-home order, she noted, but Raftelis posited that less outdoor watering will be done by customers trying to lower their bill.

Due to the District's bi-monthly billing, it is difficult for staff to predict scenarios at this point, Rodriguez said. She presented an aging report and current cash flow.

The Board approved waiver of credit card processing fees for payment, Ms. Rodriguez reminded. For March, April and up to this point in May, the District has absorbed $5,565 in credit card processing fees, she reported.

Ms. Rodriguez presented recommendations for preserving operating cash, including deferring capital projects which are paid via capital replacement funds and prioritize projects that are funded via facilities fees to reduce impact on operating cash. Additional recommendations are to hold 2020 purchases of imported water and eliminating training that is not necessary for safety.

Ms. Rodriguez acknowledged comments from the public opposing the raising of rates. She noted that the budget was in deficit and explained the importance of addressing the District's aging infrastructure.

She assured the Board that the District is in good standing and has three months of budgeted expenses in reserve for operations plus emergency reserves. Service has been uninterrupted, staff is working remotely, Rodriguez said; and although some COVID-19 related expenses such as masks and laptops were incurred, those were not impactful.

General Manager Jaggers commented on cash flow. He said staff is examining potable infrastructure projects currently budgeted and looking to defer projects. Other considerations include deferment of the landscape contract. He also advised that once shutoffs are allowed, bills will have accrued and entities in arrears may have the potential to be turned off. He reminded the Board that the District is purely reliant on customer payments for water consumed and not on tax payments.

Ms. Rodriguez reminded the Board that the grant for the AMR/AMI project is moving forward and will be using current staff. She also noted that some positions are being left vacant and some are underfilled. The District is tightening its belt where possible but will not have a more complete cash flow picture until two months from now.

President Covington stated that the report gave a clear vision of current status and acknowledged the unknowns. He said he would like to see another report to the full Board the first meeting of August. Jaggers suggested a monthly agenda item in order to keep the Board apprised.

11. Status of Local Emergency regarding the Impact of the Respiratory Illness Pandemic COVID-19 pursuant to Resolution 2020-07

Mr. Jaggers advised that staff continually monitors data from the County of Riverside and State of California. The federal, state and county governments are looking for ways to prepare for opening of the economy in a multi-step approach to watch risk, he said. The state promulgated criteria that are challenging for urban counties to meet, and Riverside is looking for a coalition of counties to work on a path forward with the state to reach commonality, Jaggers explained.

The County of Riverside Board of Supervisors revoked some of the public health orders including the mandate of wearing face masks and social distancing, which are now strongly recommended but not required, Jaggers noted.

The County Tax Assessor reported collection of $19 billion in taxes in 2019, and this year's collection as of last Tuesday was $5 billion: $14 billion less. The economic impact will be felt for quite a while, Jaggers said.

This District does not want to be on the leading edge of opening quickly, he advised. The current plan is that the field staff are fully working and are asked to wear masks within six feet and restrictions have been outlined.

More people are out in public, and the health metrics are being monitored for issues related to COVID-19 but, Jaggers noted, he does not think the District is anywhere near making the decision to open to the public. He said the County published a readiness and re-opening framework to show the governor how counties cannot meet some of the state's guidelines but show a plan with response activities and effectiveness of contact tracing.

Jaggers opined that BCVWD was in front with its response and wants to be behind in exiting the activity. The District cannot close down because there is no other solution for the community water supply. The District must be conservative and ensure continued service, he said. Staff will monitor the health metrics and do what is appropriate depending on a positive or negative effect of people beginning to socialize. He recommended keeping the office closed for the next couple of weeks and relax a bit for engineering staff to come in and work.

President Covington concurred with keeping the office closed for another two weeks and indicated the Board would follow the lead of the general manager. He noted the action by the Riverside County Board of Supervisors rescinding some health orders and asked if it is the District's intention to retain some of those procedures. Mr. Jaggers said the face mask requirement has been relaxed if crew members can maintain a target distance of 10 feet. He pointed out that last week, temperatures were 95 degrees and accommodations are being made to avoid heat stress. In proximity or in contact with the public, staff is to wear the mask.

If the metrics in Riverside County show an increased infection rate, the District will be more restrictive, Jaggers concluded.

12. Reports For Discussion

a. Ad Hoc Committees:

San Gorgonio Pass Regional Water Alliance: Director Slawson indicated the group has not met.

2x2 Recycled Water: Mr. Jaggers said he spoke to City Manager Todd Parton last week. Parton has been working on the budget and COVID-19 impacts and said he has been remiss in moving it forward. It is in the City's hands, Jaggers said.

b. General Manager

Mr. Jaggers told the Board that water is being delivered to the Noble Creek Recharge Facility at a lower rate as discussed with the intent to minimize expenditures in the near term.

Staff continues to watch the activities related to water use over the last couple of months as compared to 2018 and 2019. He noted a decrease in production and the potential that customers are having trouble paying their bills, which is not great for cash flow.

Well 29 has been returned to service, Jaggers reported. The motor was balanced in the field and the vibration improved. The intent is to extend the service life of the bearings, he noted.

c. Directors' Reports: None.

d. Legal Counsel Report: None.

13. Announcements

President Covington advised that the May 18 Personnel Committee has been canceled. He would like to set a meeting for June 1. He will discuss with Director Ramirez.

All the following meetings will be held via teleconference unless otherwise indicated. President Covington read the following announcements:

- Personnel Committee Special Meeting: Monday, June 1, 2020 at 5:30 p.m.
- District offices and telephone lines will be closed on Monday, May 25 in observance of Memorial Day
- Engineering Workshop: Thursday, May 28, 2020 at 6:00 p.m.
- Beaumont Basin Watermaster Committee: Wednesday, June 3, 2020 at 10 a.m.
- Finance and Audit Committee Meeting: Thursday, June 4, 2020 at 3:00 p.m.
- Regular Board Meeting: Wednesday, June 10, 2020 at 6:00 p.m.
- Collaborative Agencies Committee Meeting: Wednesday, July 1 at 5:00 p.m. (tentative)

14. Action List for Future Meetings:

Sites Reservoir Project Report for May 28, 2020 Engineering Workshop

15. Adjournment

President Covington adjourned the meeting at 9:08 p.m.

ATTEST:

DRAFT UNTIL APPROVED

DRAFT UNTIL APPROVED

_____

Director John Covington, President
to the Board of Directors of the
Beaumont-Cherry Valley Water District

_____

Director Lona Williams, Secretary
to the Board of Directors of the
Beaumont-Cherry Valley Water District

BEAUMONT-CHERRY VALLEY WATER DISTRICT
560 Magnolia Avenue, Beaumont, CA 92223

MINUTES OF REGULAR MEETING – ENGINEERING WORKSHOP OF THE BOARD OF DIRECTORS
Thursday, May 28, 2020 at 6:00 p.m.

Meeting held via teleconference pursuant to California Government Code Section 54950 et. seq. and California Governor's Executive Order N-29-20

Call to Order: President Covington

President Covington began the meeting at 6:05 p.m.

Pledge of Allegiance was led by Director Williams.

Invocation was given by Director Ramirez.

Announcement of Teleconference Participation

Director of Finance and Administration Yolanda Rodriguez clarified that this meeting is conducted via teleconference pursuant to California Government Code Section 54953, and under Executive Order N-29-20 and N-33-20 of the Governor of California.

The teleconference capabilities of this meeting have been identified in the Notice and Agenda for this meeting, pursuant to the Brown Act and the Governor's Executive Order. Under the Governor's Executive Order and the Gathering Guidelines of the California Department of Health due to the danger of COVID-19, the teleconference locations are not publicly accessible. The public's right to comment and participate in the meeting is being assured via teleconference capabilities.

The Beaumont-Cherry Valley Water District (BCVWD) will use sound discretion and make reasonable efforts to adhere as closely as reasonably possible to the provisions of the Brown Act, and other applicable local laws regulating the conduct of public meetings, in order to maximize transparency and provide the public access to meetings.

Roll Call:

Directors present:	Covington, Hoffman, Ramirez, Slawson, Williams
Directors absent:	None.
Staff present:	General Manager Dan Jaggers Director of Finance and Administration and Recording Secretary Yolanda Rodriguez Senior Engineer Mark Swanson Senior Finance and Administrative Analyst William Clayton

	Assistant Director of Operations James Bean Administrative Assistant Erica Gonzales Human Resources Coordinator Sabrina Foley
Legal Counsel	James Markman

Members of the public who registered their attendance: Dr. Blair Ball, James Kraus, Steven Huffaker, Glen Stull, Sharon Hamilton. Representing the Legacy Highlands project: Arthur Kidman, David Golkar, Hisam Baqai.

Director of Finance and Administration Yolanda Rodriguez verified that all members of the Board of Directors have indicated that they are able to hear the other directors clearly on the teleconference. No directors expressed any reason to believe, based on voice recognition or otherwise, that those persons representing themselves to be directors are not truly so.

Public Comment:

Ms. Sharon Hamilton confirmed her attendance.

1. **Adjustments to the Agenda:** None.

2. **NOT ADOPTED: Ordinance 2020-X: Waiver of Second Reading and Adoption of Ordinance 2020-X: Providing for Compensation of the Members of the Board of Directors of the Beaumont-Cherry Valley Water District and Superseding Ordinance 2007-01** (*Continued from April 8, 2020 Regular Meeting*)

   General Manager Jaggers introduced the item and reminded the Board that this item has been discussed for quite some time at both the Personnel Committee level and the Board. In early April, this item was tabled for consideration in May due to the COVID-19 situation.

   This is an opportunity to increase the Board per diem compensation from $200 per day to some higher number, Jaggers noted. The final decision now comes to the Board, he said.

   Jaggers advised the Board that approximately 42 written public comments were received via email and were posted to the website, and at least six additional emailed public comments had been received since the posting. All indicate opposition to a raise for the Board, he noted. The final email comments that have come in will also be posted online, Jaggers said.

   Public Comment: Ms. Sharon Hamilton of Cherry Valley said she did not think a raise for anyone is in line right now. Many ratepayers have economic uncertainty with lost jobs and price increases. She pointed out that water rates were just raised over the next five years.

   Public Comment: Mr. Glen Stull of Cherry Valley said he sent an email and indicated opposition to the ordinance. He pointed out that the State of California is in total crisis with a $54 billion deficit due to loss of revenue and tremendous expenses. People are watching and are unhappy with leadership, he said. He suggested the Board to step back and move with extreme caution.

Public Comment: Mr. Steven Huffaker, resident of Four Seasons, reiterated the prior comments. He said it is not the right time to be talking about raises. Any talk of raises for government flies in the face of what everyone is going through right now, he said, and people are angry at the idea of raises.

Public Comment: Mr. James Kraus said there is a component of public service that accompanies being a Board member; it is a privilege. When the community is facing so many problems, unless a Board member would be totally unable to complete their duties because of the pressure of poor compensation, it is totally inappropriate. The Board should continue to perform their duties without having to extract more from the customer base at a time when they are unable to provide that. He thanked the Board members for their service, but added that it stops being service when it is highly compensated.

Public Comment: Dr. Blair Ball of Cherry Valley said he appreciates the work of the directors and reminded the Board that he has indicated that $260 per meeting is in the high range for a district of this size. It is difficult for Beaumont-Cherry Valley Water District to compare themselves with Desert Water Agency which has three times the workforce, is a wholesaler and retailer, and sewer district. In addition, COVID-19 puts everything in disarray, he continued. Unemployment is up, and the economy is uncertain. He asked the Board to forgo the 30 percent pay increase and said the Board is sending the wrong message to the community. He pointed out that directors have been conservative in meeting attendance, however, the next people who come on Board will have a precedent for the future. They may look at this as a job and want to attend as many meetings as they can, Ball noted, which puts them into a $31,000 per year job. That is not wanted, he said, and he urged the Board to deny the pay raise on a 5-0 vote.

President's Remarks

President Covington said he read the comments received via email and thanked the residents for sharing their thoughts.

The California Water Code, Covington explained, allows public agencies to adjust elected officials' meeting stipends no more than 5 percent on any given year and to limits payment to no more than 10 meetings per month. He pointed out that there are no Board members who attend ten meetings per month.

District records show the Board of Directors did nothing with this issue for ten years, Covington continued, although the District's policy clearly states that this issue is to come before the Board for consideration every year in October. It is the inaction of previous Boards which has led to this point, he said. Compensation could be increased as to high as $320 per day of service, he pointed out. On October 9, 2019 this item came before the Board with a fully-burdened per diem analysis, Covington stated. Covington said he believes not all the facts were conveyed to the ratepayers by whomever contacted them about tonight's meeting.

The email comments tie the Board stipend issue to the rate increase recently passed, Covington noted. The last time the Board did a five-year rate survey was in 2010, he reminded. The District should have been looking at a new rate survey in 2013 or 2014. The District went eight years without raising water rates, he said.

President Covington pointed out that the Directors fees budget item has come in under budget for the past three years. In the 2019 budget, the line item was increased by $7,800 in anticipation of this raise being approved, he noted. This item has been

posted openly and in public meetings for well over eight months, Covington stated, and directors have been working through this process for a long time.

Covington also compared other agencies which provide paid medical insurance for directors and their dependents. The average per diem is $201, but that does not include the cost of medical insurance, which skews the numbers, he said.

Director comments

Director Williams thanked President Covington for the background information. She said her opinion is this is a period of uncertainty and with the rate increase going into effect ratepayers have not really had a chance to see their bills. There has been a cool period, and now the summer months are beginning. She said with the economy, she wanted to allow ratepayers to get their bills and see how things are going. Director Williams indicated she would be voting No. She said she felt the item can be revisited, and merited or not, she would be more comfortable looking at it again at the beginning of 2021 due to current external issues.

President Covington noted that whether the board takes action on this, the ratepayers will not be affected, as this has been budgeted. Director Williams said she believes customers may be more receptive at a later date.

Director Hoffman thanked the public for their participation and enlightening comments. He indicated that his position, given current circumstances, is to vote against. He said he does not think it is appropriate right now.

Director Slawson said he understands the emotion of it and believes that COVID-19 should not be part of the discussion. The Board has not raised the stipend in 13 years, and research was done to assure this is level with other boards, he noted. Director Slawson stated that thinking of these positions as a job is not a bad idea: the electeds should not be only wealthy people; everyone should be able to participate and without compensation some may not be able to. In the past, vacancies were difficult to fill, he pointed out. This raise would bring the stipend up to what it should be, he said. Waiting until October would be merely doing what should have been done in the first place, Slawson said.

President Covington opined that the Board should look at this every October and at a minimum, adjust for cost of living.

Director Ramirez said he believes there have been good points on both sides. He noted the increase to $260 was factored into the current water rate. President Covington clarified that it was factored into the 2020 operating budget. This is set within what ratepayers are paying regardless, Ramirez added. He reiterated that similar agencies are receiving a smaller stipend but receiving more with medical coverage.

Director Ramirez said he respects public perception. He pointed out that the cost of groceries also increased which affects everyone. Ramirez suggested either cast the vote tonight or allow another 30 days to assess the conditions of COVID-19. There is positive movement happening in the economy, he noted.

President Covington reiterated that this has been included in the 2020 budget and explained that everything the District does is a based on the water rates. He added that he believes the District has been financially strong since 2014. He noted that absent the COVID-19 crisis, the Board would be moving this forward and he said he

felt confident in doing so. He suggested that the public does not realize how much work goes into being an elected official and concurred with Director Slawson regarding candidates running for the Board based solely on receiving the stipend or medical benefits.

A motion to waive the second reading and adopt Ordinance 2020-01 Providing for Compensation of the Members of the Beaumont-Cherry Valley Water District Board of Directors and Superseding Ordinance 2007-01 failed by the following roll call vote:

MOVED: Slawson	SECONDED: Hoffman	**FAILED** 2-2-1
AYES:	Covington, Slawson	
NOES:	Hoffman, Williams	
ABSTAIN:	Ramirez	
ABSENT:	None.	

3. Letter of Support for Assembly Bill 2182 (Rubio) Related to Nonvehicular Air Pollution

Assistant Director of Operations James Bean explained this bill allows for essential public services such as water agencies to be exempt from current regulations that limit the yearly run time for standby generators. Currently, regulations of the Air Quality Management District (AQMD) restrict use to 200 total hours per year per site, which includes maintenance, actual emergencies, and exercising the generator.

California is experiencing Public Safety Power Shutoffs (PSPS) and the need to run generators has changed. The Association of California Water Agencies has urged its members to support this bill, Bean continued.

Directors Slawson and Hoffman expressed support.

The Board approved the execution of the letter in support of Assembly Bill 2182 Related to Nonvehicular Air Pollution and directed staff to forward it to the California Assembly Committee on Natural Resources and designated elected officials by the following roll call vote:

MOVED: Williams	SECONDED: Ramirez	APPROVED 5-0
AYES:	Covington, Hoffman, Ramirez, Slawson, Williams	
NOES:	None.	
ABSTAIN:	None.	
ABSENT:	None.	

4. Award of Contract for Landscape Services to Urban Habitat Landscape Contractors for an Amount Not to Exceed $67,900.00

Assistant Director of Operations James Bean advised this item allows the general manager to enter into a one-year contract with the option for an additional one-year extension by the general manager. Urban Habitat was the lowest responsive bidder of three who responded, Bean explained, and was the contracted landscaper for the past year.

Mr. Bean noted that the contract was re-bid this year excluding the Noble Creek Recharge Facility and Edgar Canyon sites. The total cost includes a 10 percent contingency for unexpected issues and an increased weed abatement schedule, Bean said.

Director Ramirez asked if irrigation used is recycled water. Mr. Bean explained that a couple of facilities will be set up for recycled water as they are adjacent to existing non-potable mains.

Director Hoffman requested staff provide a six-month progress report and a one-year report prior to the general manager's renewal of the contract at his discretion.

President Covington confirmed this is the same contractor used last year. Mr. Bean affirmed and added that the contract was modified to address activities that needed to be increased, such as weed abatement, to make facilities more presentable.

President Covington invited public comment. There was none.

The Board authorized the General Manager to execute a one (1) year contract, with an optional General Manager approved extension of one (1) year, for Landscape Maintenance Services in an amount not to exceed $61,686.00 together with an approximate contingency of 10% for a total amount not to exceed $67,900.00 per year, with Urban Habitat Landscape Contractors by the following roll call vote:

MOVED: Slawson	SECONDED: Hoffman	APPROVED 5-0
AYES:	Covington, Hoffman, Slawson, Williams	
NOES:	None.	
ABSTAIN:	None.	
ABSENT:	Ramirez	

Director Ramirez was not present on the teleconference call for the roll call vote. Director Ramirez re-joined the teleconference call directly after the vote and before the beginning of Item 5.

5. Beaumont Master Drainage Plan Line 16 Pipeline Relocation Project and Estimated Costs

Senior Engineer Swanson updated the Board. Project plans at the 60 percent design level were approved by the Riverside County Flood Control and Water Conservation District (Flood Control) and BCVWD and are now moving to 90 percent design.

As the plans moved forward, Riverside County Transportation pointed to an alignment including catch basins in an inverted street. Swanson reminded the Board that President Covington had commented on the history of the street design. Staff brought this to the attention of Flood Control, and Transportation is now in agreement with leaving the road with a centerline flow line, Swanson advised.

This is important, Swanson continued, as the District would need significant infrastructure in those two streets as part of the Potable Master Plan.

Mr. Swanson detailed the recommended action and the estimated costs related to four existing segments of pipeline that appear to be in conflict with the plan or standards.

The projects would be funded using a combination of facilities fees (capacity charges) and capital replacement reserves, Swanson explained.

Swanson advised that Flood Control would like to have plans approved and everything ready to go in September, resulting in construction starting early next year. This means that the District will have to accelerate addressing these pipelines, Swanson said. The grant for the storm drain project has a sunset date in December 2021, so the District must move quickly to assure its pipelines are not impacted by the storm drain project, he explained. Staff has put together plans and will bid the pipeline project with the District supplying the materials and a contractor performing the labor and providing equipment, Swanson noted.

General Manager Jaggers indicated that staff is trying to be proactive and keep the Board informed. Completion of the Memorandum of Understanding is being delayed by discussion regarding who will maintain the feeder pipe between Bellflower and Winesap, he advised. BCVWD has been asked to take on the maintenance but Jaggers said he has not yet weighed in with high level staff or the general manager at Flood Control.

A conservative cost estimate has been done, and the District hopes to realize some savings through economies of scale by bundling projects, Jaggers noted. This needs to continue moving forward, he stated, and said the intent is to discuss the options. He pointed out there is potential COVID-19-related short-term cash flow impact and offered two options: Option A is designed to conserve funds.

Jaggers indicated that in the future, a more holistic cost approach will be shown to properly account for project costs.

President Covington invited public comment. There was none.

In response to Director Ramirez, Mr. Swanson assured that staff would work cooperatively with the County of Riverside on such things as the encroachment permit.

Mr. Swanson requested Board consideration of Option A or B and acknowledged the estimates are preliminary. He warned that this project will quickly gain momentum. President Covington asked about a secondary cooperative agreement regarding responsibilities of ownership, operation and maintenance upon project completion. He expressed concern about the agreement on which the Board provided comments in 2016 or 2017 and which is not yet complete despite a half million dollars in proposed pipeline work.

President Covington also pointed out the replacement of 3,245 linear feet with ductile iron pipe (DIP) and other segments along Grand Avenue and suggested this not be done in a piecemeal manner. He also noted potential California Environmental Quality Act (CEQA) necessities.

President Covington indicated he is not comfortable putting additional money on the table until there are signatures on the agreement and acknowledged that it is the County that is holding it up. He assured that he is otherwise in support of the project.

Mr. Swanson acknowledged that there are components of the Grand Avenue pipeline that are not for replacement where CEQA does come into play and will slow the progress. The sections of pipeline shown which are small components of the 3,245 feet, Swanson explained, are replacements which do not require CEQA.

District staff has had conversations with Flood Control on where the MOU stands, including funding mechanisms, payment, and inspections, Swanson continued. The maintenance component, he said, is also stated in the MOU and is the last piece to shake out. Flood Control has been amicable, Swanson said, and staff may have to figure out the maintenance situation and force the conversation to bring it forward and allow the Board to feel comfortable that this is a committed project.

Swanson explained that the 3,245 feet of pipeline is shown in the Capital Replacement spreadsheet in the 2020 budget, but it is a project the District will not be able to get done in time. The holdup is due to the County requirement that the District re-pave half the street, but with the storm drain line going in, it is not something that he believes can get through CEQA to complete the entire line.

General Manager Jaggers added that BCVWD does not want to maintain the 24-inch feeder line down Bellflower. Although there is high quality water from the mobile home park north of the Grand / Bellflower intersection, Jaggers explained, the concern of Flood Control and Transportation is the debris flows. A shut off gate has been built into the project, and the plan is to actuate that in the event of debris flows. Mr. Jaggers said he has advised Flood Control and Transportation that it is not in the District's interest to take on the maintenance activity, but staff does want to know what the activity would look like. He said the District is not digging in its heels, but will not allow the other entities to drive a decision that may create more work for District staff. This is the last item of discussion, Jaggers noted.

Jaggers reminded the Board that there have already been cost increases in the storm drain project, and the pipelines are also things that need to be done. Some of the items are already-planned projects, he said. Staff's recommendation, Jaggers said, is Option B.

President Covington indicated he supports the project and the funding, but not moving this far with nothing in writing. Mr. Jaggers assured that staff agrees.

6. Update and Discussion on Sites Reservoir Progress to Date and Phase 2 Agreement

President Covington invited public comment. There was none.

General Manager Jaggers advised the Board that the Sites project has been value-engineered to provide a reasonable cost-effective solution for the participants who have indicated a desire to move forward, including the SGPWA and BCVWD. The current commitment of the SGPWA is 14,000 acre-feet (AF), he reminded the Board.

Some decisions need to be made, Jaggers advised. Jeff Davis, General Manager of the SGPWA is retiring at the end of June, Jaggers noted, with a contract to provide 400 hours of service through the end of the year.

Mr. Jaggers reminded the Board that two payments will be coming due: $60 per AF due September 1, 2020 (4,000 AF = $240,000) and $40 per AF due February 1, 2021

(4,000 AF = $160,000). This may be requested should the District desire to move forward.

The project was ranging between 1.3 and 1.8 million AF, Jaggers explained, and after value-engineering the reservoir cost can be reduced from $5 billion to $3.3 billion. Some entities still have some uncertainty about participation, he added, and some have indicated they are not interested, so the project was re-sized.

Jaggers indicated he expects a participation agreement from the SGPWA and is concerned about assuring the Board is prepared. He directed attention to the draft final annual report on Sites and pointed out highlights. The water has the potential to cost between $600 and $710 per AF and still needs to be wheeled here, Jaggers explained. It is still cheaper than the Table A water, he noted.

Costs will begin to be incurred in mid- to late 2020, he advised, and said he hoped the debt service obligation of the Pass area will be reduced as the East Branch Extension compacted bond payments fall off. Jaggers gave an overview of the project timeline, with the project to be operational as soon as 2029 and water available in 2030-2031, which is earlier than previously estimated due to project design changes.

7. Update regarding Attendance at the Association of California Water Agencies Annual Summer Conference in Monterey, CA (now July 29 - 30, 2020)

President Covington invited public comment. There was none.

General Manager Jaggers explained the conference has transitioned to a virtual format due to continued state mandates to limit the spread of the coronavirus. The dates have been changed to July 29 to 30, and the deadline to register is July 10. The original estimated cost per attendee was $4,220 but with the transition to a virtual conference the cost should be greatly reduced, Jaggers reported.

Directors Williams and Ramirez indicated they are still interested in attending. Director Slawson indicated interest in attending the virtual option.

8. Continued Review of Water Supply Assessment for Legacy Highlands Development Project located south of Highway 60 and west of Beaumont Avenue (Highway 79)

Public Comment: Mr. Arthur Kidman, legal counsel for Legacy Highlands indicated he is available to answer questions.

Public Comment: Mr. David Golkar advised of his presence.

General Manager Jaggers explained that staff has prepared an updated Water Supply Assessment (WSA) and noted that it is published on the District's website, as is the presentation material.

Senior Engineer Mark Swanson reminded the Board that this project has been discussed multiple times, and reviewed the project components, boundary and location. The project size requires a WSA per SB 221 and SB 610, to demonstrate the means of total water supply, Swanson explained.

Mr. Swanson briefly reviewed the project history. At the January 23, 2020 meeting of the Board of Directors, staff reviewed the concepts provided in the Supplemental Report to WSA for Legacy Highlands submitted by the developer and significant discussion ensued. The developer has done further investigation and has now provided further information regarding water rights, pumping capabilities, and existing on-site supplies, which has been examined by staff, Swanson said.

The City of Beaumont also provided a letter identifying some conditional use of the existing on-site wells, Swanson explained.

Staff identified some changes since the April 2019 report, including BCVWD water supply updates, Swanson noted. He explained short-term water deals of the SGPWA, the Fiesta Recharge Facility, the recycled water MOU signed in 2019 (but no finalized agreement), MDP Line 16 storm drain, the Delta Conveyance Project (formerly the California Water Fix), and Sites Reservoir project.

Mr. Swanson compared the Regional Summary of SGPWA Imported Water Supply tables of April 2019 and May 2020. He reviewed the BCVWD Water Supply Summary and explained the importance of the imported water supply.

Legacy Highlands' proposals include discussion of stormwater capture and infiltration and recharge to the San Timoteo groundwater basin, and on-site wells for non-potable use until recycled water is available for delivery. Three of the five wells were tested, Swanson explained, and at project build-out the wells could supply the non-potable component. The City of Beaumont also provided a letter to the District indicating support of the interim solution for non-potable irrigation uses, with several conditions to be enforced by the City.

Mr. Swanson detailed substantive changes to the WSA. Uncertainties remain and BCVWD's concerns are still valid, Swanson explained. He advised that over the past few months, two additional WSAs for other projects have appeared and will be going through this process. Both are being written by consultants hired by the developers and will be reviewed by the District, he said.

Swanson explained concerns. If extractions from the on-site wells are excessive, he said, there could be a drop in groundwater level and the mechanism of who owns them and how they are operated has not yet been resolved, and this must be solidified to avoid over-pumping, Swanson stated.

The recycled water agreement between BCVWD and the City of Beaumont has not been completed, so this is still an unsecured source. The Delta Conveyance project is at state level over which the District has no control and is still uncertain, he pointed out. The Sites Reservoir project is being scaled to the right size for the right cost, he noted. Short term exchanges converting to long-term water transfer opportunities are being sought by the SGPWA, but they are not at the point where they can be secured, Swanson explained.

General Manager Jaggers pointed to the discussion of potable and non-potable water supply and said the project proponent knows there are challenges and was looking for ways to increase the certainty of water supply. It is hoped that recycled water will come to fruition but there is no secured agreement, he said.

Project legal counsel and the developer believe they have an overlier water right to use on the property, Jaggers said and a mutual water company was examined. An

interim solution for non-potable water using the overlier water rights or riparian water rights along Cooper's Creek in case recycled water is not available is presented in the WSA, Jaggers said. The District's concern is that BCVWD's system would not be complete and recycled water would no longer be discharging in Cooper's Creek. Jaggers also pointed out the on-site wells have iron and manganese which have adverse activities with clogging pipes and staining concrete.

The developer provided some well analysis and groundwater production information, Jaggers noted, and staff updated the WSA for consideration by the Board. In the April 2019 WSA but not in the May 2020 analysis are the California Water Fix side deals of 3,500 AF that the SGPWA had been considering with other contractors that do not need their capacity. There may be an opportunity to purchase capacity in the Delta Conveyance Facility from entities that do not need to participate, Jaggers noted. The District has taken a fairly conservative approach looking at additional Table A side deals, he said, and the Sites Reservoir is a worst-case scenario at 9,100 AF.

The District anticipates urban water management plans for BCVWD, Banning and Yucaipa may diminish the per dwelling unit demand, Jaggers said. Usage is declining and conservation measures are required by the state, he said, but this is based on information available now, he advised.

Public Comment: Mr. Hisam Baqai, representing the project, offered his credentials and indicated he feels confident that the District said it has plenty of water for the project's potable water needs, and the project has non-potable water available to meet three to four times the needs of the project through its wells.

BCVWD legal counsel James Markman reiterated that until recycled water is available from the City, there is a gap to be filled. Mr. Markman advised that he and Mr. Kidman determined that to get this accomplished, it could be removed as an obligation of the District and asked the District to analyze only the potable water part on an interim basis. For this to be done, the City (lead agency) would have to guarantee the non-potable water supply would be there via conditions of approval. That way, the District could abstain from having to deal with it, as the City would have essentially regulated it, Markman explained. It appears they have done that, he stated, and said from his view, the developer has arrived at a point where this can be presented to the Board for approval.

Director Williams pointed out that the documents regarding the pump test results from Babcock Labs were unreadable. Mr. Baqai stated that the water quality is good enough for all irrigation purposes, but for drinking water purposes it would require treatment for removal of iron and manganese.

Director Ramirez asked about any foreseeable issues with neighboring water agencies, and if this would expand the District's jurisdiction over the aquifer.

General Manager Jaggers explained that historically there was no holistic view of supply and demand and the District's projections are based on looking at historical data. Every agency is concerned about water supply, and there are facilities being built to bring water down, and there are facilities of the state that assure water supplies are secure and available, and there has been a loss of opportunity due to environmental findings in the Delta, he stated.

Other things need to be done across the state to make sure water supply is augmented, like the Delta Conveyance facility and the Sites Reservoir to help get back

to a better level of service, Jaggers continued. The challenge is balancing the need with the opportunity to pay for it when the service area becomes large enough to do so, he said.

With the WSA process and the CEQA process, Jaggers explained, staff believes a reasonable, conservative case has been presented and is defendable. Not in the projections is a potential recession and decline in building, he noted, as houses in the Beaumont area are still selling.

There is not really expansion of authority in the groundwater basin, Jaggers explained. The District has brought before the Board opportunities to manage its small section of the San Timoteo groundwater basin including agreements authorized by the Board in the last few months. This is just one more activity in management, he said, that doesn't allow water to get away from this area.

Director Ramirez pointed to annexations by the City of Beaumont and cautioned that as the District moves to expand its boundaries, it must be wary of potential litigation. He said he hopes for protections as needed, as this is new territory. President Covington concurred.

Public Comment: Mr. David Golkar said the developer has been working with the District for two years and concluded that the District has allowed the City to claim water as part of the WSA and the timing was an issue. Even though the MOU was signed, the contract was not, he said. If interim non-potable water was able to be provided, there is no shortage of water and the WSA can move forward. The developer accepted the conditions and knows there are established overlying rights and riparian rights, Golkar stated.

Mr. Golkar indicated that the conditions in the WSA were acceptable. He said the developer recommends using its own reliable source of water that has been tested and this is a solid WSA that can move forward to be approved at the next Board meeting so the annexation process can be completed. COVID-19 has not impacted the project, he stated. This is a 20-year project, and the first phase needs to move on, he said. The project has all information to satisfy the WSA including technical and legal opinion. The District is not going to be sued, he stated. The City is the lead agency, he said, and the project will be moving forward through the Court. The only thing holding it up was the WSA that was done by the water district, he opined.

The project brings employment, opportunity and millions of dollars in fees to the District and the City, Golkar submitted.

President Covington asked about distribution of non-potable water for the first project phase. Mr. Golkar explained the well is already drilled, the developer will make sure that water quality standards are met, and the first phase is anticipated to have water tanks for non-potable use to city, county and water district standards. Treatment and costs have been discussed with Mr. Jaggers and staff, and the developer is prepared to do this, Golkar stated. He reiterated water rights. If the District wants to operate the wells in the future for the beneficial use of the property, the developer is more than happy to dedicate that to the District, he said. He said he believes there is potential extraction of water without depleting the groundwater supply.

Golkar stated that the developer is willing to fill the supply gap and willing to pay the expenses to supply the water source and it is their legal right to do so. This will

complete the WSA so the District can approve it without any liabilities and with the support of the City, Golkar indicated.

Mr. Baqai added that there is a separate irrigation system dedicated to the project that will use its non-potable water for the time being until the City's recycled water is available going through the same system. In response to President Covington, Mr. Baqai confirmed that the project will be building a reservoir and installing piping for the non-potable system. Mr. Golkar assured that the project's water would not be mixed with the District's recycled water.

Covington noted the WSA was made available at 4 p.m. and will have to be read through more diligently. Mr. Jaggers advised that information was received at noon on Thursday and staff worked through the weekend to prepare the WSA for this meeting.

9. Update: Status of Local Emergency regarding the Impact of the Respiratory Illness Pandemic COVID-19 pursuant to Resolution 2020-07

General Manager Jaggers advised that staff continued to watch information coming from the County of Riverside and pay attention to the situation.

He reviewed current case information for Supervisorial District 5: 141 new cases as of May 24, with 56 total deaths. The infection doubling time is increased from 29.9 to 34.7 days, he noted and shared the COVID-19 trajectory given the County's relaxation of some public health orders. He noted an increase in infections with more person contact, but the doubling time is increasing. Staff is watching the data and utilizing it to determine a move-forward position.

Materials and supplies are being ordered for sanitation needs when the front office opens, he said, and a target date may be July 1. Office staff presence will be reduced as some can work from home but there is a desire from a community service perspective to come up with a solution that allows the front doors to be open and people to come in to interface with staff, Jaggers said. The District wants to be healthy and conservative in moving that forward, he noted. Plans are being developed for employee safety, he added, and field staff has protocols in place.

President Covington said he believes a conservative move forward is warranted and he would like to see everyone back at work as soon as possible, safely, and the front office open to the public.

10. Legislative Update

President Covington acknowledged the Legislative Update. There were no questions.

11. General Manager's Report

General Manager Jaggers reported that 10 cubic feet per second is being delivered to the Noble Creek facility and percolation rates are fine. There are no algae issues.

Jaggers said he attended a conference call with Counsel Markman regarding the Merlin Property. The project engineers advised that it was an exorbitant cost to take service from BCVWD and asked if the District would support de-annexation from the BCVWD service area boundary. Mr. Jaggers communicated that they would have to

dual-plumb their system. He told the developer that a cost analysis to show why BCVWD would abandon its facilities, and to determine the cost associated with the stranded assets compared to taking service from BCVWD would need to be done before bringing the item back to the Board.

In addition, Jaggers reported, Mr. Markman said he would need to understand whether facilities were put in to make it more practical to take service for YVWD in the last few years after BCVWD put in facilities. Mr. Jaggers also pointed out that he had not heard the developer ask YVWD to provide only sewer service. In 2008, the YVWD created a condition requiring a water, recycled water and sewer bundled service, Jaggers explained. The property was annexed into the BCVWD service area before that condition was created. In addition, YVWD had indicated there were no other areas with partial service, but Mr. Jaggers thought there was such activity in the South Mesa Water Company service area. He suggested YVWD ask its Board to relax the bundled service requirement.

The Ad Hoc Communications Committee met on Tuesday, Jaggers reported. Public outreach has been done and there is about $35,000 left in the budget. There is interest in developing a video at a cost of $4,000 to walk customers through the water bill. Jaggers said he thinks the idea has merit and it may be something to move forward on quickly.

12. Topics for Future Meetings:

None added.

13. Announcements

All the following meetings will be held via teleconference unless otherwise indicated. President Covington read the following announcements:

- Personnel Committee Special Meeting: Monday, June 1 at 5:30 p.m.
- Beaumont Basin Watermaster Committee: Wednesday, June 3 at 10 a.m. (*teleconference confirmed*)
- Finance and Audit Committee Meeting: Thursday, June 4, 2020 at 3:00 p.m.
- Regular Board Meeting: Wednesday, June 10, 2020 at 6:00 p.m.
- Engineering Workshop: Thursday, June 25, 2020 at 6:00 p.m.
- Collaborative Agencies Committee Meeting: Wednesday, July 1 at 5:00 p.m.

14. Adjournment

President Covington adjourned the meeting at 9:35 p.m.

ATTEST:

DRAFT UNTIL APPROVED

DRAFT UNTIL APPROVED

_____

Director John Covington, President
to the Board of Directors of the
Beaumont-Cherry Valley Water District

_____

Director Lona Williams, Secretary
to the Board of Directors of the
Beaumont-Cherry Valley Water District

Beaumont-Cherry Valley Water District
Regular Board Meeting
June 10, 2020

Item **4**

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **San Gorgonio Pass Water Agency (SGPWA) and Sites Project Authority Phase 2 Participation Agreement, Associated Costs and Presentation by Jeff Davis, General Manager of SGPWA**

Staff Recommendation

No recommendation. Information only.

Background

The Sites Reservoir Project was anticipated to be a 1.3 to 1.8 million acre-foot storage facility located in northern California and expected to be constructed and online in 2032. At this time the project has undergone some revisions as outlined hereafter to accommodate the current participants as well as adjust (right size) the project, and value engineer the project. This information is presented in the attachment entitled "Draft Sites Project Authority Messaging and Informational Materials".

Participation in the Sites Reservoir Project has been under consideration by the District since July 2016. The Sites Reservoir Project Consists of five phases and is currently proceeding in Phase 2.

The District joined Phase 1 of the project with a request for 4,000 AF of water via the San Gorgonio Pass Water Agency (SGPWA) on May 18, 2017. The SGPWA and the District are currently participating in Phase 2A – 2019 Sites Reservoir Activities in the amount of 14,000 AF (SGPWA at 10,000 AF and the District at 4,000 AF). The BCVWD Board approved the SGPWA and District 2019 Phase 2A Participation Agreement at the March 7, 2019 Board Meeting and the District subsequently made payment to the SGPWA for the District's 4,000 AF share of the Phase 2A participation in the amount of $240,000. The Phase 2 – 2019 Participation Agreement has been extended from its December 31, 2019 expiration due to several uncertainties. To date, District accounting records identify that the District has expended $428,299.48 for Phase 1 and Phase 2A project activities.

At the May 18, 2020 SGPWA Regular Board Meeting, General Manager Jeff Davis gave a presentation to his Board of Directors. A Draft version of the materials were obtained by District Staff from the Sites Reservoir website and this information was presented to the Board of Directors at the Engineering Workshop on May 28, 2010.

Mr. Davis has identified to his Board that at this time the project has been "Right Sized" and certain facilities have been removed from the project to lower costs and allow for a more favorable economic participation by project participants. Specifically, the current analysis identifies that the project cost has been lowered by approximately $2.0 Billion less than the 2017 preferred alternative of approximately $5.0 Billion. The current total project cost in 2019 is $3.0 to $3.3 Billion dollars with an annualized release capability (of the reservoir) in AF/yr of 240,000 AF. Further the range of annual cost during repayment without WIFIA Loans, the

cost per acre foot is estimated to be in the $650/AF to $710/AF range. With WIFIA Loans used, the cost is estimated to be in the $600/AF to $660/AF range.

It appears that the current Sites Reservoir project schedule identifies that the Reservoir project may be constructed as soon as 2029 with full operation by 2030.

Additionally, the next planned steps are as follows:

2020-2021 Environmental Permitting (Submit the Biological Assessment and work with Fish and Wildlife Service to complete the Biological Opinion, finalize the programmed agreement – National Historic Preservation Act Sect. 106, prepare development agreement on approach for River and Harbors Act - Section 408 approval, progress on water right application, and submit required permits in support of geotechnical field activities)

2020-2021 Engineering (Final federal feasibility report, engage the Division of Safety of Dams, collect and analyze focused geotechnical data, develop project wide geotechnical investigation plan, update and refine the project wide cost estimate)

These activities will cost $100/AF which are requested in two installments as follows:

$60/AF due November 1, 2020 (4,000 AF = $240,000 for BCVWD Component)

$40/AF due September 1, 2021 (4,000 AF = $160,000 for BCVWD Component)

Summary

At the June 1, 2020 SGPWA Regular Board meeting, SGPWA Staff presented a Second Amendment to the 2019 Sites Reservoir Project Agreement, also known as the Sites Phase 2 Participation Agreement. Approval of this agreement is required of all participants who wish to continue investing in the project. SGPWA must sign the agreement by September 10, 2020. The cost to participate, as stated above, will be $400,000 for BCVWD, paid in two (2) installments due November 1, 2020 and April 1, 2021. SGPWA has requested a confirmation of continued participation from BCVWD by the end of July 2020.

Further, the SGPWA has identified that they are hopeful that their 10,000 AF participation might be funded with Debt Service tax revenue collected from the SGPWA's tax base (which includes contributions from BCVWD's service area). This opportunity will be based upon future determinations made by the State and probably the court system as this project moves forward.

Also, based upon information presented at the most recent tax setting discussion of the SGPWA, BCVWD would be making approximately a $2.8 million dollar payment for debt service activities related to the Sites Reservoir project, on top of said possible tax based contribution collected from within our District's Sphere of Influence.

Fiscal Impact

Should the District elect to continue to participate with the ongoing sites activities, the cost of $100/AF which are requested in two installments as follows:

$60/AF due November 1, 2020 (4000 AF = $240,000 for BCVWD Component)

$40/AF due April 1, 2021 (4000 AF = $160,000 for BCVWD Component)

Attachment(s)

June 1, 2020 SGPWA Staff Report

Second Amendment to 2019 Reservoir Project Agreement

Staff Report prepared by Daniel K. Jaggers, General Manager

MEMORANDUM

TO: Board of Directors

FROM: General Manager

RE: Participation in Phase 2 of Sites Reservoir

DATE: June 1, 2020

Summary:
At the May 18 Board meeting, Staff made a presentation on Sites Reservoir and shared recent information on the project and recent progress. The purpose of this proposed Board action is to determine if the Board wishes to participate in Phase 2 of the project and, if so, at what level.

Background:
The Agency has been an investor in Sites Reservoir for a number of years. The Board recognized early on that the project had an environmental benefit, would likely get Prop 1 funding, and could provide much-needed long-term dry year yield for the Agency. Thus far, the Agency has invested just over $1,000,000 in the Sites project over several fiscal years as it has moved through the first part of the planning phase. The project recently underwent a value planning process that redefined the project with a smaller footprint that is sufficient to meet the future needs of its investors.

The project is now ready to embark on the last part of the planning phase, and will require additional funds in order to do so. The next phase, currently being called Phase 2 of the project, will begin November 1 and will include completing or nearly completing most of the major permit applications required, a re-circulation of a Draft EIR, and reducing project uncertainties. Much of the current uncertainty revolves around the permit required from California Department of Fish and Wildlife. This permit will largely determine how much water the project will yield for its investors and for fish.

Detailed Report:

Staff reviewed some of the recent project products with the Board at the May 18 Board meeting, including current talking points, an executive prospectus, a 2019 Annual Report, and a Power Point summarizing the status of the project. These documents are not included in this agenda package, but were included in the May 18 package.

Included in this agenda package is a Second Amendment to the 2019 Sites Reservoir Project Agreement, also known as the Sites Phase 2 Participation Agreement, approval of which is required of all participants who wish to continue investing in the project. The General Counsel has reviewed the agreement and has found it legally acceptable. Staff will review it with the Board at the meeting. The agreement largely covers the financial commitments required of participants--$100 for every acre-foot of yield, in two installments payable on November 1, 2020 and April 1, 2021. At the Agency's current participation level of 10,000 AF, this results in a Phase 2 investment of $1,000,000. Should the Beaumont Cherry Valley Water District wish to continue its participation at its current level, it would have to remit $400,000 to the Agency prior to September 1.

Phase 2 will last through 2021. In late 2021, the Board will be presented with information related to continuing the investment through the design and construction phases, which will be far more costly per acre-foot. The Phase 2 commitment under consideration today is only through 2021.

The Agency is a 7% owner in the project at this time. Its 14,000 acre-feet of participation is approximately 7% of the total projected yield of 193,000 acre-feet. The Agency has played a very active role in the Reservoir Committee and has helped shape the project to date. As Vice-Chair of the Reservoir Committee, and as a member of other key work groups, staff has had and continues to have outsized influence on the direction of the project.

Sites Reservoir represents the best opportunity in the state at this time to construct a new surface storage facility. The fact that the State has invested over $800 million in the project through Prop 1 is an indication of its value to the environment—it gives back more to the environment than it takes. The project is one of just two projects

specifically mentioned in the Governor's water resiliency portfolio and has the full support of the Governor and his administration.

The project is largely a dry year storage project, which works well with the Agency's portfolio, which is weak in dry year yield. The Sites project, together with the proposed Delta Conveyance project and investment in an upstream groundwater bank, should enable the Agency to meet the long-term water supply needs of its service area. The estimated cost per acre-foot of Sites water, between $600 and $700 per acre-foot (in 2030), represents a cost-effective dry year yield for the Agency and for most urban water suppliers in the State. The fact that it is a permanent supply means that the Agency will be able to count on Sites water in its UWMP's for the foreseeable future. Without this project, the Agency would be in a position where it would have to go out and find water in dry years and pay spot water prices; also, this would not fit into the Agency's UWMP, as it would not be a long-term solution.

Funding the Sites project beyond Phase 2 will be an issue for the Agency. It has three choices in funding future phases. First, it can fund them through general fund taxes and the water rate. This would result in a large increase in the water rate over time and is not recommended. If the Agency were to fund the project in this manner, it would almost certainly have to reduce its investment greatly. Second, it can fund all or part of the project through a capacity fee, which is a reasonable funding source if the Agency can adopt the fee and if local water agencies support its collection. Third, it could potentially be funded (wholly or partly) through the Agency's tax rate. However, several actions would have to be taken before this could occur. Staff is working with other State Water Contractors to bring these about. This will likely take some time, possibly up to two years. At this point, the plan is to have such decisions made prior to having to commit to the next phase of Sites, which will occur in late 2021. Such actions and decisions could be the subject of future litigation.

Should the Agency wish to participate in Phase 2, and should BCVWD wish to participate, it is likely that an agreement between the two parties would be required in order to clarify several issues. This would not be required prior to the Agency's commitment to Phase 2,

but would be required prior to the Agency receiving funds from BCVWD.

Fiscal Impact:
Funding Phase 2 of Sites will not be as difficult as funding future phases. The Agency has the $1 million required in its reserves for new water. The funds have been included in the draft general fund budget for 2020-21. The Agency has built up its reserves over the years for just such an opportunity.

Recommendation:
Staff believes that the Sites project is an outstanding project for the Agency's future water supply portfolio and that it would play a large role in procuring the long-term water supplies needed for the region. At this time, staff recommends that the Board participate in Phase 2 at the current level of 10,000 acre-feet. If additional capacity becomes available in the next two months, staff may come back to the Board and recommend a slightly higher participation level. This would be after reviewing a draft of the Agency's infrastructure plan, currently being developed by Provost & Pritchard, and after consultation between current staff and the next General Manager. Staff's recommendation is that the Board authorize the General Manager to sign the Second Amendment to the 2019 Reservoir Project Agreement and to complete Exhibit A with the number 10,000 acre-feet (pending a decision by BCVWD to participate).

[redacted]

Sites

May 21, 2020

Dear Reservoir Committee Member,

In April 2020, actions were taken by the Project and Authority governing bodies to adopt the April 13, 2020, Sites Project Value Planning Alternatives Appraisal Report and the Amendment 2 Work Plan which together constitute the scope, schedule and budget for the next stage of project development through December 2021. In taking these actions, funding requirements were set which established the timing and amount due from each participating member that wishes to continue its participation in the Project during the Amendment 2 Work Plan period.

As a participating member in the original Phase 2 Project Agreement dated April 1, 2019 and the First Amendment dated January 1, 2020, the Authority hereby requests your determination of interest in continued participation by returning the attached Second Amendment completed and signed by your authorized agency designee, **no later than September 10, 2020.**

Please note that the Second Amendment requires the following information in addition to the authorized signature on the amendment:

- Indicate the amount of capacity shares in acre feet that you are securing through this phase of the project which, in accordance with the amended Section 6, will represent the capacity share amount to which your agency has first rights of refusal in any future phase of work. These capacity share amounts indicated by each participating member will be used for the final Exhibit A of the Second Amendment.
- Indicate your commitment to provide up to the total funding required for the capacity shares you have designated. The unit cost is the total for the original agreement already paid ($60/AF) and the new commitment for the Amendment2 Work Plan (not to exceed $100/AF).

We have prepared a set of documents for you to use in your agency deliberations of this request. Documents are available for you to download at this link: https://brwncald-my.sharepoint.com/:f:/p/jrobinette/Epm9jMLcDwNOhlMc2840b6EBFm-iqGMQPzc-HU2pCxovcQ?e=Z6687k. Don't hesitate to contact Kevin Spesert, Sites Project Authority, External Affairs Manager, at [redacted] if you need assistance with any of these materials.

The project team is excited to embark on this ambitious Amendment 2 Work Plan. It is critical that you receive timely information for your next decision prior to December 2021 where we will be seeking commitment of the total project local cost share which is one of the conditions for receiving the $816M State WSIP funds.

Please don't hesitate to contact me if there are any questions or you need my support regarding this request.

Jerry Brown
Executive Director, Sites Project Authority

Sincerely,

_____

Jerry Brown, Executive Director
Sites Project Authority

SECOND AMENDMENT TO 2019 RESERVOIR PROJECT AGREEMENT

BY AND AMONG

SITES PROJECT AUTHORITY

and

THE PROJECT AGREEMENT MEMBERS LISTED HEREIN

Dated as of July 1, 2020

THIS SECOND AMENDMENT TO 2019 RESERVOIR PROJECT AGREEMENT (this "Second Amendment"), dated as of July 1, 2020, by and among SITES PROJECT AUTHORITY, a joint powers authority duly organized and existing under the laws of the State of California (the "Authority"), and the project agreement members listed in the Agreement referenced below (the "Project Agreement Members") and amends that certain 2019 Reservoir Project Agreement dated as of April 1, 2019 (the "Original Agreement"), as previously amended by the First Amendment to 2019 Reservoir Project Agreement dated as of January 1, 2020 (the "First Amendment" and, together with the Original Agreement, the "Agreement"), each by and among the Authority and the Project Agreement Members;

WITNESSETH:

WHEREAS, Authority and the Project Agreement Members have determined to approve an Amendment 2 Work Plan and to extend the term of the Agreement to December 31, 2021; and

WHEREAS, under Section 11 of the Agreement, the Agreement may be amended by a writing executed by the Authority and at least 75% of the total weighted vote of the then current Committee members as provided in Subsection 3(g); and

WHEREAS, all acts, conditions and things required by law to exist, to have happened and to have been performed precedent to and in connection with the execution and the entering into of this Second Amendment do exist, have happened and have been performed in regular and due time, form and manner as required by law, and the parties hereto are now duly authorized to execute and enter into this Second Amendment;

NOW, THEREFORE, THIS SECOND AMENDMENT WITNESSETH, the Authority and the Project Agreement Members agree, as follows:

ARTICLE I

DEFINITIONS

Section 1.01. **Definitions.** All capitalized terms not otherwise defined herein shall have the meaning set forth in the Agreement.

ARTICLE II

AMENDMENTS TO AGREEMENT

Section 2.01. **Project Agreement Members**.

(a) Effective September 1, 2020, the Project Agreement Members attached as Exhibit A to the Agreement shall be succeeded in their entirety by the Project Agreement Members attached hereto as Exhibit A.

Section 2.02. **Work Plan**.

(a) Effective September 1, 2020, the 2019 Work Plan attached as Exhibit B to the Agreement shall be supplemented by the Work Plan attached hereto as Exhibit B (the "Amendment 2 Work Plan").

Section 2.03. **Funding**.

The Agreement is hereby amended to remove Section 4(a) in its entirety and replace it with the following:

"(a) Budget. The Committee shall, in cooperation with the Authority's Board, provide and approve both a Fiscal Year operating budget and reestablish a Phase 2 budget target, annually or more frequently as needed. The Project Agreement Members shall contribute their respective pro-rata share of the budgeted sums reflected in the 2019 Work Plan (prior to November 1, 2020) and the Amendment 2 Work Plan (on and after November 1, 2020) in accordance with Section 5 of this Project Agreement; provided, however, that in no event shall the amount paid by a Project Agreement Member exceed $160 per acre-foot (with $60 of such amount being attributable to the 2019 Work Plan and $100 of such amount being attributable to the Amendment 2 Work Plan) without the approval of such Project Agreement Member. The contribution with respect to the pro-rata budgeted sums reflected in the Amendment 2 Work Plan shall be payable by each Project Agreement Member in two installments. The first installment shall be in an amount equal to $60 per acre-foot and shall be payable by no later than November 1, 2020. The second installment shall be in an amount up to $40 per acre-foot and shall be payable by no later than April 1, 2021. The exact amount per acre-foot of the second installment shall be established by the Committee, in cooperation with the Authority's Board, and notice of such amount shall be provided by the Authority to each Project Agreement Member."

Section 2.04. **Future Development of the Sites Reservoir Project**.

The Agreement is hereby amended to remove Section 6(b) in its entirety and replace it with the following:

"(b) Without limiting the foregoing, any Project Agreement Member that elects to continue participating in the development, financing, and construction of the Sites Reservoir Project to the time when the Authority offers contracts for a water supply or other services, will be afforded a first right, equal to that Project Agreement Member's Participation Percentage, to contract for a share of any water supply that is developed, and for storage capacity that may be available from, the Sites Reservoir Project. In any successor phase agreements, Project Agreement Members who are parties to this Project Agreement that submitted a proposal to participate before February 28, 2019, shall be granted rights to contract for a share, in an amount equal to that Project Agreement Member's Participation Percentage as of the effective date of such successor phase agreement, of any water supply that is developed, and for storage capacity that may be available from the Sites Reservoir Project prior to the rights of those becoming parties to this Project Agreement after that date.

If a participating Project Agreement Member as of February 28, 2019 identifies a lesser amount in the Second Amendment than its Original Agreement requested amount, that participating Project Agreement Member's first rights of refusal in the future are to be based on the Second Amendment amounts and not the February 28, 2019 amounts.

Provided, however, that if a Project Agreement Member withdraws from the Project Agreement pursuant to Section 9 of this Agreement but later requests to be reinstated, then to the extent there is unsubscribed participation in the Project as determined by the Committee, the

Committee may vote to readmit said withdrawn Member with a reinstated first right of refusal provided said withdrawing Member provides funding to the Project commensurate with the funding requirements met by all current Project Agreement Members in the current phase of the Project as well as any prior phase, as adjusted for any credits, payments and/or reimbursements made under the Authority's credit reimbursement policy (the "Credit Reimbursement Policy").

Further provided, that if a Project Agreement Member desires to increase its participation after execution of the Second Amendment, then to the extent there is unsubscribed participation in the Project as determined by the Committee, the Committee may vote to approve said increase, or portion thereof, with a first right of refusal attendant thereto, provided said increasing Project Agreement Member provides funding to the Project commensurate with the funding requirements met by all current Project Agreement Members in the current phase of the Project as well as any prior phase, as adjusted for any credits, payments and/or reimbursements made under the Credit Reimbursement Policy.

The Authority and the Project Agreement Members will cooperate on the drafting of provisions in the water supply contract that will allow a Project Agreement Member or other eligible entity that commits to purchase a Sites Reservoir Project water supply to transfer water that the entity may not need from time to time on terms and conditions acceptable to the Project Agreement Member."

Section 2.05. **Term**. The Agreement is hereby amended to remove Section 8(b) in its entirety and replace it with the following:

"(b) The term of this Project Agreement shall continue until December 31, 2021. In the event that this Second Amendment is not approved by Project Agreement Members with the requisite percentage of the total weighted vote as set forth in the Agreement by June 30, 2020, the Agreement shall be revived immediately upon approval by such requisite percentage, without any additional approval of the Project Agreement Members, and this Second Amendment shall become effective."

Section 2.06. **Executive Director**. All references to the "General Manager" in the Agreement shall be changed to "Executive Director."

ARTICLE III

PROJECT AGREEMENT MEMBER PARTICIPATION

Section 3.01. **Project Agreement Participation.** Each Project Agreement Member shall specify its participation in the Sites Reservoir Project by indicating its elected water participation amount in the Sites Reservoir Project and the associated cost in the space provided therefor on the signature page to this Second Amendment. Based upon the respective participation elections of the Project Agreement Members, the Authority shall update Exhibit A pursuant to Section 5 of the Agreement.

ARTICLE IV

MISCELLANEOUS

Section 4.01. **Effectiveness of Agreement**. Except as expressly amended by this Second Amendment, the Agreement is hereby ratified and confirmed and shall continue in full force and effect in accordance with the terms and provisions thereof. The amendments set forth in this Second Amendment shall be incorporated as part of the Agreement upon their effectiveness in accordance with Section 11 of the Agreement.

Section 4.02. **Execution in Several Counterparts**. This Second Amendment may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the Authority and the Project Agreement Members shall preserve undestroyed, shall together constitute but one and the same instrument.

Section 4.03. **Authorization, Ratification and Confirmation of Certain Actions**. The Authority and the Project Agreement Members each hereby authorize, ratify and confirm the extension of the term of the Agreement, as previously extended pursuant to the First Amendment, to June 30, 2020, and the expenditure of funds collected under the Agreement with respect to the 2019 Work Plan on and prior to June 30, 2020.

Section 4.04. **Laws Governing Second Amendment**. The effect and meaning of this Second Amendment and the rights of all parties hereunder shall be governed by, and construed according to, the laws of the State.

IN WITNESS WHEREOF, the Authority and Project Agreement Members hereto, pursuant to resolutions duly and regularly adopted by their respective governing bodies, have caused their names to be affixed by their proper and respective officers on the date shown below:

Dated: _____

SITES PROJECT AUTHORITY

By: _____
Name:
Title:

[PROJECT AGREEMENT MEMBER]

Dated: _____

_____

(Authority & Project Agreement Member)

By: _____
Name:
Title:

PARTICIPATION AMOUNT

[PROJECT AGREEMENT MEMBER] hereby elects to participate in the Sites Reservoir Project in the amount and at the cost identified below.

Participation (Second Amendment Annualized Acre-Foot):

Second Amendment Cost: Not to Exceed $100 per Acre-Foot

EXHIBIT A

PROJECT AGREEMENT MEMBERS

Participant	Participation (Second Amendment Annualized Acre-Foot) Preliminary	Percent
American Canyon, City of		
Antelope Valley-East Kern Water Agency		
Carter Mutual Water Company #		
Coachella Valley Water District		
Colusa County		
Colusa County Water District		
Cortina Water District		
Davis Water District		
Desert Water Agency		
Dunnigan Water District		
Glenn-Colusa Irrigation District		
LaGrande Water District		
Metropolitan Water District of S. CA		
Pacific Resources Mutual Water Company #		
Reclamation District 108		
San Bernardino Valley Municipal Water District		
San Gorgonio Pass Water Agency		
Santa Clara Valley Water District		
Santa Clarita Valley Water Agency		
Westside Water District		
Wheeler Ridge-Maricopa Water Storage District		
Zone 7 Water Agency		
Potential new participants		
Total:		

Participation Percentages exclude State of California and United States Bureau of Reclamation share of the Project.

# Denotes a non-public agency. Refer to California Corporations Code Section 14300 et. seq. with additional requirements provided in both the Public Utilities Code and Water Code.

EXHIBIT B

AMENDMENT 2 WORK PLAN

Beaumont-Cherry Valley Water District
Regular Board Meeting
June 10, 2020

Item **5**

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Resolution 2020- ____: Adopting Regulations Regarding the Payment of the Cost of the Candidate's Statement for the November 2020 Consolidated Election**

Staff Recommendation

Adopt Resolution 2020- __, adopting regulations regarding the payment of the cost of the Candidate's Statement for the November 2020 Consolidated Election.

Background

Section 13307 of the California Elections Code provides that the governing body of any local agency may require each candidate filing a statement to pay in advance to the County their estimated pro rata share of the costs incurred for distribution of the statement. The filing of a candidate's statement is optional.

A local agency may adopt regulations pertaining to such materials to be submitted to the electorate. Specifically, Section 13307 3(e) states "Before the nominating period opens, the local agency for that election shall determine whether a charge shall be levied against that candidate for the candidate's statement sent to each voter." Candidates may file statements with their declaration of candidacy during the filing period of July 13 through August 7, 2020.

The estimated costs of the candidate's statements are:

- County of Riverside: $650
- County of San Bernardino: $250

In prior years, the County of San Bernardino did not require candidates to file a candidate statement, as there were too few registered voters within the District boundaries. Staff anticipates this will again be the case in 2020.

Historically, the District has required the candidates to pay for their own candidate statements. Staff recommends the District continue to do so.

Fiscal Impact

No fiscal impact related to candidates' statements if candidates are required to pay their own fees.

Attachment(s)

1. Resolution 2020-___
2. County of Riverside Registrar of Voters letter

RESOLUTION 2020-___

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE BEAUMONT-CHERRY VALLEY WATER DISTRICT ADOPTING REGULATIONS REGARDING PAYMENT OF THE COST OF THE CANDIDATE'S STATEMENT

WHEREAS, Section 13307 of Elections Code of the State of California provides that the governing body of any local agency may adopt regulations pertaining to materials to be submitted to the electorate prepared by any candidate for a special district election, including costs thereof; and

WHEREAS, any candidate for the office of director may prepare a candidate's statement using the appropriate form provided by the County Registrar of Voters; and

WHEREAS, the Board of Directors of the Beaumont-Cherry Valley Water District has determined that it is in the best interest of the District to require candidates to bear their own costs of the filing of such statements,

NOW, THEREFORE, BE IT RESOLVED by the Beaumont-Cherry Valley Water District Board of Directors and orders as follows:

1. *General Provisions*. Candidate's Statements filed for elective office to the Board of Directors may be made on an appropriate form provided by the County of San Bernardino and/or the County of Riverside and will comply with all regulations set forth by each county and the State of California.
2. *Payment*. The candidate will be responsible for payment of any costs associated with the submission of the candidate's statement as determined by the County Registrar of Voters.

ADOPTED this _____ day of _____, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST:

_____ _____

Director John Covington, President of the Board of Directors of the Beaumont-Cherry Valley Water District

Director Lona Williams, Secretary to the Board of Directors of the Beaumont-Cherry Valley Water District

REBECCA SPENCER
Registrar of Voters

ART TINOCO
Assistant Registrar of Voters

REGISTRAR OF VOTERS
COUNTY OF RIVERSIDE

June 3, 2020

Yolanda H. Rodriguez
Beaumont-Cherry Valley Water District
PO Box 2037
Beaumont, CA 92223

Dear Ms. Rodriguez:

In preparation for your upcoming November 3, 2020 General District Election, we are providing the following information:

- **Candidate Filing Seminar:** Please plan to attend a virtual candidate filing seminar on **June 25, 2020.** In this seminar we will coordinate the procedures involved in conducting the election, discuss new legislation that impacts general district elections and answer any questions.
- **Estimated Candidate Statement Costs:** The estimated candidate statement costs for your jurisdiction are as follows: Division 1 $650 & Division 2 $650.

  Please note that this is only an estimate. Candidates may receive a bill or refund for the difference depending on how many candidates actually file a candidate statement. The electronic distribution of a candidate statement cost is $260.

  You must adopt regulations regarding the payment of the costs of candidate statements.
- **Enclosed forms:**

  Election Calendar – For your review.

  Notice of General District Election Form – Complete and return this form to us as soon as it is approved at your board meeting. This form and a map of your district showing the current boundaries must be filed in our office by **July 1, 2020**.

If you have any questions, please feel free to call Leticia Flores at (951) 486-7212 or Malissa Kouba at (951) 486-7318.

Sincerely,

REBECCA SPENCER
Registrar of Voters

Malissa Kouba
Chief Deputy Registrar of Voters

Enclosures

2720 Gateway Drive | Riverside, CA 92507-0921
Mailing address: 2724 Gateway Drive | Riverside, CA 92507-0918
(951) 486-7200 | TTY (951) 697-8966 | FAX (951) 486-7272
www.voteinfo.net

Beaumont-Cherry Valley Water District
Regular Board Meeting
June 10, 2020

Item **6**

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Approval of the Notices of Election of 2020 for submission to the Registrars of Voters of the County of San Bernardino and the County of Riverside regarding the November 3, 2020 Consolidated Election**

Staff Recommendation

Approve the Notices of Election of 2020 for submission to the Registrars of Voters of the County of San Bernardino and the County of Riverside regarding the November 3, 2020 Consolidated Election and direct the Recording Secretary to do all things necessary to facilitate the election.

Background

The District is required to give notice to the Registrars of Voters of the County of San Bernardino and the County of Riverside of the holding of the 2020 election for two directors' seats, which expire on Thursday, December 3, 2020: BCVWD Divisions 1 and 2. Although Divisions 1 and 2 are located completely within the boundaries of the County of Riverside, the District's directors are elected at large by all voters within the District's boundaries.

The terms for Divisions 1 and 2 will be for a 4-year period beginning at 12:01 p.m. on December 4, 2020 and ending December 6, 2024 (Elections Code 10505(b)). Staff has reviewed the election information provided by the County of Riverside and has prepared the associated notices accordingly. These notices must be returned to the Registrar by July 1, 2020.

Attached is the completed notice for the Riverside County ROV. A similar notice will be prepared for the San Bernardino County ROV when those forms are available. Staff has prepared the required District boundary maps.

Fiscal Impact

The total fiscal impact of the 2020 election is estimated to be $100,000.

The FY 2020 budget includes an approved expenditure of $10,000 for the 2020 election. Because the County of Riverside invoices for elections are received in the following year, an additional $90,000 will be budgeted in 2021 to cover this anticipated expense.

Attachment(s)

1. Notice of Election – County of Riverside

Staff Report prepared by Lynda Kerney, Administrative Assistant

NOTICE TO THE REGISTRAR OF VOTERS
(ELECTIONS CODE §§ 10509, 10522; W.C. § 71451)
GENERAL DISTRICT ELECTION, NOVEMBER 3, 2020

DISTRICT: Beaumont-Cherry Valley Water District **PHONE:** (951) 845-9581

ADDRESS: 560 Magnolia Ave, Beaumont, CA 92223 **FAX:** (951) 845-0159

MAILING ADDRESS: 560 Magnolia Ave., Beaumont, CA **E-MAIL:** info@bcvwd.org

LIST NAMES OF DISTRICT DIRECTORS WHOSE TERMS EXPIRE ON DECEMBER 4, 2020

NAME OF DIRECTOR	DIVISION NUMBER (IF APPLICABLE)
Andy Ramirez	1
Lona Williams	2

The following section applies only if a Director(s) was/were appointed to fill a vacancy in an office, which is not normally scheduled to be voted on this year (Short term).

NAME	DIVISION (If applicable)	DATE APPOINTED	DIRECTOR REPLACED

STATEMENT OF ECONOMIC INTERESTS: The Government Code now requires all candidates to file a Form 700 with the Registrar of Voters by the nomination period deadline. If the candidate has previously filed an initial, assuming office, or annual statement for the same office sought within 60 days before the nomination deadline then the candidate does not have to file the Form 700 again.

CANDIDATE'S STATEMENT: Who is to pay the cost of the printing and handling of statement?
Please check appropriate box. **CANDIDATE** ☒ **DISTRICT** ☐

NOTICE OF ELECTION published by Registrar of Voters in Record Gazette
(Insert name of Local Newspaper)

CANDIDATES may obtain nomination documents from the Registrar of Voters, 2720 Gateway Drive, Riverside, CA 92507, or from the District Secretary located at:

Beaumont-Cherry Valley Water District, 560 Magnolia Ave., Beaumont, CA 92223 (Mon-Th 8 a.m.-5 p.m.)
(Insert Location Name, Address, and Business Hours)

DISTRICT MAP: Attach 34" x 42" map showing district boundaries and divisions, if applicable.

Enclosed Map Contains Boundary/Division Changes YES ☒ **NO** ☐

I certify that the enclosed map of the district boundaries and divisions is true and correct as of this date, and is submitted in compliance with Section 10522 of the California Elections Code for use in the General District Election to be held on November 3, 2020, or that there have been no changes to the boundaries as of the last General District Election.

Dated: 6/11/2020 **Contact Person:** Yolanda Rodriguez

Sign: _____
(District Secretary)

(DISTRICT SEAL)

Beaumont-Cherry Valley Water District
Regular Board Meeting
June 10, 2020

Item **7**

STAFF REPORT

TO: Board of Directors

FROM: Yolanda Rodriguez, Director of Finance and Administrative Services

SUBJECT: **2019 External Audit and Comprehensive Annual Financial Report**

Staff Recommendation

Recommend to the full Board the independent auditors' unmodified (clean) opinion on the Beaumont-Cherry Valley Water District's (District) financial statements for the year ended December 31, 2019, included in the December 31, 2019 Comprehensive Annual Financial Report (CAFR), and the attached Report to the Audit Committee.

Background

The CAFR is used to communicate the District's financial condition and activity in a transparent and organized manner. The report presents historical and comparative information that can be useful to District staff, elected officials, and external users; such as debt rating agencies, businesses, other public agencies and the District's customers. The most recent CAFR and several prior year reports are available on the District's website.

Financial statements are prepared by the District and audited by independent auditors who are contracted through a competitive procurement process. The District's current independent auditor is Rogers, Anderson, Malody & Scott, LLP (RAMS). Auditors follow audit industry standards established by the American Institute of Certified Public Accountants (AICPA). These standards require auditors to provide an opinion on specific areas of the District's financial statements based on observations, inquiries, testing of transactions and analysis.

A clean, unmodified opinion communicates to users that the financial statements are fairly presented, in all material respects, and that the information used in the report is reliable. Other minor issues that would not warrant a change in the auditor's opinion are presented in the form of a Management Letter, with comments and recommendations to management, intending to improve internal control or result in other operating efficiencies.

The District's Annual Financial Report includes the following major sections and information:

Introductory Section

- Letter of Transmittal – prepared by management and used to communicate information on areas that may have an impact on the District's finances now and in the future. This includes economic factors as well as budget and management factors.

Financial Section

- Independent Auditors' Report – report on the reliability and fair presentation of the CAFR.

- Management's Discussion and Analysis (MD&A) – an overview of the year's operations and how the District performed financially.

- Basic Financial Statements

    - Statement of Net Position – presents information on all of the District's assets and deferred outflows of resources, and liabilities and deferred inflows of resources, with the difference reported as net position.

    - Statement of Revenues, Expenses and Changes in Net Position – measures the success of the District's operations over the past reporting period(s) and can be used to determine if the District has successfully recovered all of its costs through its rates and other charges.

    - The Statement of Cash Flows – presents information relating to the District's cash receipts and cash disbursements during the year. This information should help readers assess the District's ability to generate future net cash flows, its ability to meet its obligations as they come due, and its need for external financing.

    - Notes to the Basic Financial Statements – presents additional information that is necessary to understand the data provided in the basic financial statements.

- Required Supplementary Information

    - Pension information – presents the District's proportionate share of the Net Pension Liability of the Cost-Sharing Multiple Employer Benefit Plan, and contributions to the Plan as of the end of the year.

    - Other Post-Employment Benefits information – presents three (3) years of OPEB funding information.

Statistical Section

Presents information on financial trends, revenue capacity, debt capacity, demographic and economic conditions, and comparative operational data, for ten years.

Fiscal Impact

There is no immediate financial impact or budget action necessary as a result of the recommended action.

Attachment(s)

Report to the Audit Committee

Summarized Financial Information for the Year Ended December 31, 2019

DRAFT Comprehensive Annual Financial Report for the year ended December 31, 2019

Report prepared by Yolanda Rodriguez, Director of Finance and Administrative Services

Beaumont-Cherry Valley Water District

For the year ended December 31, 2019

Report to the Audit Committee

TABLE OF CONTENTS

Executive Summary

To assist you in your responsibilities as a member of the Audit and Finance Committee, this section summarizes the most significant conclusions reached and issues addressed during our audit of Beaumont-Cherry Valley Water District for the year ended December 31, 2019.

Significant Conclusions and Issues

We have completed our audit and will issue our report, dated June 10, 2020, once approved by this Committee. Based on our work performed:

- The scope of our audit was in accordance with what we communicated in our first Statement on Auditing Standards No. 114 *Communication Letter,* as well as our engagement letter, both of which were dated January 23, 2020.
- We have given an unmodified opinion on the December 31, 2019 financial statements.
- There are no conditions that we have identified which we consider to be material weaknesses or significant deficiencies in internal controls.
- In the context of our responsibility to render an opinion on the overall fairness of the presentation of the financial statements, audit areas designated by us as having greater than normal risk (pension and OPEB amounts), as well as any financial accounting or reporting issues, have been addressed and resolved to our satisfaction.
- We received the full cooperation of management and staff throughout the District and were kept abreast as to developments and plans affecting our audit scope.

The following report includes additional information for the benefit of the Audit Committee.

June 10, 2020

To the Board of Directors
Beaumont-Cherry Valley Water District
Beaumont, California

We have audited the financial statements of Beaumont-Cherry Valley Water District (the District) as of and for the year ended December 31, 2019, and have issued our report thereon dated June 10, 2020. Professional standards require that we advise you of the following matters relating to our audit.

Our Responsibility in Relation to the Financial Statement Audit

As communicated in our engagement letter dated January 23, 2020, our responsibility, as described by professional standards, is to form and express opinions about whether the financial statements that have been prepared by management with your oversight are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America. Our audit of the financial statements does not relieve you or management of your respective responsibilities.

Our responsibility, as prescribed by professional standards, is to plan and perform our audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control over financial reporting. Accordingly, as part of our audit, we considered the internal control of District solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control

We are also responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures for the purpose of identifying other matters to communicate to you.

Planned Scope and Timing of the Audit

We conducted our audit consistent with the planned scope and timing we previously communicated to you.

Compliance with All Ethics Requirements Regarding Independence

The engagement team, others in our firm and our firm, have complied with all relevant ethical requirements regarding independence.

Qualitative Aspects of the City's Significant Accounting Practices

Significant Accounting Policies

Management has the responsibility to select and use appropriate accounting policies. A summary of the significant accounting policies adopted by the District is included in Note 1 to the financial statements. There have been no initial selection of accounting policies and no changes in significant accounting policies or their application during 2019. No matters have come to our attention that would require us, under professional standards, to inform you about (1) the methods used to account for significant unusual transactions and (2) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

Significant Accounting Estimates

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's current judgments. Those judgments are normally based on knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ markedly from management's current judgments.

The most sensitive accounting estimates affecting the financial statements are:

> Management's estimate of capital asset depreciation is based on historical estimates of each capitalized item's useful life. We evaluated the key factors and assumptions used to develop the estimated useful lives and determined that it is reasonable in relation to the basic financial statements taken as a whole and in relation to the applicable opinion units.
>
> The estimate of the net pension liability and related deferred inflows and outflows of resources is based on actuarial reports provided by independent actuaries. We evaluated the key factors and assumptions used to develop the estimate in determining that it is reasonable in relation to the financial statements taken as a whole.
>
> Management's estimate of the liability for other post-employment benefits and related deferred inflows and outflows or resources are based on actuarial reports provided by independent actuaries. We evaluated the key factors and assumptions used to develop the estimate and determined that it is reasonable in relation to the basic financial statements taken as a whole.

Financial Statement Disclosures

Certain financial statement disclosures involve significant judgment and are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the City's financial statements relate to:

The disclosure of accumulated depreciation in Note 5 to the financial statements is based on estimated useful lives which could differ from actual useful lives of each capitalized item.

The disclosure of the net pension liability and related pension information in Note 12 is based on actuarial assumptions which will differ from actual amounts in future periods.

The disclosure of the other post-employment benefits (OPEB) and related OPEB information in Note 10 to the financial statements identifies the annual OPEB cost and the funded status of the actuarial accrued liability. The information disclosed is based on actuarial assumptions which could differ from actual costs.

The disclosure related to subsequent events in Note 16 relating to the COVID-19 pandemic is significant to the financial statement users.

Significant Difficulties Encountered during the Audit

We encountered no significant difficulties in dealing with management relating to the performance of the audit.

Uncorrected and Corrected Misstatements

For purposes of this communication, professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that we believe are trivial, and communicate them to the appropriate level of management. Further, professional standards require us to also communicate the effect of uncorrected misstatements related to prior periods on the relevant classes of transactions, account balances or disclosures, and the financial statements as a whole and each applicable opinion unit. None of the misstatements identified by us as a result of our audit procedures and corrected by management were material, either individually or in the aggregate, to the financial statements taken as a whole.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a matter, whether or not resolved to our satisfaction, concerning a financial accounting, reporting, or auditing matter, which could be significant to the District's financial statements or the auditor's report. No such disagreements arose during the course of the audit.

Representations Requested from Management

We have requested certain written representations from management, which are included in the attached letter dated June 10, 2020.

Management's Consultations with Other Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters. Management informed us that, and to our knowledge, there were no consultations with other accountants regarding auditing and accounting matters.

Other Significant Matters, Findings, or Issues

In the normal course of our professional association with the District, we generally discuss a variety of matters, including the application of accounting principles and auditing standards, operating and regulatory conditions affecting the entity, and operational plans and strategies that may affect the risks of material misstatement. None of the matters discussed resulted in a condition to our retention as the District's auditors.

Other Information in Documents Containing Audited Financial Statements

Pursuant to professional standards, our responsibility as auditors for other information in documents containing the District's audited financial statements does not extend beyond the financial information identified in the audit report, and we are not required to perform any procedures to corroborate such other information. However, in accordance with such standards, we have:

> We applied certain limited procedures to the required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.
>
> We were engaged to report on the supplementary information, which accompany the financial statements but are not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

Our responsibility also includes communicating to you any information which we believe is a material misstatement of fact. Nothing came to our attention that caused us to believe that such information, or its manner of presentation, is materially inconsistent with the information, or manner of its presentation, appearing in the financial statements.

This report is intended solely for the use of the information and use of the Board of Directors, and management of the District and is not intended to be and should not be used by anyone other than these specified parties.

San Bernardino, California
June 10, 2020

June 10, 2020

Rogers, Anderson, Malody & Scott, LLP
735 E. Carnegie Drive, Suite 100
San Bernardino, CA 92408

This representation letter is provided in connection with your audit of the financial statements of Beaumont-Cherry Valley Water District (the District) as of December 31, 2019 and for the year then ended, and the related notes to the financial statements, for the purpose of expressing an opinion on whether the basic financial statements present fairly, in all material respects, the financial position, results of operations, and cash flows, where applicable, of the various opinion units of the District in accordance with accounting principles generally accepted for governments in the United States of America (U.S. GAAP).

Certain representations in this letter are described as being limited to matters that are material. Items are considered material, regardless of size, if they involve an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it probable that the judgment of a reasonable person relying on the information would be changed or influenced by the omission or misstatement.

We confirm that, to the best of our knowledge and belief, having made such inquiries as we considered necessary for the purpose of appropriately informing ourselves as of June 10, 2020:

Financial Statements

1) We have fulfilled our responsibilities, as set out in the terms of the audit engagement letter dated January 23, 2020, for the preparation and fair presentation of the financial statements of the various opinion units referred to above in accordance with U.S. GAAP.
2) We acknowledge our responsibility for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.
3) We acknowledge our responsibility for the design, implementation, and maintenance of internal control to prevent and detect fraud.
4) We acknowledge our responsibility for compliance with the laws, regulations, and provisions of contracts and grant agreements.
5) We have reviewed, approved, and taken responsibility for the financial statements and related notes.
6) We have a process to track the status of audit findings and recommendations.

7) We have identified and communicated to you all previous audits, attestation engagements, and other studies related to the audit objectives and whether related recommendations have been implemented.
8) Significant assumptions used by us in making accounting estimates, including those measured at fair value, are reasonable.
9) Related party relationships and transactions have been appropriately accounted for and disclosed in accordance with the requirements of U.S. GAAP.
10) All events subsequent to the date of the financial statements and for which U.S. GAAP requires adjustment or disclosure have been adjusted or disclosed.
11) The effects of all known actual or possible litigation and claims have been accounted for and disclosed in accordance with U.S. GAAP.
12) All component units, as well as joint ventures with an equity interest, are included and other joint ventures and related organizations are properly disclosed.
13) All funds and activities are properly classified.
14) All funds that meet the quantitative criteria in GASB Statement No. 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments*, GASB Statement No. 37, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments: Omnibus* as amended, and GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*, for presentation as major are identified and presented as such and all other funds that are presented as major are considered important to financial statement users.
15) Our policy regarding whether to first apply restricted or unrestricted resources when an expense is incurred for purposes for which both restricted and unrestricted net position/fund balance are available is appropriately disclosed and net position/fund balance is properly recognized under the policy.
16) Deposit and investment risks have been properly and fully disclosed.
17) Capital assets, including infrastructure assets, are properly capitalized, reported, and if applicable, depreciated.
18) All required supplementary information is measured and presented within the prescribed guidelines.
19) With regard to investments and other instruments reported at fair value:
    a) The underlying assumptions are reasonable and they appropriately reflect management’s intent and ability to carry out its stated courses of action.
    b) The measurement methods and related assumptions used in determining fair value are appropriate in the circumstances and have been consistently applied.
    c) The disclosures related to fair values are complete, adequate, and in accordance with U.S. GAAP.
    d) There are no subsequent events that require adjustments to the fair value measurements and disclosures included in the financial statements.

Information Provided

20) We have provided you with:
    a) Access to all information, of which we are aware that is relevant to the preparation and fair presentation of the financial statements of the various opinion units referred to above, such as records, documentation, meeting minutes, and other matters;
    b) Additional information that you have requested from us for the purpose of the audit; and
    c) Unrestricted access to persons within the entity from whom you determined it necessary to obtain audit evidence.
21) All transactions have been recorded in the accounting records and are reflected in the financial statements.

22) We have disclosed to you the results of our assessment of the risk that the financial statements may be materially misstated as a result of fraud.
23) We have no knowledge of any fraud or suspected fraud that affects the entity and involves:
    a) Management;
    b) Employees who have significant roles in internal control; or
    c) Others where the fraud could have a material effect on the financial statements.
24) We have no knowledge of any allegations of fraud, or suspected fraud, affecting the entity's financial statements communicated by employees, former employees, vendors, regulators, or others.
25) We are not aware of any pending or threatened litigation, claims, and assessments whose effects should be considered when preparing the financial statements.
26) We have disclosed to you the identity of the entity's related parties and all the related party relationships and transactions of which we are aware.
27) There have been no communications from regulatory agencies concerning noncompliance with or deficiencies in accounting, internal control, or financial reporting practices.
28) The District has no plans or intentions that may materially affect the carrying value or classification of assets and liabilities.
29) We have disclosed to you all guarantees, whether written or oral, under which the District is contingently liable.
30) We have disclosed to you all nonexchange financial guarantees, under which we are obligated and have declared liabilities and disclosed properly in accordance with GASB Statement No. 70, *Accounting and Financial Reporting for Nonexchange Financial Guarantees*, for those guarantees where it is more likely than not that the entity will make a payment on any guarantee.
31) We have disclosed to you all significant estimates and material concentrations known to management that are required to be disclosed in accordance with GASB Statement No. 62 (GASB-62), *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*. Significant estimates are estimates at the balance sheet date that could change materially within the next year. Concentrations refer to volumes of business, revenues, available sources of supply, or markets or geographic areas for which events could occur that would significantly disrupt normal finances within the next year.
32) We have identified and disclosed to you the laws, regulations, and provisions of contracts and grant agreements that could have a direct and material effect on financial statement amounts, including legal and contractual provisions for reporting specific activities in separate funds.
33) There are no:
    a) Violations or possible violations of laws or regulations, or provisions of contracts or grant agreements whose effects should be considered for disclosure in the financial statements or as a basis for recording a loss contingency, including applicable budget laws and regulations.
    b) Unasserted claims or assessments that our lawyer has advised are probable of assertion and must be disclosed in accordance with GASB-62.
    c) Other liabilities or gain or loss contingencies that are required to be accrued or disclosed by GASB-62
    d) Continuing disclosure consent decree agreements or filings with the Securities and Exchange Commission and we have filed updates on a timely basis in accordance with the agreements (Rule 240, 15c2-12).
34) The District has satisfactory title to all owned assets, and there are no liens or encumbrances on such assets nor has any asset or future revenue been pledged as collateral, except as disclosed to you.

35) We have complied with all aspects of grant agreements and other contractual agreements that would have a material effect on the financial statements in the event of noncompliance.

Required Supplementary Information

With respect to the required supplementary information (RSI) accompanying the financial statements:

36) We acknowledge our responsibility for the presentation of the RSI in accordance with U.S. GAAP.
37) We believe the RSI, including its form and content, is measured and fairly presented in accordance with U.S. GAAP.
38) The methods of measurement or presentation have not changed from those used in the prior period.

Daniel K. Jaggers, General Manager

Yolanda Rodriguez, Director of Finance and Administrative Services

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Independent Auditor's Report

To the Board of Directors
Beaumont-Cherry Valley Water District
Beaumont, California

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Beaumont-Cherry Valley Water District (the District) as of and for the year ended December 31, 2019, and the related notes to the financial statements, which collectively comprise the District's basic financial statements, and have issued our report thereon dated June 10, 2020.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the District's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

San Bernardino, California
June 10, 2020

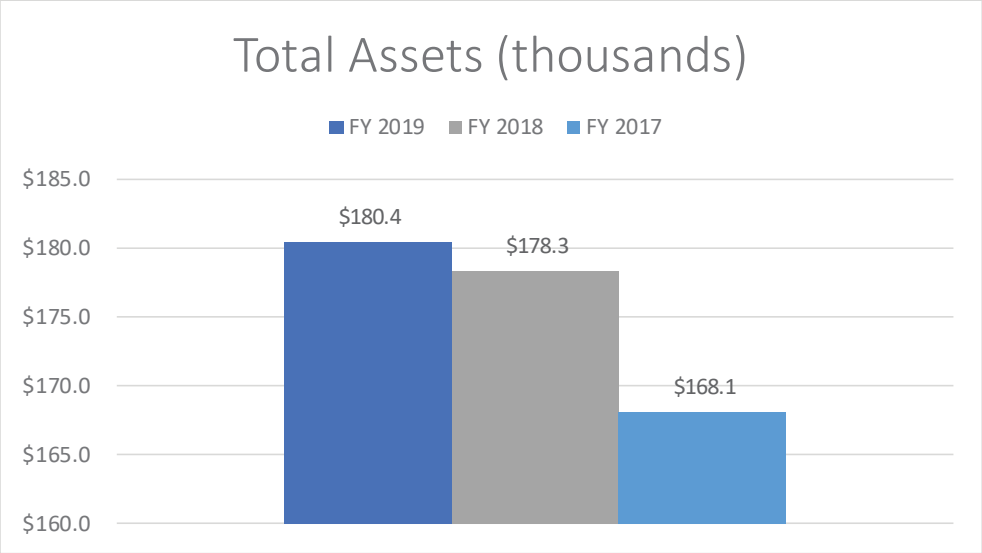
Summarized Financial Information for the Year Ended December 31, 2019

DECEMBER 31, 2019

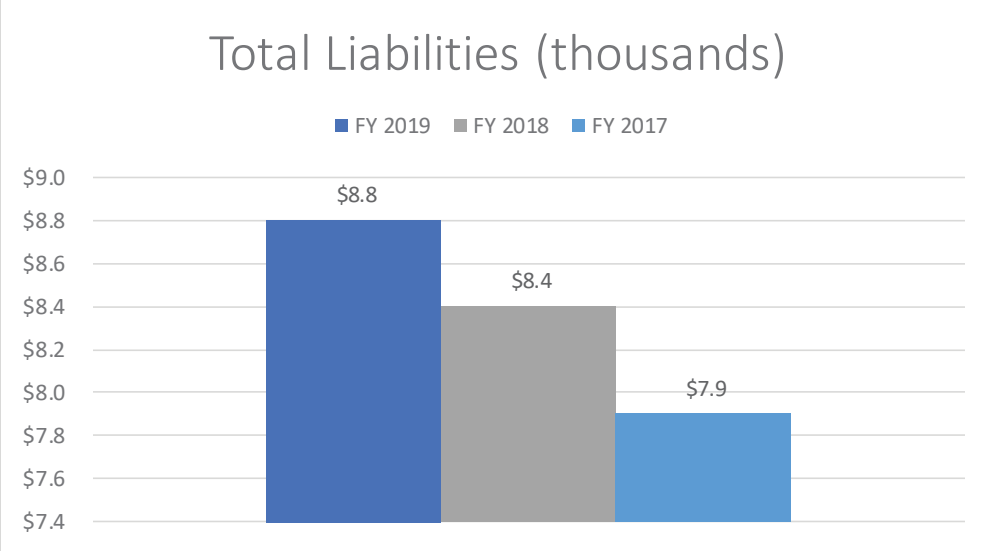
Beaumont-Cherry Valley Water District

Assets and Liabilities

Total assets as of December 31, 2019 were $180.4M, reflecting an increase of $2.1M from 2018 (CAFR page 24 of 72).

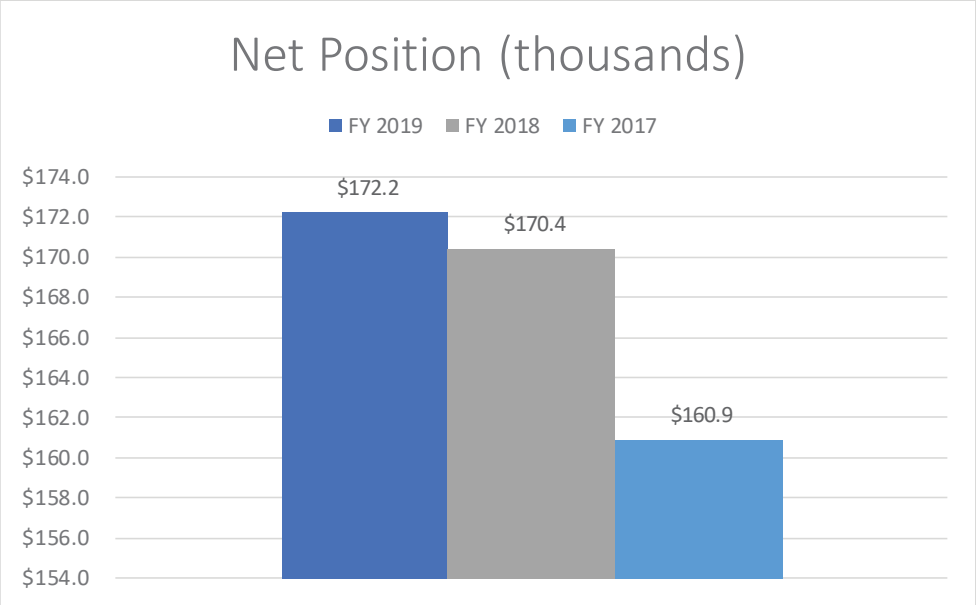


Total liabilities as of December 31, 2019 were $8.8M, reflecting an increase of $.4M from 2018 (CAFR page 24 of 72).

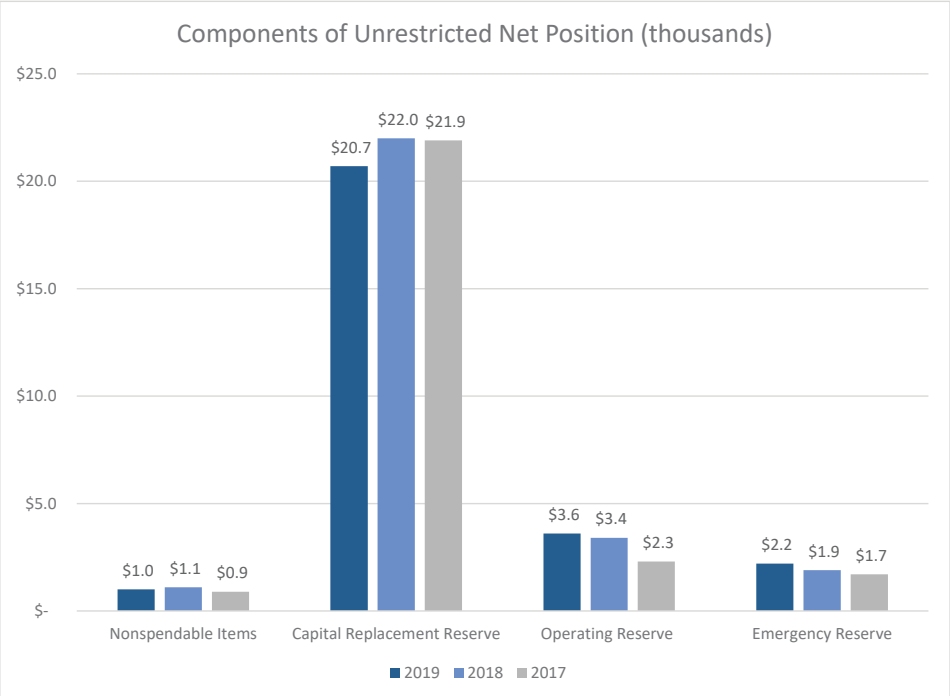


Net Position

Total net position as of December 31, 2019 was $172.2M, reflecting an increase of $1.8M from 2018 (CAFR page 24 of 72).



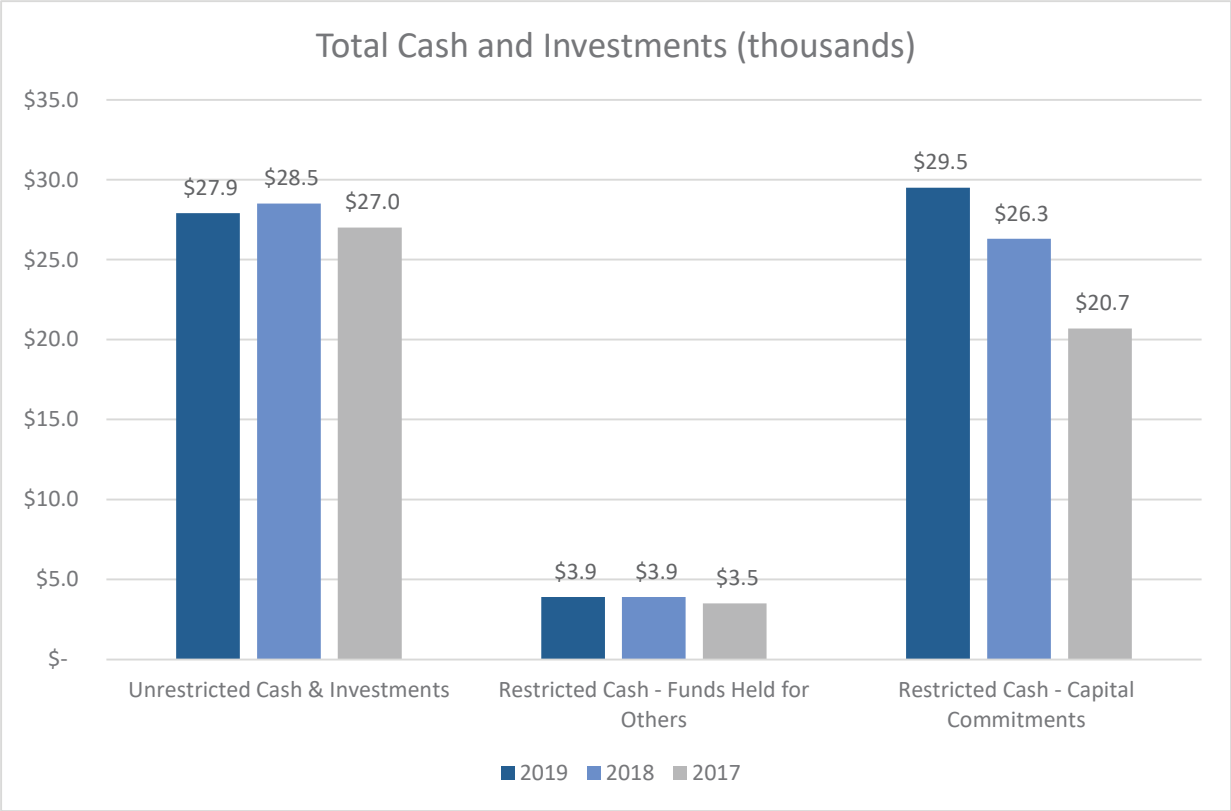
Unrestricted net position of $27.5M includes (CAFR pages 24 and 45 of 72):



- Nonspendable items include inventories, prepaid items, and the non-current portion of notes receivable.
- Capital Replacement Reserve are “pay as you go” reserves available for necessary capital purchases.
- Operating Reserve is equal to 3 months of the next year’s budgeted operating expenses less depreciation.
- Emergency Reserve is equal to 15% of the next year’s budgeted operating expenses less depreciation.

Total Cash and Investments

Total Cash and Investments of $61.3M are sufficient to fund the District's Restricted and Unrestricted requirements (CAFR pages 24 and 32 of 72).



- Unrestricted Cash & Investments are for use in operations or capital replacement and improvement projects.
- Restricted Cash – Funds Held for others consist of items such as customer and developer deposits that are either returned or consumed by the District once certain requirements are met.
- Restricted Cash – Capital Commitments are capacity charges (facilities fees) restricted to use for facilities needed to support new growth.

Significant Liabilities

Net OPEB Liability – Retiree Health

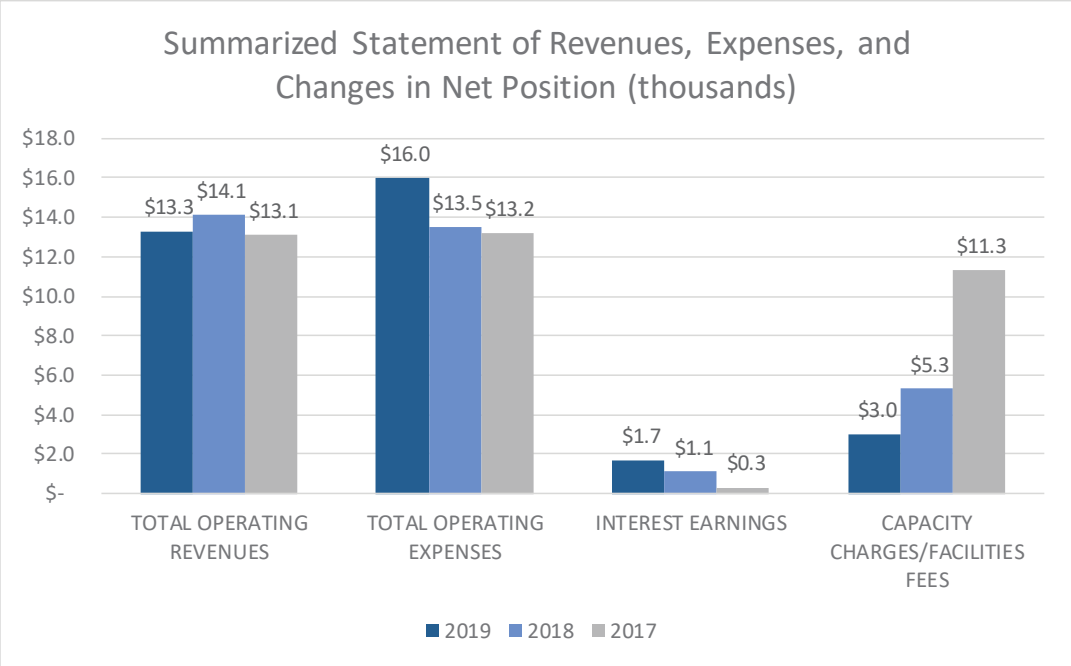
The District's net other post-employment benefits (OPEB) liability as of December 31, 2019 was $1.6M, an increase of $220K over 2018. The District pays a portion of the cost of health insurance (including prescription drug benefits) as post-employment benefits to retired employees who satisfy the eligibility rules as required by CalPERS Health Program enrollment. Refer to the Statement of Net Position and Note 10 of the CAFR, on pages 24 and 40 (of 72 of the CAFR) for more information.

Net Pension Liability – Retirement/Pension

The District's net pension liability as of December 31, 2019 was $2.3M, an increase of $249K over 2018. The District's net pension liability is a proportionate share of the CalPERS Public Agency Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Plan). Refer to the Statement of Net Position and Note 12 of the CAFR, on pages 24 and 46 (of 72 of the CAFR) for more information.

Statement of Revenues, Expenses, and Changes in Net Position

(CAFR Page 25 of 72)



Total operating revenues of $13.3M decreased by $.8M over 2018, primarily because:

- Metered water sales and the corresponding water importation charges and water pumping pass-through charges totaling $8.8M decreased by $.8M mainly due to a 7.2 percent decrease in water consumption (CAFR Page 25 of 72).
- Development and installation charges of $.9M decreased by $.1M mainly due to a slight downturn in development-driven activities (CAFR Page 25 of 72).
- Water service charges of $3.4M increased by $.2M mainly due to the installation of 592 meters during 2019 (CAFR Page 25 of 72).

Total operating expenses of $16.0M increased by $2.4M over 2018, primarily because:

- Purchases of imported water totaling $5.2M increased by $1.4M as the District participated in a regional effort to buy imported water from Northern California to recharge the local groundwater basin. In addition, the District paid for the costs to increase the San Gorgonio Pass Water Agency's State Water Project facility's hydraulic capacity, which enabled the District to import more water in a calendar year than ever before (CAFR Page 25 of 72).
- Salaries and employee benefits expenses of $4.2M increased by $.4M as the District implemented the second of a three-year phasing in of wage increases in accordance with a salary and compensation study performed in late 2017 (CAFR Page 25 of 72).

GFOA Award

The District received the Government Finance Officers Association (GFOA) “Excellence Award in Government Finance” for its 2018 Comprehensive Annual Financial Report (CAFR), making it the second year in a row. The District’s 2019 CAFR will be submitted in anticipation of receiving the award for a third straight year.

Beaumont-Cherry Valley Water District
Comprehensive Annual Financial Report

Fiscal Year Ended December 31, 2019

Beaumont, California

A Century of Service, Quality, and Stewardship 1919 – 2019

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Comprehensive Annual Financial Report
For the Year Ended December 31, 2019

Beaumont-Cherry Valley Water District
Beaumont, California

Board of Directors as of June XX , 2020
John Covington, President
David Hoffman, Vice-President
Daniel Slawson, Treasurer
Lona Williams, Secretary
Andy Ramirez, Director

Daniel K. Jaggers, P.E., General Manager

Prepared by the Finance and Administrative Services Department
Yolanda Rodriguez
Director of Finance & Administrative Services

The goal of the District is to provide for a healthy, safe and enriched quality of life throughout the District boundaries through watershed stewardship and thorough management of water resources in a practical, cost-effective, and environmentally sensitive manner for current and future generations.

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Beaumont-Cherry Valley Water District

Comprehensive Annual Financial Report
For the Year Ended December 31, 2019

Table of Contents

Introductory

June XX, 2020

Honorable Board of Directors
Beaumont-Cherry Valley Water District

It is our pleasure to submit the Comprehensive Annual Financial Report (CAFR) for the Beaumont-Cherry Valley Water District (District) for the year ended December 31, 2019, following guidelines set forth by the Government Accounting Standards Board (GASB) and Generally Accepted Accounting Principles (GAAP).

District staff prepared this financial report. District management is ultimately responsible for both the accuracy of the data and the completeness and fairness of presentation, including all disclosures in this financial report. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of operations of the District. All disclosures necessary to enable the reader to gain an understanding of the District's financial activities have been included. Internal controls are an important part of any financial reporting framework, and management of the District has established a comprehensive framework of internal controls to provide a reasonable basis for asserting that the financial statements are fairly presented. Because the cost of an internal control should not exceed the benefits to be derived, the objective is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material misstatements.

GAAP requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). The letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The District's MD&A can be found immediately following the report of the independent auditors.

The District's financial statements have been audited by Rogers, Anderson, Malody and Scott, LLP, a firm of licensed certified public accountants. The independent auditors concluded, based upon the audit, that there was a reasonable basis for rendering an unmodified (clean) opinion that the District's financial statements for the year ended December 31, 2019, are fairly presented, in all material respects, in conformity with GAAP. The independent auditors' report is presented as the first component of the financial section of this report.

Profile of the District

The goal of the District is to provide for a healthy, safe and enriched quality of life throughout the District boundaries through watershed stewardship and thorough management of water resources in a practical, cost-effective, and environmentally sensitive manner for current and future generations.

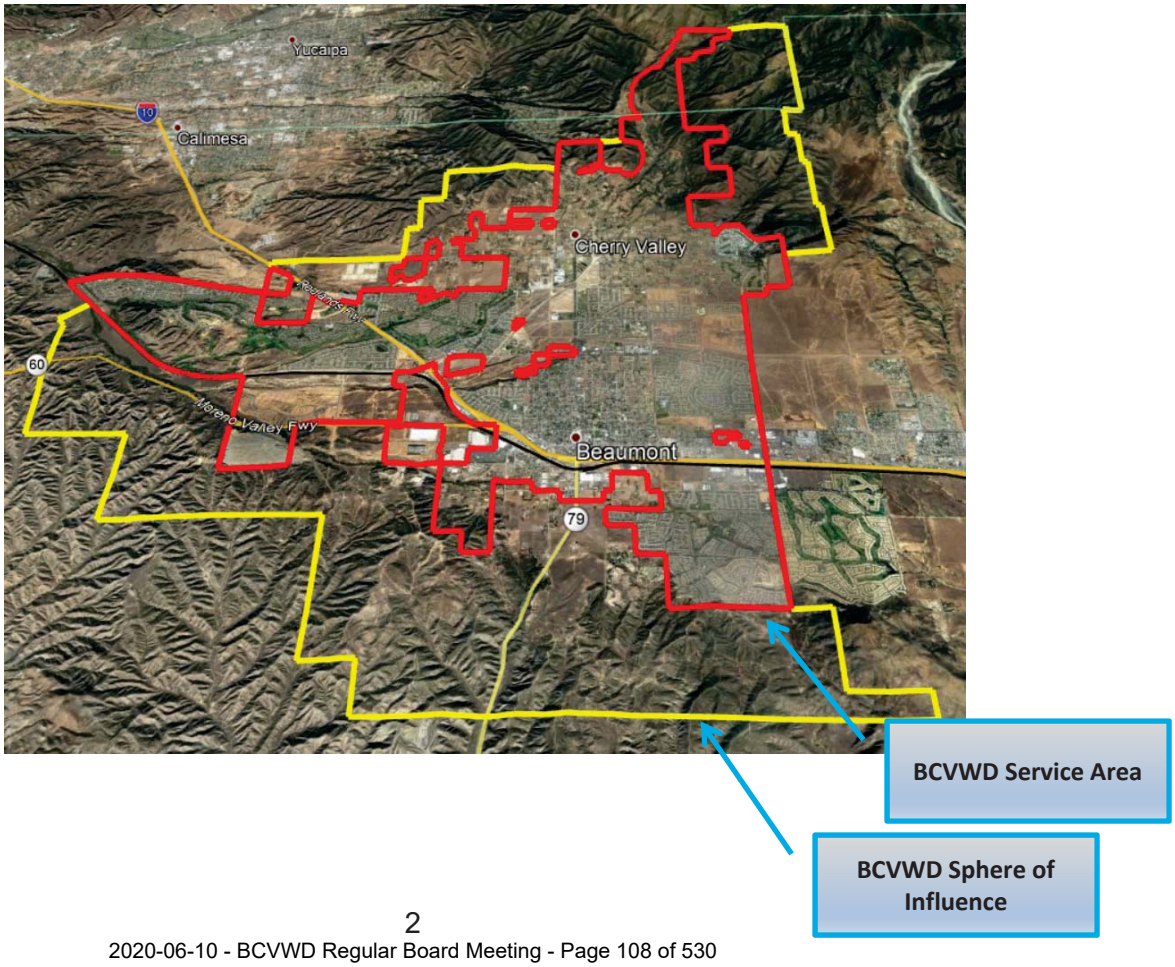
History

The origin of the District dates back to the latter part of the 1800's when the Southern California Investment Company was the owner of the land that currently is the City of Beaumont and the community of Cherry Valley. The Company intended to build a system of water lines for the purpose of developing subdivisions throughout the Beaumont and Cherry Valley areas. The area started to develop in the late 1880s and in 1912 the community of Beaumont incorporated. The District was formed in 1919 as the Beaumont Irrigation District under California Irrigation District law, Water Code Section #20500 et seq. The name was changed to the Beaumont-Cherry Valley Water District in 1973. The District owns 575 acres of watershed land in Edgar Canyon in San Bernardino County and 949 acres of watershed in Riverside County. Edgar Canyon is named after Dr. William F. Edgar, a military doctor who was in charge of a number of hospitals during the Civil War. Dr. Edgar appreciated the beauty of the land and purchased it in 1859, he planted fruits and vineyards and later established a winery.

Service Area

The District's present service area covers approximately 28 square miles, virtually all of which is in Riverside County, and includes the City of Beaumont, the community of Cherry Valley, and some small areas of Calimesa.

Figure 1
BCVWD Service Area



Water Services, Supply, and Reliability
The District has both a potable and non-potable water distribution system. At the end of 2019, the District had a total of 19,349 connections, an increase of 592 connections over 2018, 93.05 percent of which are for single family residences.

The District has a total of 24 wells and 15 reservoirs ranging in size from 0.5 million gallons (MG) to 5 MG. Total storage is approximately 23 MG.

Today, the District continues to develop programs and policies that ensure a supply of water for the area's growing population and include recharge of local area storm water and imported water from the State Water Project.

Of significance to its programs and goals, the Board authorized the purchase of 78.8 acres of land, and eventually constructed the Noble Creek Recharge Facility for the recharge of imported water from the State Water Project. In the future, storm runoff and possibly highly treated recycled water may be recharged at the facility. These water sources would receive additional natural treatment as they recharge the groundwater much like rain and runoff, which are naturally treated as they seep into the ground to become groundwater.

The District's water supplied for the year ended December 31, 2019 of 12,458 acre-feet (AF) was comprised 9,246 AF of imported water (74.2%), 1,308 AF of groundwater (10.5%), and a 1,905 AF allocation of unused overlying water rights (15.3%) as determined by the Beaumont Basin Watermaster in accordance with Beaumont Basin Stipulated Judgment. Groundwater is pumped from Edgar Canyon, while the allocation of unused overlying water rights is derived from a calculated distribution of the volume of allowable water not produced by Overlying Parties to Appropriators.

Governance
The District's Board of Directors is comprised of five members elected by the citizens within their geographical area. Each Director serves a four year staggered term and must be a resident of the division they represent. The District operates under a Board-Manager form of government. The General Manager is appointed by the Board, and administers the daily affairs of the District and carries out policies of the Board of Directors. The District employs a full-time and temporary staff of 41 under the direction of the General Manager.

Local Economy
The District is located within Riverside County, the fourth largest county in the State. Riverside County and San Bernardino County comprise the Inland Empire which is one of the fastest growing metropolitan areas in the nation. The Inland Empire covers approximately 27,000 square miles with a population of about 4.6 million. Riverside County has a population of 2.4 million people and of this, the District serves approximately 59,200 between the City of Beaumont and community of Cherry Valley. According to the State Department of Finance, Beaumont was the fastest growing California city of those with populations exceeding 30,000 in 2019.

The District's customer base currently is comprised of mostly residential and commercial customers. Large consumers remain consistent year to year with the City of Beaumont, Beaumont Unified School District, K Hovnanian's Four Seasons, Highland Springs Country Club, and Perricone Juices rounding out the top five users.

According to US Census Bureau projections, median household incomes within the City of Beaumont of $78,111 are 22 percent higher than for the County of Riverside at $63,948, and ten percent higher than the State-wide median household income of $71,948. Housing prices in the District's service area continue to remain steady. The median value of a single family owner-occupied housing unit in the vicinity of the City of Beaumont is $352,122, up 2.3 percent over the past year.

Financial Management

The keys to the District's successful financial management are the District's Capital Improvement Plan, annual budget process, and financial policies.

Capital Improvement Plan
The Capital Improvement Plan (CIP) is a ten-year fiscal planning tool used to identify the future capital needs of the District, as well as identify the timing and method of financing those capital needs. The CIP is designed to show how the District will build, maintain, and manage the assets needed to produce, treat, and distribute water while keeping costs as low as possible. This planning tool provides the framework for District investments over a ten-year horizon, while providing the flexibility to adapt to changing infrastructure needs and opportunities as they arise.

Annual Budget Process
The General Manager is responsible for keeping expenses within budget allocations and may adopt budget policies necessary to carry out that responsibility. No expenditure of funds shall be authorized unless sufficient funds have been appropriated by the Board or reallocated by the General Manager.

The General Manager may exercise discretion in the administration of the Budget to respond to changed circumstances, by requesting budget amendments between line items within their department. Budget transfers between departments must be approved by both department directors. Any single line item (account) modification in excess of $50,000, shall require approval by the Board. Any addition to the budget shall also require approval by the Board. All budget transfers are documented and tracked in the District's computerized financial system and reported to the Finance and Audit committee at their regular meetings on the first Thursday of each month.

The Capital Improvement Budget (CIB) is presented as a supplement to the annual operating budget and includes only the next five years of the most-recently adopted CIP. Any additions or changes to the CIP are documented in the CIB.

Financial Policies
The District's financial policies include financial management practices that are used for operational and strategic decision making and allow the Board of Directors and stakeholders to monitor how the District is managing its financial responsibilities.

Investment Policy - This policy is intended to provide a guideline for the prudent investment of surplus cash, reserves, trust funds, and restricted monies and to outline a policy for maximizing the efficiency of the District's cash management system in compliance with Section 53646 of the Government Code of California. The policy applies to all financial assets of the District as accounted for in the audited financial statements. The primary objectives of the District's investment activities, in order of priority, are safety of principal through the mitigation of both credit and market risk, maintenance of the liquidity necessary to meet cash flow needs and, lastly, return on investment.

Reserve Policy - This policy incorporates and identifies restricted reserves as Future Capital Commitments, Funds Held for Others, and Debt Service. Board designated unrestricted reserves are identified in the policy as Emergency, Capital Replacement, and Operations.

The purpose of the Emergency Reserve is to ensure continued service to the District's customers and service areas for events which are impossible to anticipate and budget for. The Emergency Reserve is adjusted annually to a minimum of 15 percent of the annual operating budget.

The Capital Replacement Reserve is earmarked for the purchase of operating equipment, physical plant, infrastructure, water conservation projects and other capital items. They are designed to stabilize funding for capital by accumulating "pay as you go" reserves available for necessary capital purchases. The Capital Replacement Reserve is funded through any sources available for capital improvements, including operating revenues.

The Reserve for Operations is to be used for working capital purposes and to ensure continuity of customer services regardless of cash flow. This Reserve is adjusted annually to a minimum amount sufficient to pay for three months of budgeted operating expenses, not exceeding a maximum of six months of budgeted operating expenses. Adequate reserves, along with sound financial policies, provide financial flexibility in the event of unanticipated expenses or revenue fluctuations.

Purchasing Policy - This policy is designed to establish policies and procedures that provide for:

- competitive bidding in the open market
- a cost effective purchasing process that incorporates high ethical standards
- obtaining quality materials, supplies, equipment, and non-professional services at the lowest ultimate cost and in a timely manner
- a process to purchase, using effective fiscal controls that assure adherence to budgeted expenses and for obtaining appropriate levels of approval as established therein

Short- and Long-Term Issues Impacting the District's Financial Position

California's water supply continues to be a concern due to past droughts and projected population increases. This concern has increased interest in recycled water for groundwater replenishment purposes. The District has expanded and will continue to expand its conservation efforts and the availability of local sources such as canyon water. Such expansions will increase diversity of the District's water supply and water source reliability. The District will also continue to work with local and regional water suppliers in planning and constructing other water delivery systems throughout its service area.

Considerations at the state level include the various policy decisions presided over by the CalPERS Board that can have direct bearing on the District's financial obligations to the pension fund. There are three key policy areas that affect the District and by causing contribution amounts to change and the measurements of unfunded accrued liability to fluctuate. Those policy areas include: asset allocation across investment portfolios, which, in turn affects the second area; discount rate (or rate of return on investments of the fund); and the amortization policy, which governs the payment of unfunded accrued liability. In December 2016, the Board adopted a policy to lower the discount rate (or rate of return) from 7.5% to 7% with a three-year phase in beginning with fiscal year 2016-17. As of fiscal year 2019, the lowered discount rate of 7% was fully implemented. Implications for the District include higher pension costs and considerations of establishing a stabilization fund in order to build budget resiliency against future policy changes by the CalPERS Board. More specific information is presented in Note 12 of the Notes to the Financial Statements.

Drinking water utilities across the U.S. have experienced, and are anticipated to continue to experience, revenue and cost impacts associated with the COVID-19 pandemic. Along with many other water utilities, the District has changed its shutoff and late bill payment fee policies for delinquent accounts, mandated by the State of California, in reaction to the pandemic. It is anticipated that the District could experience some revenue losses from non-residential customers due to declines in water consumption. However, these potential losses could be offset by an increase in water demands and revenues as indoor water use increases due to higher homeowner occupancy during normal working hours because of Federal and State stay-at-home-orders.

The District may also experience some revenue losses from non-payment of customer bills due to the COVID-19 pandemic. Due to the water metering frequency employed by the District, there is a lag in observable changes in water consumption associated with the crisis, and thus it is too early to estimate the impacts precisely.

Major Initiatives

Major goals for the District continue to be the conservation and efficient use of urban water supplies, providing the means to meet increasing demands for water, and providing an accurate accounting of all business operations including District infrastructure. Planning for and developing facilities to provide water for future growth continues to be a District priority.

Following are highlights of the District's completed and on-going initiatives identified in the 2018 Comprehensive Annual Financial Report (CAFR) as well as highlights of major projects that have been or are planned to be initiated in 2019 to meet the District's goals.

Completed

- Worked with SGPWA to complete construction activities related to the upsizing of the East Branch Extension - Noble Creek Turnout, from 20 cubic feet per second to 34 cubic feet per second.

- Finalized and Executed Memorandum of Understanding with the City of Beaumont for supply of Recycled Water to the District.

- Completed a seven-month Domestic and Recycled Water Rates and Fees Study with the assistance of an independent financial consulting firm. The last water rate study was conducted in 2010, and this was the first time the District took an in-depth look at the rate structure for recycled water.

- Hosted State legislators to strengthen relationships between the District and its state representatives and to continue to build the District's brand in the region and across the State

To Be Initiated:

- Moving forward, the District intends to complete capital improvement design activities and commence construction for Noble Reservoir No. 2 and Pipeline, 2018 Replacement Pipeline Project, and Well 1A and 2A Well Drilling Project, Well 25 block wall, Noble Creek Recharge Facility Phase I security fencing, Noble Booster equipment purchase, and 4A Booster equipment replacement.

- Commence Capital Improvement Projects including design of Wells 30 and 31, Well 1A and 2A Pumping Plants, Wells 30 and 31 Pumping Plant, Raw Water Filter and Pump Station, City of Beaumont WWTP Recycled Water Booster Station and connection piping, 2750 PZ to 2850 PZ Booster Station, 2020 Replacement Pipelines, and miscellaneous projects

- Apply for and gain certification for the delivery of Recycled Water through the Department of Water Resources (DWR).

- Apply for grant funding to secure additional generator power and provide redundancy during emergencies and Public Service Power Shutdowns from Southern California Edison.

Ongoing:

- Continued development of: water supply opportunities with regional partners; storm water capture programs; recycled water supply and recovery programs; and San Timoteo groundwater basin management activities.

- The District will continue with the development of the non-potable water system by constructing additional facilities necessary to complete the conversion of the landscape irrigation users as well as satisfy additional demand. The District's focus in 2020 and beyond will be on design and construction of Recycled Water Booster Station on a City of Beaumont provided site located adjacent to the City of Beaumont Wastewater Treatment Plant, pressure regulator projects, 2520 PZ to 2370 PZ and 2600 PZ to 2520 PZ, as well as the Raw Water Filter System Project at the 2800 PZ Tank.

- The Grand Avenue Storm Drain Project, which is being developed in conjunction with Riverside County Flood Control and Water Conservation District and partially funded utilizing grant funding from Proposition 84, will capture and recharge storm water at NCRF Phase II. The Project continued in 2019 and likely will be on-going through 2021.

- The GIS System Mapping Project is on-going with the majority of the system completely mapped and accessible to District personnel

- Conservation Program and a Community Outreach Program - The District's intent is to work with surrounding agencies and develop a joint program with regional partners and community stakeholders.

- The revised Capacity Fee (Facility Fee) Study was initiated in 2016 and is expected to be completed by the end of 2020.

- AMR/AMI Deployment – the AMR/AMI Deployment project was designed to provide a streamlined and efficient way for staff to read water meters electronically. Staff planned deployment of radios over the next few years for the AMR/AMI Deployment project is defined by the $1.5 million grant the District was awarded in early 2020 related to this activity.

- In 2018 the District initiated the IT workstation upgrade program that is ongoing and is based on a rotating three-year replacement plan.

Awards and Acknowledgements

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the District for its comprehensive annual financial report (CAFR) for the fiscal year ended December 31, 2018. This was the second consecutive year that the District has achieved this prestigious award. In order to be awarded a Certificate of Achievement, the District had to publish an easily readable and efficiently organized CAFR that satisfied both generally accepted accounting principles and applicable program requirements.

A Certificate of Achievement for Excellence in Financial Reporting is valid for a period of one year only. However, we believe that our current CAFR continues to meet the Certificate of Achievement for Excellence in Financial Reporting Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

Preparation of this report was accomplished by the combined efforts of District staff. We appreciate the dedicated efforts and professionalism that these staff members contribute to the District. We would also like to thank the members of the Board of Directors for their continued support in the planning and implementation of the Beaumont-Cherry Valley Water District's financial and operating policies.

Daniel Jaggers
General Manager

Yolanda Rodriguez
Director of Finance and Administrative Services

Beaumont-Cherry Valley Water District

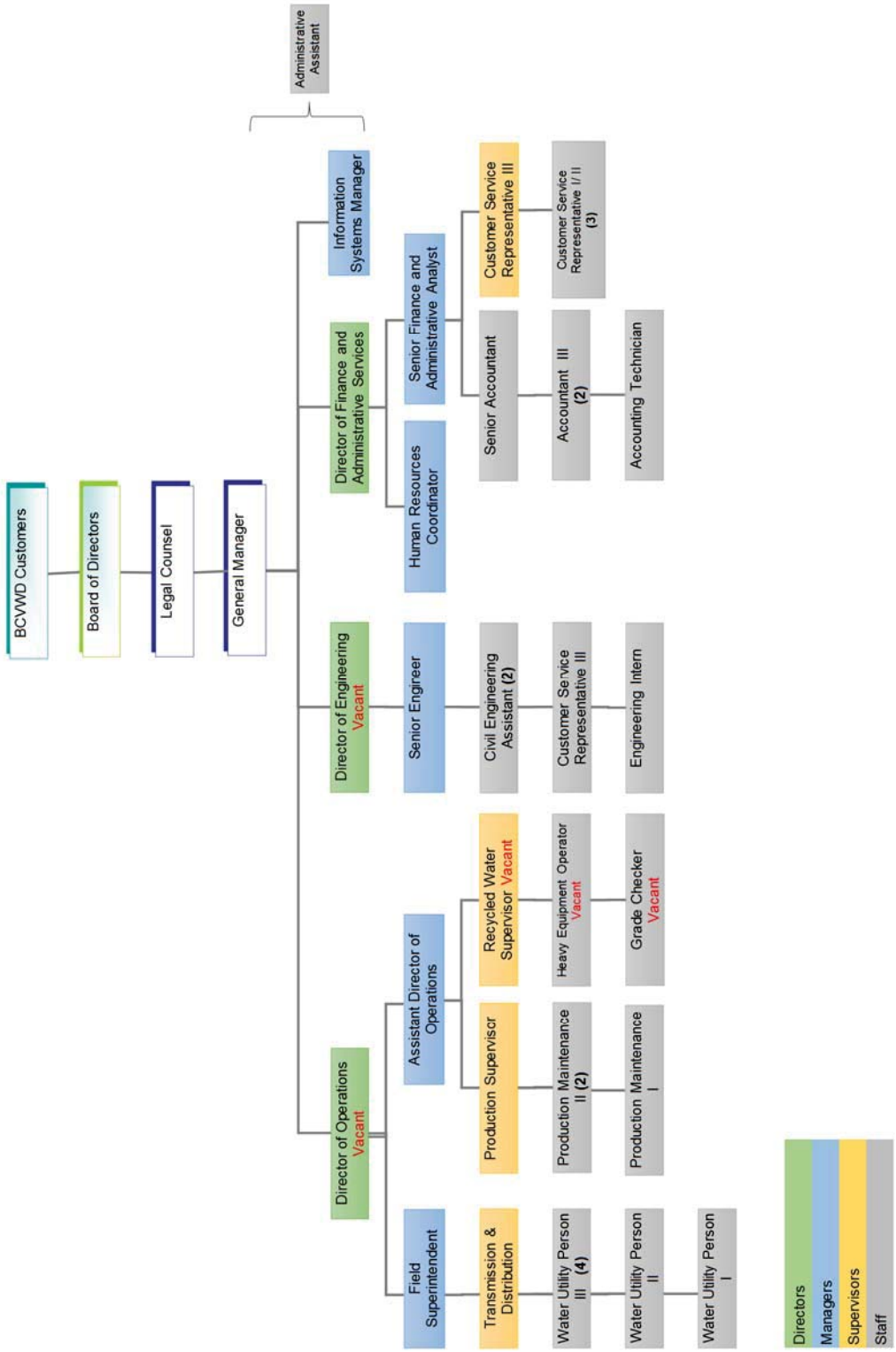
560 Magnolia Avenue Beaumont CA 92223
951.845-9581 www.bcvwd.org

Board of Directors as of December 31, 2019

Director	Title	Division	Current Term
John Covington	President	4	12/2018 – 12/2022
Daniel Slawson	Vice-President	3	12/2018 – 12/2022
Andy Ramirez	Secretary	1	12/2016 – 12/2020
David Hoffman	Treasurer	5	12/2018 – 12/2022
Lona Williams	Director	2	12/2018 – 12/2020

Daniel K. Jaggers, P.E.
General Manager

Beaumont-Cherry Valley Water District
Organizational Chart



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Beaumont Cherry Valley Water District

California

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

December 31, 2018

Christopher P. Morrill

Executive Director/CEO

Financial

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Independent Auditor's Report

Independent Auditor's Report

Board of Directors
Beaumont-Cherry Valley Water District
Beaumont, California

Report on the Financial Statements

We have audited the accompanying financial statements of the Beaumont-Cherry Valley Water District (the District), as of and for the year ended December 31, 2019, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States and the State Controller's *Minimum Audit Requirements for California Special Districts*. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the District's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the District as of December 31, 2019, and the changes in financial position and, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America, as well as the accounting systems prescribed by the State Controller's Office and State Regulations governing Special Districts.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the District's basic financial statements. The introductory section and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The introductory section and statistical section has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

Prior Year Comparative Information

We have previously audited the District's 2018 financial statements, and we expressed an unmodified opinion in our report dated June 27, 2019. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2018, is consistent, in all material respects, with the audited financial statements which it has been derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June xx, 2020 on our consideration of the District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.

San Bernardino California
June xx, 2020

Management's Discussion and Analysis

As management of the Beaumont-Cherry Valley Water District (the "District" or "BCVWD"), we offer readers of the District's financial statements this narrative overview and analysis of the financial activities of the District for the fiscal years ended December 31, 2019 and 2018. We encourage readers to consider the information presented here in conjunction with additional information that we have furnished in our transmittal letter which can be found on pages 1-8.

FINANCIAL HIGHLIGHTS

Based on the financial information for the year ended December 31, 2019, the following financial highlights are noted for the District:

- The assets and deferred outflows of resources of the District exceeded its liabilities and deferred inflows of resources at year end by $172,166,721 (net position). Of this amount, $27,472,086 represents unrestricted net position, which may be used to meet the District's ongoing obligations to customers and creditors and maintain designated reserves approved by the District's Board of Directors.
- The District's total net position increased $1,801,503 from the prior fiscal year. The increase is mainly a result of capacity charges to developers in the amount of $2,989,469, to ensure that funds are set aside to provide for the expansion of the domestic and non-potable water system.
- In addition to the capacity charges, the increase in net position was due to investment earnings of $1,668,981, and together these helped offset a loss from operations of $2,643,548.

Based on the financial information for the year ended December 31, 2018, the following financial highlights are noted for the District:

- The assets and deferred outflows of resources of the District exceeded its liabilities and deferred inflows of resources at year end by $170,365,218 (net position). Of this amount, $28,366,923 represents unrestricted net position, which may be used to meet the District's ongoing obligations to customers and creditors and maintain designated reserves approved by the District's Board of Directors.
- The District's total net position increased $9,449,835 from the prior fiscal year. The increase is mainly a result of capital contributions from developer activities of $7,706,050, which is comprised of $2,423,839 in donated capital assets and $5,282,211 in capacity charges to developers to ensure that funds are set aside to provide for the expansion of the domestic and non-potable water system.

OVERVIEW OF THE BASIC FINANCIAL STATEMENTS

Beaumont-Cherry Valley Water District is a special-purpose government engaged in activities that are supported exclusively by user charges. As such, the District's financial statements are presented in the format prescribed for proprietary funds by the Governmental Accounting Standards Board.

The following financial statements for the year ended December 31, 2019 (2018 for comparative purposes only) consist of a series of interrelated statements designed to provide the reader with relevant, understandable data about the District's financial condition and operating results. They are the Statement of Net Position, the Statement of Revenues, Expenses, and Changes in Net Position, and the Statement of Cash Flows.

The *Statement of Net Position* presents financial information on all of the District's assets and deferred outflows of resources, and liabilities and deferred inflows of resources, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Beaumont-Cherry Valley Water District is improving or deteriorating.

The *Statement of Revenues, Expenses and Changes in Net Position* presents information illustrating how net position changed during the fiscal year. This *Statement* measures the success of the District's operations over the past reporting periods and can be used to determine if the District has successfully recovered all of its costs through its rates and other charges. More succinctly, this *Statement* can be used to evaluate the District's financial condition over the last two years. It can also be used as a basis for determining credit worthiness.

The *Statement of Cash Flows* presents information relating to the District's cash receipts and cash disbursements during the year. When used with related disclosures and information in the other financial statements, the information in this *Statement* should help readers assess the District's ability to generate future net cash flows, its ability to meet its obligations as they come due, and its need for external financing. It also provides insight into the reasons for differences between operating income and associated cash receipts and payments; and the effects of the District's financial position of its cash and non-cash investing for capital and related transactions during the years. This *Statement* answers questions such as sources of cash, uses of cash, and the change in the cash balance during the reporting periods.

Notes to the Basic Financial Statements. The notes provide additional information that is necessary to understand the data provided in the basic financial statements. The notes to the financial statements are included immediately following the *Basic Financial Statements* and can be found on pages 28-55 of this report.

In addition to the *Basic Financial Statements* and accompanying notes, this report also presents *Required Supplementary Information,* which includes the schedule of the District's proportionate share of the net pension liability, schedule of pension contributions, and the schedule of funding progress on the other post-employment benefit (OPEB) plan. *Required Supplementary Information* can be found on pages 56-58 of this report.

FINANCIAL ANALYSIS OF THE DISTRICT

The following condensed schedules contain a summary of financial information that was taken from the *Basic Financial Statements,* to assist readers in assessing the District's overall financial position and operating results.

Condensed Statements of Net Position

	2019	2018	2017
Assets			
Current assets	$ 65,234,010	$ 62,512,946	$ 54,612,083
Non-current assets	529,104	595,426	659,696
Capital assets	114,636,883	115,174,259	112,850,063
Total assets	180,399,997	178,282,631	168,121,842
Deferred outflows of resources	729,769	677,933	844,250
Liabilities			
Current liabilities	4,813,944	4,865,655	4,379,864
Non-current liabilities	3,979,186	3,511,702	3,478,403
Total liabilities	8,793,130	8,377,357	7,858,267
Deferred inflows of resources	169,915	217,989	192,442
Net position			
Net investment in capital assets	114,636,883	115,174,259	112,850,063
Restricted	30,057,752	26,824,036	21,287,702
Unrestricted	27,472,086	28,366,923	26,777,618
Total net position	$ 172,166,721	$ 170,365,218	$ 160,915,383

Assets

2019 compared to 2018 Total assets were $180,393,997, reflecting an increase of $2,117,366 primarily due to the following:

- Current assets, comprised of restricted and unrestricted assets, increased by $2,721,064. This change is primarily reflective of the $396,106 provided by operating activities, capital contributions from developers, net of capital contributed to another government, of $2,469,818, and $1,510,069 of interest received, less $1,856,995 for acquisition and construction of capital assets.

FINANCIAL ANALYSIS OF THE DISTRICT (Continued)

Assets (Continued)

2018 compared to 2017 Total assets were $178,282,631, reflecting an increase of $10,160,789 primarily due to the following:

- Current assets, comprised of restricted and unrestricted assets, increased by $7,900,863. This change is primarily reflective of net cash from operations of $3,558,493, and capital contributions of $5,327,811 less $2,476,161 for acquisition and construction of capital assets.

Liabilities

2019 compared to 2018 Total liabilities were $8,793,130, reflecting an increase of $415,773 primarily due to the following:

- The District's net pension liability increased by $248,900, a year-end calculation made in accordance with Governmental Accounting Standards Board (GASB) statement number 68 Accounting and Financial Reporting for Pensions.
- The District's net other post-employment benefits (OPEB) liability increase by $219,779, a year-end calculation made in accordance with Governmental Accounting Standards Board (GASB) statement number 75, Accounting and Financial Reporting for Post-employment Benefits Other Than Pensions.

2018 compared to 2017 Total liabilities were $8,337,357, reflecting an increase of $519,090 primarily due to the following:

- Unearned revenues, which are generally payments made in advance of the District providing services such as meter installations, plan checks, and inspections, increased by $330,994.
- The District's net other post-employment benefits (OPEB) liability increased by $79,847, a year-end calculation made in accordance with Governmental Accounting Standards Board (GASB) statement number 75, Accounting and Financial Reporting for Post-employment Benefits Other Than Pensions.
- The District's net pension liability increased by $46,779, a year-end calculation made in accordance with Governmental Accounting Standards Board (GASB) statement number 68 Accounting and Financial Reporting for Pensions.

FINANCIAL ANALYSIS OF THE DISTRICT (Continued)

Net Position

2019 compared to 2018 Total net position was $172,166,721, reflecting an increase of $1,801,503.

- The largest portion of the District's net position, which is its investment in capital assets of $114,636,883 (66.6%) had a decrease of $537,376 from the prior year. Investment in capital assets reflects its investment in land, transmission and distribution systems, reservoirs, tanks, pumps, buildings and structures, and equipment and vehicles, net of depreciation. The District uses its capital assets to provide water service to the residents of Beaumont, Cherry Valley and some portions of Calimesa. As such, these assets are not available for future spending.
- The restricted portion of net position was $30,057,752 (17.5%), an increase of $3,233,716 from the prior year. Restricted net position is subject to external restrictions on its use, such as for future infrastructure construction.
- The remaining unrestricted net position of $27,472,086 (15.9%), a decrease of $894,837, is non-spendable ($996,240) and designated ($26,475,846), according to Board policy, to meet the ongoing needs of the District. See Note 11 on page 45 for more details on the District's net position.

2018 compared to 2017 Total net position was $170,365,218, reflecting an increase of $9,449,835.

The details of both increases were discussed in the Financial Highlights section on page 15.

Condensed Statements of Revenues, Expenses and Changes in Net Position

	2019	2018	2017
Operating revenues	$ 13,351,751	$ 14,160,641	$ 13,177,509
Non-operating revenues	1,711,954	1,167,115	461,712
Total revenues	15,063,705	15,327,756	13,639,221
Operating expenses	15,995,299	13,583,971	13,235,100
Non-operating expenses	-	-	37,031
Total expenses	15,995,299	13,583,971	13,272,131
Income (loss) before contributions	(931,594)	1,743,785	367,090
Capital contributions	2,733,097	7,706,050	11,270,398
Change in net position	$ 1,801,503	$ 9,449,835	$ 11,637,488

FINANCIAL ANALYSIS OF THE DISTRICT (Continued)

Operating Revenues and Expenses

2019 compared to 2018

Total operating revenues of $13,351,751 decreased by $808,890 primarily due to the following:

- Metered water sales and the corresponding water importation charges and water pumping pass-through charges totaling $8,775,157 decreased by $763,242, mainly due to a 7.2 percent decrease in water consumption.
- Development and installation charges of $851,465 decreased by $128,164, mainly due to a slight downturn in development-driven activities.
- Water service charges of $3,403,608 increased by $164,965, mainly due to the installation of 592 meters during 2019.

Total operating expenses of $15,995,299 increased by $2,411,328 primarily due to the following:

- Purchases of imported water totaling $5,200,241 increased by $1,357,884 as the District participated in a regional effort to buy imported water from Northern California to recharge the local groundwater basin. In addition, the District paid for the costs to increase the San Gorgonio Pass Water Agency's State Water Project facility's hydraulic capacity, which enabled the District to import more water in a calendar year than ever before. Higher groundwater levels resulting from the recharge not only helps ensure the health of the basin but also makes pumping groundwater more cost effective.
- Salaries and employee benefits expenses of $4,214,548 decreased by $353,374 as the District implemented the second of a three-year phasing in the wage increases in accordance with a salary and compensation study performed in late 2017.
- Maintenance and repair expenses increased by $202,681 as the District drastically increased landscaping maintenance activities at many of its facilities.
- The District's year-end calculation of pension expense of $242,066 under GASB statement number 68 increased by $149,420. This is a required each year and can be volatile as it involves complex actuarial assumptions and calculations.

2018 compared to 2017

Total operating revenues of $14,160,641 increased by $983,132 primarily due to the following:

- Metered water sales and the corresponding water importation charges and water pumping pass-through charges totaling $9,538,399 increased by $547,505, mainly due to an 8.8 percent increase in water consumption.
- Development and installation charges of $979,629 increased by $161,199, mainly due to an increase in development-driven activities.
- Water service charges of $3,238,643 increased by $223,891, mainly due to the installation of 760 meters during 2018.

FINANCIAL ANALYSIS OF THE DISTRICT (Continued)

Operating Revenues and Expenses (continued)

Total operating expenses of $13,583,971 increased by $348,871 primarily due to the following:

- Salaries and employee benefits expenses of $3,855,018 increased by $459,960 as the District filled several positions that were previously vacant and implemented increases in accordance with salary and compensation study performed in late 2017.
- Energy costs from pumping totaling $1,760,641 increased by $161,976 as a result of the increase in consumer demand.
- In spite of the increased consumer demand, purchased of imported water totaling $3,842,357 decreased by $456,673. The District continued to participate in a regional effort to buy imported water from Northern California to recharge the local groundwater basin, but to a lesser extent than it had in the previous year. The District was still able to add to its storage account with the Beaumont Basin Watermaster by the end of 2018.
- The District's year-end calculation of the pension expense of $92,646 under GASB statement number 68 increased by $180,160 from a credit of $87,514 in 2017. This is a complex calculation required each year and can be volatile.

Capital Assets

	Balance December 31, 2019	Balance December 31, 2018	Balance December 31, 2017
Land	$ 7,721,730	$ 7,721,730	$ 7,721,730
Construction in progress	1,505,184	988,172	428,469
Transmission and distribution system	65,878,826	66,165,371	63,828,190
Structures and improvements	13,514,867	13,828,960	14,138,546
Reservoirs and tanks	15,748,653	16,234,527	16,722,251
Pumping and telemetry equipment	9,516,397	9,520,651	9,300,108
Vehicles and equipment	751,226	714,848	710,769
Capital assets, net of depreciation	$ 114,636,883	$ 115,174,259	$ 112,850,063

The District's investment in capital assets includes land, transmission and distribution systems, buildings and structures, reservoirs, tanks, pumps, equipment and vehicles, and construction in progress.

2019 compared to 2018 The District's investment in capital assets, net of accumulated depreciation, was $114,636,883, a decrease of $537,376. The decrease resulted mainly from the following significant capital additions, offset by current year depreciation of $2,707,811:

- Well pumping and chlorination equipment of $245,397.
- Developer donated water systems totaling $312,918.
- Installations of new and retrofitted radio read-capable meters amounting to $827,370.
- New additions to construction in progress of $517,012.

FINANCIAL ANALYSIS OF THE DISTRICT (Continued)

Capital Assets (Continued)

2018 compared to 2017 The District's investment in capital assets, net of accumulated depreciation, was $115,174,259, an increase of $2,324,196. The increase resulted mainly from the following significant capital additions, offset by current year depreciation of $2,575,804:

- Well pumping and chlorination equipment of $443,194.
- Developer donated water systems totaling $2,423,839.
- Installations of new and retrofitted radio read-capable meters amounting to $1,032,213.
- New additions to construction in progress of $559,703.

New meter installations include the cost of employee labor, as well as meter parts. Meters are currently replaced every 10-15 years as part of the District's meter change out program. More information on the District's capital assets activity for the years ending December 31, 2019 and 2018 can be found in Note 5 beginning on page 38 of this report.

Long-term Debt

At December 31, 2019, the District had no long-term debt.

CONDITIONS AFFECTING CURRENT FINANCIAL POSITION

Increasing CalPERS Costs

The District provides retirement benefits to District employees through the California Public Employees Retirement System (CalPERS). Although the District pays what it is billed annually, the District's unfunded liability is in excess of $2 million. Due to changes in actuarial assumptions made by the CalPERS Board, as well as projected rate of return on investments, the unfunded liability is expected to increase. A significant portion of the current CalPERS contributions are directly related to paying off the principal and interest of the unfunded liability, the difference between estimated pension plan obligations and the current value of its assets. It is expected that these contributions may grow significantly over the next ten years, which would have a direct impact on rates.

Water Rates and Charges

The District Board of Directors approved proposed changes to water rates and service charges following a public hearing on February 27, 2020, after a seven-month evaluation by an independent financial expert who studied the then-current rate structures and cost of service, balancing revenue needs with mitigating rate increases for customers. The study revealed the need for new rates and charges based on increasing operating, maintenance and capital replacement costs, which went into effect on March 1, 2020.

CONDITIONS AFFECTING CURRENT FINANCIAL POSITION (Continued)

WaterSMART Water and Energy Efficiency Grant

In February 2020, the District received notification that it had been awarded a $1.5 million WaterSMART Water and Energy Efficiency Grant from the United States Bureau of Reclamation for its Advanced Meter Infrastructure (AMI) Project.

Once fully completed, the project is expected to reduce the District's reliance on imported water and offset local groundwater pumping. The meters will allow for automated meter reads and improve water conservation by increasing system-wide leak detection effectiveness. Switching to AMI meters is also anticipated to increase efficiency, improve customer service, reduce costs, and decrease fuel and carbon dioxide emissions.

Requests for Information

This financial report is designed to provide a general overview of the District's finances and to demonstrate accountability and stewardship over the money it receives. Questions regarding the content provided in this report or requests for additional information should be addressed to the Director of Finance and Administrative Services, Beaumont-Cherry Valley Water District, 560 Magnolia Avenue, Beaumont, CA, 92223.

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Basic Financial Statements

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Beaumont-Cherry Valley Water District

Statements of Net Position
December 31, 2019 with Comparative Information as of December 31, 2018

	2019	2018
ASSETS		
Current assets:		
Cash and investments (Note 2)	$ 27,918,643	$ 28,537,743
Restricted cash and investments - funds held for others (Note 2)	3,912,513	3,868,662
Restricted cash and investments - capital commitments (Note 2)	29,534,286	26,250,409
Interest receivable	191,699	206,577
Accounts receivable, net of allowance for uncollectible accounts (Note 3)	2,677,821	2,607,627
Notes receivable	8,446	9,029
Restricted notes receivable (Note 4)	55,176	50,160
Inventories	720,828	787,117
Prepaid items	214,598	195,622
Total current assets	65,234,010	62,512,946
Noncurrent assets:		
Notes receivable (Note 4)	60,814	71,959
Restricted notes receivable (Note 4)	468,290	523,467
Capital assets, net of accumulated depreciation (Note 5)	114,636,883	115,174,259
Total noncurrent assets	115,165,987	115,769,685
Total assets	180,399,997	178,282,631
DEFERRED OUTFLOWS OF RESOURCES		
OPEB related (Note 10)	99,893	12,349
Pension related (Note 12)	629,876	665,584
Total deferred outflows of resources	729,769	677,933
LIABILITIES		
Current liabilities:		
Accounts payable and other accrued liabilities (Note 6)	659,393	783,821
Customer account credit balances (Note 7)	177,912	181,178
Customer deposits payable	498,818	469,009
Unearned revenues (Note 8)	3,235,784	3,218,476
Current portion of long-term liabilities:		
Compensated absences (Note 9)	242,037	213,171
Total current liabilities	4,813,944	4,865,655
Noncurrent liabilities:		
Compensated absences (Note 9)	99,807	101,002
Net OPEB liability (Note 10)	1,550,636	1,330,857
Net pension liability (Note 12)	2,328,743	2,079,843
Total noncurrent liabilities	3,979,186	3,511,702
Total liabilities	8,793,130	8,377,357
DEFERRED INFLOWS OF RESOURCES		
OPEB related (Note 10)	53,119	58,652
Pension related (Note 12)	116,796	159,337
Total deferred inflows of resources	169,915	217,989
NET POSITION		
Net investment in capital assets (Note 11)	114,636,883	115,174,259
Restricted (Note 11)		
Capital Commitments	29,534,286	26,250,409
Notes Receivable	523,466	573,627
Unrestricted (Note 11)	27,472,086	28,366,923
Total net position	$ 172,166,721	$ 170,365,218

The accompanying notes are an integral part of the financial statements.

Beaumont-Cherry Valley Water District

Statements of Revenues, Expenses and Changes in Net Position
For the Year Ended December 31, 2019 with Comparative Information for the year ended December 31, 2018

	2019	2018
OPERATING REVENUES		
Metered water sales	$ 4,933,445	$ 5,375,165
Water service charges	3,403,608	3,238,643
Water importation pass-through charges	2,237,051	2,424,212
Water pumping power pass-through charges	1,604,661	1,739,022
Development and installation charges	851,465	979,629
Other revenue	321,521	403,970
Total operating revenues	13,351,751	14,160,641
OPERATING EXPENSES		
Salaries and employee benefits	4,214,548	3,861,174
Pension expense	242,066	92,646
Energy expenses	1,621,377	1,760,641
Water purchases	5,200,241	3,842,357
Administration	508,291	313,973
Operations	586,603	574,263
Maintenance and repairs	536,022	333,341
Depreciation	2,707,811	2,575,804
Insurance	75,858	73,530
Professional fees	272,752	144,908
Other expenses	29,730	11,334
Total operating expenses	15,995,299	13,583,971
Operating income (loss)	(2,643,548)	576,670
NONOPERATING REVENUES (EXPENSES)		
Investment earnings	1,668,981	1,121,500
Rental income	23,805	20,934
Other revenue	3,328	24,681
Gain on sale of capital assets	15,840	-
Total nonoperating revenues (expenses)	1,711,954	1,167,115
Income before contributions	(931,594)	1,743,785
CAPITAL CONTRIBUTIONS		
Donated capital assets	313,440	2,423,839
Capital contribution to other government	(569,812)	-
Capacity charges	2,989,469	5,282,211
Total capital contributions	2,733,097	7,706,050
Change in net position	1,801,503	9,449,835
Net position, beginning of year	170,365,218	160,915,383
Net position, end of year	$ 172,166,721	$ 170,365,218

The accompanying notes are an integral part of the financial statements.

Beaumont-Cherry Valley Water District

Statements of Cash Flows
For the Year Ended December 31, 2019 with Comparative Information for the year ended December 31, 2018

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Receipts from customers	$ 13,338,280	$ 14,404,274
Payments to employees for salaries and benefits	(4,040,357)	(3,647,387)
Payments to suppliers and service providers	(8,931,626)	(7,221,022)
Receipt of customer deposits	29,809	43,562
Net cash provided by operating activities	396,106	3,579,427
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Acquisition and construction of capital assets	(1,856,995)	(2,476,161)
Capital contributions	3,039,630	5,327,811
Capital contribution to other government	(569,812)	-
Gain on sale of capital assets	15,840	-
Net cash provided by capital and related financing activities	628,663	2,851,650
CASH FLOWS FROM INVESTNG ACTIVITIES:		
Interest received	1,510,069	1,080,380
Gain/(loss) on investments	173,790	(29,499)
Net cash provided by investing activities	1,683,859	1,050,881
Net increase in cash and cash equivalents	2,708,628	7,481,958
Cash and investments, beginning of year	58,656,814	51,174,856
Cash and investments, end of year	$ 61,365,442	$ 58,656,814
Reconciliation to the Statement of Net Position:		
Cash and investments	$ 27,918,643	$ 28,537,743
Restricted cash and investments - funds held for others	3,912,513	3,868,662
Restricted cash and investments - capital commitments	29,534,286	26,250,409
Total cash and investments	$ 61,365,442	$ 58,656,814

The accompanying notes are an integral part of the financial statements.

Beaumont-Cherry Valley Water District

Statements of Cash Flows, Continued
For the Year Ended December 31, 2019 with Comparative Information for the year ended December 31, 2018

	2019	2018
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating income (loss)	$ (2,643,548)	$ 576,670
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:		
Depreciation expense	2,707,811	2,575,804
Other income	3,328	24,681
Rental income	23,805	20,934
(Increase) decrease in accounts receivable	(70,194)	(158,878)
(Increase) decrease in notes receivable	11,728	14,832
(Increase) decrease in inventories	66,289	(151,209)
(Increase) decrease in prepaid items	(18,976)	(34,361)
(Increase) decrease in deferred outflows of resources	(51,836)	166,317
Increase (decrease) in accounts payable and other accrued liabilities	(124,428)	49,263
Increase (decrease) in customer account credit balances	(3,266)	17,559
Increase (decrease) in customer deposits payable	29,809	43,562
Increase (decrease) in unearned revenues	17,308	330,994
Increase (decrease) in compensated absences	27,671	44,644
Increase (decrease) in other post-employment benefit obligations	219,779	79,847
Increase (decrease) in net pension liability	248,900	(46,779)
Increase (decrease) in deferred inflows of resources	(48,074)	25,547
Total adjustments	3,039,654	3,002,757
Net cash provided by operating activities	$ 396,106	$ 3,579,427
Schedule of non-cash investing and capital and related financing activities		
Capital contributions - donated capital assets	$ 313,440	$ 2,423,839

The accompanying notes are an integral part of the financial statements.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity and Basis of Presentation

The Beaumont-Cherry Valley Water District (District) is a special-purpose government district supplying and distributing water to over 55,000 people in both the City of Beaumont and the community of Cherry Valley. The District is governed by a five-member Board of Directors who serve overlapping four-year terms. The financial statements of the District have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP), as applied to enterprise funds. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The District solely operates as a special-purpose government which means it is only engaged in business-type activities; accordingly activities are reported in the District's proprietary fund.

B. Measurement Focus and Basis of Accounting

Proprietary fund financial statements are reported using the *economic resources measurement focus* and the *accrual basis of accounting*. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of when the related cash flows take place. Non-exchange transactions, in which the District receives value without directly giving equal value in return, include grants, entitlements and donations. Revenue from grants, entitlements and donations are recognized in the fiscal year in which all eligibility requirements have been satisfied.

Proprietary funds distinguish *operating* revenues and expenses from *non-operating* items. Operating revenues and expenses generally result from providing services, and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the District's proprietary fund is charges to customers for sales and services. Operating expenses include the costs of sales and services, the costs of employee benefits, maintenance of capital assets, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

C. Cash and Cash Equivalents

The District's cash and investments are considered to be cash on hand, demand deposits and investments with maturities less than 90 days. Therefore, for purposes of the statement of cash flows, the District considers the cash and investment balance to be cash and cash equivalents.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

D. Restricted Cash and Investments

Restricted cash and investments are cash and investments that are segregated and can only be used for specific purposes. The District's restricted cash and investments consist of funds held for others, including refundable or prepaid customer deposits. The District also restricts cash and investments for capital commitments in the amount of developer capacity charges collected during the year to ensure that funds are set aside to provide for the expansion of the domestic and non-potable water system.

Please refer to *Note 2 - Cash and Investments* for additional details.

E. Inventories and Prepaid Items

Inventories are stated at cost using the average-cost method, and consist of materials used in construction and maintenance of the water system.

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items. The costs of the prepaid items are recorded as expenses when consumed rather than when purchased.

F. Capital Assets

Capital assets purchased or constructed are carried at historical cost. Constructed costs include labor, materials and construction period interest expense (net of interest income, where applicable). The capitalization threshold is $5,000. Contributed assets are stated at estimated acquisition value at the time received by the District. Land and construction in progress are not depreciated. Depreciation on the other assets is calculated on the straight-line method over the following estimated useful lives of the assets:

Pump House Structures	25 to 40 years
Well Casings & Development	10 to 40 years
Pumping Equipment	10 to 50 years
Chlorinators	15 to 30 years
Reservoirs & Tanks	15 to 50 years
Telemetering Equipment	10 to 20 years
Transmission & Distribution Mains	40 to 75 years
Meters & Meter Services	10 to 15 years
Fire Hydrants	30 to 50 years
Structures & Improvements	10 to 75 years
Office Furniture & Equipment	3 to 20 years
Automobile Equipment:	
Vehicles	5 to 15 years
Heavy Equipment	7 to 15 years
Light Equipment	5 to 7 years
General Equipment	5 to 15 years

Please refer to *Note 5 - Capital Assets* for additional details.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

G. Unearned Revenues

Unearned revenues arise when resources are received by the District before revenues are earned, as when developers pay in advance for services to be provided by the District at a later date. When the District has provided the services, the associated amounts will be recognized as revenue.

Please refer to *Note 8 - Unearned Revenues* for additional details.

H. Compensated Absences

Vacation

The District's policy permits employees to accumulate earned but unused vacation benefits, which are eligible for payment upon separation from the District. The liability for such leave is reported as an expense when incurred.

Sick Leave

All full-time, regular employees not using any sick leave for twelve consecutive months can convert their twelve accrued 8-hour sick days to cash at the rate of two accrued days for 8 hours paid at their regular hourly rate. Upon retirement or death, all employees or their beneficiaries are entitled to receive a pay-out of 50% of all accumulated sick leave. Accumulated sick leave dissolves when employees separate from the District in any other manner.

Please refer to *Note 9 - Compensated Absences* for additional details.

I. Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

J. Uncollectible Accounts

The District provides an allowance for doubtful accounts for all accounts deemed uncollectible. Any unpaid debt is deemed a lien against the real property to which service is rendered in accordance with applicable law.

Please refer to *Note 3 - Accounts Receivable* for additional detail.

K. Use of Restricted Resources

When both restricted and unrestricted resources are available for use, it is the District's policy to use restricted resources first, and then unrestricted resources as they are needed.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

L. Credit/Market Risk

The District provides water services to local residents, commercial, industrial, irrigation and construction customers. As part of normal operating practices, credit is granted to residential, commercial, industrial, and irrigation customers on a secured basis and to construction customers on an unsecured basis.

M. Fair Value Measurement

The definition of *fair value* is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. The District has no investments subject to the fair value hierarchy.

N. Pensions

For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the District's California Public Employees Retirement System (CalPERS) Plans and additions to/deductions from the plan's fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Valuation Date	June 30, 2018
Measurement Date	June 30, 2019
Measurement Period	January 1 to December 31, 2019

O. Other Postemployment Benefits (OPEB)

For purposes of measuring the net OPEB liability, deferred outflows/inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the District's plan and additions to/deductions from the OPEB's Plan's fiduciary net position have been determined on the same basis. For this purpose, benefit payments are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

Valuation Date	June 30, 2018
Measurement Date	June 30, 2019
Measurement Period	January 1 to December 31, 2019

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

P. Prior Year Data

Selected information regarding the prior year has been included in the accompanying financial statements. This information has been included for comparison purposes only and does not represent a complete presentation in accordance with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the District's prior year financial statements from which this selected financial information was derived.

Q. Reclassifications

Certain reclassifications have been made to prior year's balance to conform to classifications used in 2019.

NOTE 2 – CASH AND INVESTMENTS

Cash and investments as of December 31 are classified in the accompanying financial statements as follows:

Description	2019	2018
Cash and investments	$ 27,918,643	$ 28,537,743
Restricted cash and investments - funds held for others	3,912,513	3,868,662
Restricted cash and investments - capital commitments	29,534,286	26,250,409
Total cash and investments	$ 61,365,442	$ 58,656,814

Cash and investments as of December 31 consist of the following:

Description	2019	2018
Cash on hand (petty cash and change drawers)	$ 1,400	$ 1,400
Demand deposits (cash in bank)	491,614	774,460
Investments	60,872,428	57,880,954
Total cash and investments	$ 61,365,442	$ 58,656,814

Investments Authorized by the California Government Code and the District's Investment Policy

The table below identifies the investment types that are authorized for the District by the California Government Code and the District's policy, where more restrictive. The table also identifies certain provisions of the California Government Code that address interest rate risk, credit risk, and concentration of credit risk.

NOTE 2 – CASH AND INVESTMENTS (Continued)

Authorized Investment Type	Maturity Limit	Maximum Specified % of Portfolio
Local Agency Bonds	5 years	None
US Treasury Obligations	5 years	None
State Obligations - CA and others	5 years	None
CA Local Agency Obligations	5 years	None
US Agency Obligations	5 years	None
Bankers Acceptances	180 days	40%
Commercial Paper - Pooled Funds	270 days	40% of the District's money
Commercial Paper - Non-Pooled Funds	270 days	25% of the District's money
Negotiable Certificates of Deposit	5 years	30%
Non-negotiable Certificates of Deposit	5 years	None
Placement Service Deposits	5 years	30%
Placement Service Certificates of Deposit	5 years	30%
Repurchase Agreements	1 year	None
Reverse Repurchase Agreements and Securities Lending Agreements	92 days	20% of the base value of the portfolio
Medium Term Notes	5 years	30%
Mutual Funds and Money Market Mutual Funds	N/A	20%
Collateralized Bank Deposits	5 years	None
Mortgage Pass-Through Securities	5 years	20%
County Pooled Investment Funds	N/A	None
Joint Powers Authority Pool	N/A	None
Local Agency Investment Fund (LAIF)	N/A	None
Voluntary Investment Program Fund	N/A	None
Supranational Obligations	5 years	30%

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates.

The District's investment policy follows the California Government Code as it relates to limits on investment maturities as a means of managing exposure to fair value losses arising from increasing interest rates.

NOTE 2 – CASH AND INVESTMENTS (Continued)

The District's investments as of December 31, 2019 were as follows:

Investment Type	Fair Value	Maturity 12 Months or Less
CalTRUST	$ 36,292,837	$ 36,292,837
LAIF	24,579,591	24,579,591
Total investments	$ 60,872,428	$ 60,872,428

The District's investments as of December 31, 2018 were as follows:

Investment Type	Fair Value	Maturity 12 Months or Less
CalTRUST	$ 33,335,400	$ 33,335,400
LAIF	24,545,554	24,545,554
	$ 57,880,954	$ 57,880,954

Disclosures Relating to Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. The District's only investments are in LAIF and CalTRUST, both of which are unrated.

Concentration of Credit Risk

The investment policy of the District contains no limitations on the amount that can be invested in any one issuer beyond that stipulated by the California Government Code.

Custodial Credit Risk

Custodial credit risk for *deposits* is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code and the District's investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits or investments, other than the following provision for deposits: The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110 percent of the total amount deposited by the public agencies.

NOTE 2 – CASH AND INVESTMENTS (Continued)

Custodial Credit Risk (Continued)

California law also allows financial institutions to secure deposits by pledging first trust deed mortgage notes having a value of 150 percent of the secured public deposits. The District may waive collateral requirements for deposits which are fully insured by federal depository insurance.

As of December 31, 2019 and 2018, the District had deposits with financial institutions of $274,521 and $604,800, respectively, in excess of federal depository insurance limits and subject to custodial credit risk as described above.

Investment in State Investment Pool

The District is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by California Government Code Section 16429 under the oversight of the Treasurer of the State of California. LAIF is a governmental investment pool managed and directed by the California State Treasurer and is not registered with the Securities and Exchange Commission. An oversight committee comprised of California State officials and various participants provide oversight to the management of the fund. The daily operations and responsibilities of LAIF fall under the auspices of the State Treasurer's office. The fair value of the District's investment in this pool is reported in the accompanying financial statements, at amounts based upon the District's pro-rata share of the fair value provided by LAIF, for the entire LAIF portfolio (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis. Accordingly, under the fair value hierarchy, the measurement of the District's investment is based on uncategorized inputs not defined as Level 1, Level 2, or Level 3 inputs. Further information about LAIF is available on the California State Controller's website: www.treasurer.ca.gov/pmia-laif/.

CalTRUST

The District is a voluntary participant in CalTRUST, a Joint Exercise Powers Agreement of the Investment Trust of California. The principal executive office is located at 1100 K Street, Suite 1010, Sacramento, California 95814. CalTRUST is subject to the California Joint Exercise of Powers Act. Each participant in CalTRUST must be a California Public Agency. The purpose of CalTRUST is to consolidate investment activities of its participants and thereby reduce duplication, achieve economies of scale and carry out coherent and consolidated investment strategies through the issuance of shares of beneficial interest in investments purchased by CalTRUST.

The two funds the District has invested in are the short-term and medium-term fund. The short-term fund has a targeted portfolio duration of 0 to 2 years and medium-term fund has a targeted portfolio duration of 1 ½ to 3 ½ years. Investment strategies are to attain as high as a level of current income as is consistent with the preservation of principal.

NOTE 2 – CASH AND INVESTMENTS (Continued)

CalTRUST (Continued)

The fair value of the District's investment in CalTRUST is based upon the net asset value (NAV) of shares held by the District at year-end. The net asset value per share is computed by dividing the total value of the securities and other assets, less any liabilities, by the total outstanding shares. Liabilities include all accrued expenses and fees, including expenses of the trust.

The market value of CalTRUST portfolio securities is determined on the basis of the market value of such securities, or, if market quotations are not readily available, at fair value under the guidelines established by the trustees. Investments with short remaining maturities may be valued at amortized cost which the CalTRUST Board has determined to equal fair value.

NOTE 3 – ACCOUNTS RECEIVABLE

Water Sales and Services are reported net of uncollectible amounts based on actual collections as of the preparation date of the statements. The General Manager or their designee is authorized to file a lien against real property serviced with the Assessor-Clerk-Recorder of the County of Riverside for any charges 60 days past due. The amount of charges of unpaid bills are included as a lien against the debtor's property until the unpaid charges are collected and the account is brought current. Other receivables, those billings outside of the normal water sales and services billings, include items such as damages to District property and rental of District property. Amounts not expected to be collected within the next year have been included in the allowance for uncollectible accounts. Developer receivables are those receivables due from developers for development activity that has exceeded deposits collected to-date. The amount included in the allowance for uncollectible accounts is an estimate based on other refundable accounts held for the developer that the District feels they can use to negotiate settlement on balances due to the District. Amounts are aggregated into a single accounts receivable (net of allowance for uncollectible) amount on the financial statements.

The detail of the receivables, including applicable allowances for uncollectible amounts as of December 31, 2019 is as follows:

	Water Sales and Services	Other	Developer	Total
Receivables	$ 2,366,044	$ 16,189	$ 564,778	$ 2,947,011
Less: allowance for uncollectible accounts	-	-	(269,190)	(269,190)
Net receivables	$ 2,366,044	$ 16,189	$ 295,588	$ 2,677,821

NOTE 3 – ACCOUNTS RECEIVABLE (Continued)

The detail of the receivables, including applicable allowances for uncollectible amounts, as of December 31, 2018 is as follows:

	Water Sales and Services	Other	Developer	Total
Receivables	$ 2,328,602	$ 54,755	$ 493,030	$ 2,876,387
Less: allowance for uncollectible accounts	-	(1,036)	(267,724)	(268,760)
Net receivables	$ 2,328,602	$ 53,719	$ 225,306	$ 2,607,627

NOTE 4 – NOTES RECEIVABLE

In 2003, the Bonita Vista Mutual Water Company (Bonita Vista) started the annexation process to join the District. The annexation agreement called for the District to install a new water delivery system. The property owners/shareholders in Bonita Vista were responsible for 1/100th of the costs of construction of the new system, at $5,500 per meter. The notes are payable over 20 years at a variable interest rate calculated annually at 1.5 percent above the LAIF interest rate. The notes are due to mature as of February 15, 2028.

The District has entered into various agreements with the developers of the Fairway Canyon Community Association (Fairway Canyon) for payment of the new water component of the water main extension and capacity charges. The notes are payable over 10 years at an annual interest rate of 10 percent.

Amounts due from Bonita Vista and Fairway Canyon are separated into current and non-current portions on the *Statement of Net Position*.

The detail of the notes, including applicable allowances for uncollectible amounts as of December 31, 2019 is as follows:

	Notes Receivable	Restricted Notes Receivable	
	Bonita Vista	Fairway Canyon	Total
Current	$ 8,446	$ 55,176	$ 63,622
Non-current	60,814	468,290	529,104
Total notes receivable	$ 69,260	$ 523,466	$ 592,726

NOTE 4 – NOTES RECEIVABLE (Continued)

The detail of the notes, including applicable allowances for uncollectible amounts as of December 31, 2018 is as follows:

	Notes Receivable	Restricted Notes Receivable	
	Bonita Vista	Fairway Canyon	Total
Current	$ 9,029	$ 50,160	$ 59,189
Non-current	71,959	523,467	595,426
Total notes receivable	$ 80,988	$ 573,627	$ 654,615

NOTE 5 – CAPITAL ASSETS

The following table summarizes capital asset activity during the year ended December 31, 2019:

	Beginning Balance	Additions	Deletions	Transfers	Ending Balance
Capital assets, not being depreciated					
Land	$ 7,721,730	$ -	$ -	$ -	$ 7,721,730
Construction in progress	988,172	1,842,861	-	(1,325,849)	1,505,184
Total capital assets, not being depreciated	8,709,902	1,842,861	-	(1,325,849)	9,226,914
Capital assets, being depreciated:					
Transmission and distribution system	82,504,147	319,666	-	834,323	83,658,136
Structures and improvements	17,941,928	-	-	-	17,941,928
Reservoirs and tanks	22,546,667	-	-	-	22,546,667
Pumping and telemetry equipment	13,146,242	-	-	251,485	13,397,727
Vehicles and equipment	2,395,514	7,908	(184,669)	240,041	2,458,794
Total capital assets, being depreciated	138,534,498	327,574	(184,669)	1,325,849	140,003,252
Less accumulated depreciation for:					
Transmission and distribution system	(16,338,776)	(1,440,534)	-	-	(17,779,310)
Structures and improvements	(4,112,968)	(314,093)	-	-	(4,427,061)
Reservoirs and tanks	(6,312,140)	(485,874)	-	-	(6,798,014)
Pumping and telemetry equipment	(3,625,591)	(255,739)		-	(3,881,330)
Vehicles and equipment	(1,680,666)	(211,571)	184,669	-	(1,707,568)
Total accumulated depreciation	(32,070,141)	(2,707,811)	184,669	-	(34,593,283)
Total capital assets, being depreciated, net	106,464,357	(2,380,237)	-	1,325,849	105,409,969
Capital assets, net of depreciation	$ 115,174,259	$ (537,376)	$ -	$ -	$ 114,636,883

NOTE 5 – CAPITAL ASSETS (Continued)

The following table summarizes capital asset activity during the year ended December 31, 2018:

	Beginning Balance	Additions	Deletions	Transfers	Ending Balance
Capital assets, not being depreciated					
Land	$ 7,721,730	$ -	$ -	$ -	$ 7,721,730
Construction in progress	428,469	2,341,160	-	(1,781,457)	988,172
Total capital assets, not being depreciated	8,150,199	2,341,160	-	(1,781,457)	8,709,902
Capital assets, being depreciated:					
Transmission and distribution system	78,827,974	2,431,035	-	1,245,138	82,504,147
Structures and improvements	17,919,428	-	-	22,500	17,941,928
Reservoirs and tanks	22,546,667	-	-	-	22,546,667
Pumping and telemetry equipment	12,749,864	-	(46,816)	443,194	13,146,242
Vehicles and equipment	2,197,084	127,805	-	70,625	2,395,514
Total capital assets, being depreciated	134,241,017	2,558,840	(46,816)	1,781,457	138,534,498
Less accumulated depreciation for:					
Transmission and distribution system	(14,999,784)	(1,338,992)	-	-	(16,338,776)
Structures and improvements	(3,780,882)	(332,086)	-	-	(4,112,968)
Reservoirs and tanks	(5,824,416)	(487,724)	-	-	(6,312,140)
Pumping and telemetry equipment	(3,449,756)	(222,651)	46,816	-	(3,625,591)
Vehicles and equipment	(1,486,315)	(194,351)		-	(1,680,666)
Total accumulated depreciation	(29,541,153)	(2,575,804)	46,816	-	(32,070,141)
Total capital assets, being depreciated, net	104,699,864	(16,964)	-	1,781,457	106,464,357
Capital assets, net of depreciation	$ 112,850,063	$ 2,324,196	$ -	$ -	$ 115,174,259

NOTE 6 – ACCOUNTS PAYABLE AND OTHER ACCRUED LIABILITIES

Accounts payable and other accrued liabilities as of December 31 were as follows:

Description	2019	2018
Accounts payable	$ 536,197	$ 684,262
Salaries and employee benefits	92,521	72,374
Other	30,675	27,185
Total accounts payable and other accrued liabilities	$ 659,393	$ 783,821

NOTE 7 – CUSTOMER ACCOUNT CREDIT BALANCES

Credit balances on customer utility accounts are to be used against future billings or refunded upon request. As of December 31, 2019 and 2018, the balance was $177,912 and $181,178, respectively.

NOTE 8 – UNEARNED REVENUES

Developers make payments in advance of the District providing services, including items such as meter installations, development plan checks and development inspections. As the District provides these services, revenues are recognized and the unearned revenues balance is reduced. As of December 31, 2019 and 2018, the balance was $3,235,784 and $3,218,476, respectively.

NOTE 9 – COMPENSATED ABSENCES

Compensated absences comprise unpaid vacation, sick, holiday and administrative leave, which is accrued as earned. The liability for compensated absences is determined annually.

The activity for the year ended December 31, 2019 was as follows:

Beginning Balance	Additions	Deletions	Ending Balance	Current Portion	Non-current Portion
$ 314,173	$ 290,601	$ (262,930)	$ 341,844	$ 242,037	$ 99,807

The activity for the year ended December 31, 2018 was as follows:

Beginning Balance	Additions	Deletions	Ending Balance	Current Portion	Non-current Portion
$ 269,529	$ 294,473	$ (249,829)	$ 314,173	$ 213,171	$ 101,002

NOTE 10 – OTHER POST-EMPLOYMENT BENEFITS OBLIGATION

A. Plan Description

The District pays a portion of the cost of health insurance (including prescription drug benefits) as post-employment benefits to retired employees who satisfy the eligibility rules as required by CalPERS Health Program enrollment. The current District contribution is fixed at $474 per month. Spouses and surviving spouses are also eligible to receive benefits. Retirees may enroll in any medical plan available through the District's CalPERS Health Program, a cost-sharing multiple-employer medical coverage plan. The contribution requirements of eligible retired employees and the District are established and may be amended by the Board of Directors.

NOTE 10 – OTHER POST-EMPLOYMENT BENEFITS OBLIGATION (Continued)

B. Employees Covered

As of the June 30, 2019 measurement date, the following numbers of participants were covered by the benefit terms under the Plan:

Active employees	34
Inactive employees or beneficiaries currently receiving benefits	5
Inactive employees entitled to, but not yet receiving benefits	-
Total	39

C. Funding Policy

The District funds the Plan on a pay-as-you-go basis. There are no assets accumulated in a qualifying trust to pay related benefits.

D. Net OPEB Liability

The District's net OPEB liability was measured as of June 30, 2019 and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation dated June 30, 2018 that was rolled forward to determine the June 30, 2019 total OPEB liability, based on the following actuarial methods and assumptions:

Actuarial Assumptions	June 30, 2019 Measurement Date
Actuarial Valuation Date	June 30, 2018
Contribution Policy	No pre-funding
Discount Rate	3.50% at June 30, 2019 3.87% at June 30, 2018
General Inflation	2.75%
Mortality, Retirement, Disability, Termination	Based on CalPERS 1997-2015 Experience Study
Salary increases	3.00%
Medical Trend	Non-Medicare – 7.5% for 2020, decreasing to an ultimate rate of 4.0% in 2076 and later Medicare – 6.5% for 2020, decreasing to an ultimate rate of 4.0% in 2076 and later

NOTE 10 – OTHER POST-EMPLOYMENT BENEFITS OBLIGATION (Continued)

D. Net OPEB Liability (Continued)

Change in Assumptions

The discount rate changed from 3.87 percent in 2018 to 3.50 percent in 2019.

E. Discount Rate

A discount rate of 3.50 percent was used in the valuation for measurement date June 30, 2019.

F. Changes in the OPEB Liability

The changes in the net OPEB liability for the Plan are as follows:

	(a) Total OPEB Liability	(b) Plan Fiduciary Net Position	(a) - (b) = (c) Net OPEB Liability
Balance at December 31, 2018 (6/30/18 measurement date)	$ 1,330,857	$ -	$ 1,330,857
Changes recognized for the measurement period:			
Service cost	104,143	-	104,143
Interest	54,966	-	54,966
Differences between expected and actual experience	-	-	-
Changes in assumptions	90,015	-	90,015
Contributions – employer	-	-	-
Net investment income	-	-	-
Benefit payments	(29,345)	-	(29,345)
Administrative expense	-	-	-
Net changes	219,779	-	219,779
Balance at December 31, 2019 (6/30/19 measurement date)	$ 1,550,636	$ -	$ 1,550,636

G. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following represents the net OPEB liability of the District if it were calculated using a discount rate that are one percentage point lower or one percentage point higher than the current rate, for measurement period ended June 30, 2019:

December 31, 2019 (measurement date June 30, 2019)

	1% Decrease (2.50%)	Current Discount Rate (3.50%)	1% Increase (4.50%)
Net OPEB Liability	$ 1,837,720	$1,550,636	$ 1,323,832

NOTE 10 – OTHER POST-EMPLOYMENT BENEFITS OBLIGATION (Continued)

G. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate (Continued)

December 31, 2018 (measurement date June 30, 2018)

	1% Decrease (2.50%)	Current Discount Rate (3.50%)	1% Increase (4.50%)
Net OPEB Liability	$ 1,572,091	$1,330,857	$ 1,139,286

H. Sensitivity of the Net OPEB Liability to Changes in the Health Care Trend Rates

The following represents the net OPEB liability of the District if it were calculated using healthcare costs trend rates that are one percentage point lower or one percentage point higher than the current rate, for measurement period ended June 30, 2019:

December 31, 2019 (measurement date June 30, 2019)

	1% Decrease	Current Healthcare Cost Trend Rates	1% Increase
Net OPEB Liability	$ 1,389,126	$1,550,636	$ 1,819,476

December 31, 2018 (measurement date June 30, 2018)

	1% Decrease	Current Healthcare Cost Trend Rates	1% Increase
Net OPEB Liability	$ 1,204,837	$1,330,857	$ 1,538,991

I. OPEB Plan Fiduciary Net Position

As the District is not prefunding with an OPEB trust, Plan Fiduciary Net Position was $0 at June 30, 2019 measurement date. The District does not have assets accumulated in a trust that meets the criteria of GASB 75 to pay related benefits.

Recognition of Deferred Outflows and Deferred Inflows of Resources

Gains and losses related to changes in total OPEB liability and fiduciary net position are recognized in OPEB expense systematically over time. Amounts are first recognized in OPEB expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to OPEB and are to be recognized in future OPEB expense. The net difference between projected and actual earnings on OPEB plan investments is amortized over the expected average remaining service lifetime (EARSL) of plan participants.

NOTE 10 – OTHER POST-EMPLOYMENT BENEFITS OBLIGATION (Continued)

J. *OPEB Expense and Deferred Outflows /Inflows of Resources Related to OPEB*

For the fiscal year ended December 31, 2019, the District recognized OPEB expense of $161,468. As of fiscal year ended December 31, 2019 and December 31, 2018, the District reported deferred outflows and inflows related to OPEB from the following sources:

December 31, 2019 (measurement date June 30, 2019)

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	$ 82,255	$ (53,119)
Contributions to OPEB plan subsequent to the measurement date	17,638	-
Total	$ 99,893	$ (53,119)

December 31, 2018 (measurement date June 30, 2018)

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes in assumptions	$ -	$ (58,652)
Contributions to OPEB plan subsequent to the measurement date	12,349	-
Total	$ 12,349	$ (58,652)

The $17,638 reported as deferred outflows of resources related to contributions subsequent to the June 30, 2019 measurement date will be recognized as a reduction of the net OPEB liability during the upcoming fiscal year. Other amounts reported as deferred outflows or inflows of resources related to OPEB will be recognized as expense as follows:

Fiscal Year Ended December 31	Deferred Outflows/(Inflows) of Resources
2020	$ 2,227
2021	2,227
2022	2,227
2023	2,227
2024	2,227
Thereafter	18,001
	$ 29,136

NOTE 11 – NET POSITION

	December 31, 2019	December 31, 2018
Net Position:		
Net investment in capital assets	$ 114,636,883	$ 115,174,259
Restricted	30,057,752	26,824,036
Unrestricted	27,472,086	28,366,923
Total net position	$ 172,166,721	$ 170,365,218

Net investment in capital assets is the value of the District's capital assets, less accumulated depreciation.

Unrestricted net position includes non-spendable assets and spending designations set by the Board of Directors:

	December 31, 2019	December 31, 2018
Unrestricted Net Position:		
Nonspendable assets:		
Inventories	$ 720,828	$ 787,117
Prepaid items	214,598	195,622
Non-current portion of notes receivable	60,814	71,959
Total nonspendable items	996,240	1,054,698
Board of Directors' Designations:		
Capital replacement reserve	20,742,568	22,022,905
Operating reserve	3,583,299	3,371,679
Emergency reserve	2,149,979	1,917,641
Total designations	26,475,846	27,312,225
Total unrestricted net position	$ 27,472,086	$ 28,366,923

NOTE 12 – DEFINED BENEFIT PENSION PLAN

A. General Information about the Pension Plan

Plan Description

All qualified permanent and probationary employees are eligible to participate in the Public Agency Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (Plan) administered by the California Public Employees' Retirement System (CalPERS). The Plan consists of individual rate plans (benefit tiers) within a safety risk pool (police and fire) and a miscellaneous risk pool (all other). Plan assets may be used to pay benefits for any employer rate plan of the safety and miscellaneous pools. Accordingly, rate plans within the safety or miscellaneous pools are not separate plans under GASB Statement No. 68. Individual employers may sponsor more than one rate plan in the miscellaneous or safety risk pools. The District sponsors two miscellaneous rate plans. Benefit provisions under the Plan are established by State statute and District resolution. CalPERS issues publicly available reports that include a full description of the pension plan regarding benefit provisions, assumptions and membership information that can be found on the CalPERS' website, at www.calpers.ca.gov.

Benefits Provided

CalPERS provides service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. All members are eligible for non-duty disability benefits after 5 years of service. The death benefit is one of the following: the Basic Death Benefit, the 1957 Survivor Benefit, or the Optional Settlement 2W Death Benefit. The cost of living adjustments for each plan are applied as specified by the Public Employees' Retirement Law.

The Plan operates under the provisions of the California Public Employees' Retirement Law (PERL), the California Public Employees' Pension Reform Act of 2013 (PEPRA), and the regulations, procedures and policies adopted by the CalPERS Board of Administration. The Plan's authority to establish and amend the benefit terms are set by the PERL and PEPRA, and may be amended by the California state legislature and in some cases require approval by the CalPERS Board.

The Plan's provisions and benefits in effect at December 31, 2019 are summarized as follows:

Hire date	Prior to January 1, 2013	On or after January 1, 2013
Benefit formula	2.7% @ 55	2% @ 62
Benefit vesting schedule	5 years of service	5 years of service
Benefit payments	monthly for life	monthly for life
Retirement age	50 - 60	52 - 62
Monthly benefits, as a % of eligible compensation	2.0% to 3.0%	1.0% to 2.0%
Required employee contribution rates	8.0%	7.5%
Required employer contribution rates	15.097%	7.528%

NOTE 12 – DEFINED BENEFIT PENSION PLAN (Continued)

A. General Information about the Pension Plan (Continued)

Contributions

Section 20814(c) of the California Public Employees' Retirement Law (PERL) requires that the employer contribution rates for all public employers be determined on an annual basis by the actuary and shall be effective on the July 1 following notice of a change in the rate. The total plan contributions are determined through CalPERS' annual actuarial valuation process. For public agency cost-sharing plans covered by either the Miscellaneous or Safety risk pools, the Plan's actuarially determined rate is based on the estimated amount necessary to pay the Plan's allocated share of the risk pool's costs of benefits earned by employees during the year, and any unfunded accrued liability. The employer is required to contribute the difference between the actuarially determined rate and the contribution rate of employees. Employer contribution rates may change if plan contracts are amended. Payments made by the employer to satisfy contribution requirements that are identified by the pension plan terms as plan member contribution requirements are classified as plan member contributions. Employer Contributions to the Plan for the fiscal year ended December 31, 2019 were $303,397. The actual employer payments of $396,918 made to CalPERS by the District during the measurement period ended June 30, 2019 differed from the District's proportionate share of the employer's contributions of $374,841 by $22,077, which is being amortized over the expected average remaining service lifetime in the Public Agency Cost-Sharing Multiple Employer Plan.

B. Net Pension Liability

The District's net pension liability for the Plan is measured as the total pension liability, less the pension plan's fiduciary net position. The net pension liability of the Plan is measured as of June 30, 2019, using an annual actuarial valuation as of June 30, 2018 rolled forward to June 30, 2019 using standard update procedures. A summary of principal assumptions and methods used to determine the net pension liability is as follows.

NOTE 12 – DEFINED BENEFIT PENSION PLAN (Continued)

B. Net Pension Liability (Continued)

Actuarial Methods and Assumptions Used to Determine Total Pension Liability

Valuation Date	June 30, 2018	June 30, 2017
Measurement Date	June 30, 2019	June 30, 2018
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Asset Valuation Method	Market Value of Assets	Market Value of Assets
Actuarial Assumptions:		
Discount Rate	7.15%	7.15%
Inflation	2.50%	2.75%
Salary Increases (1)	3.3% - 14.2%	3.3% - 14.2%
Mortality Rate Table (2)	Derived using CalPERS' membership data for all Funds	Derived using CalPERS' membership data for all Funds
Post Retirement Benefit Increase	Contract COLA up to 2.0% until purchasing power protection allowance floor on purchasing power applies, 2.5% thereafter	Contract COLA up to 2.75% until purchasing power protection allowance floor on purchasing power applies, 2.75% thereafter

(1) Annual increases vary by category, entry age and duration of service
(2) The mortality table used was developed based on CalPERS' specific data. The table includes 15 years of mortality improvements using Society of Actuaries Scale 90% of scale MP 2016. For more details on this table, please refer to the December 2017 experience study report (based on CalPERS demographics from 1997 to 2015) that can be found on the CalPERS website.

All other actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from 1997 to 2015, including updates to salary increase, mortality and retirement rates. The Experience Study report can be obtained at CalPERS' website, at www.calpers.ca.gov.

Long-term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

NOTE 12 – DEFINED BENEFIT PENSION PLAN (Continued)

B. Net Pension Liability (Continued)

In determining the long-term expected rate of return, CalPERS took into account both short-term and long-term market return expectations as well as the expected pension fund cash flows. Using historical returns of all the funds' asset classes, expected compound (geometric) returns were calculated over the short-term (first 10 years) and the long-term (11+ years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the rounded single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equal to the single equivalent rate calculated above and adjusted to account for assumed administrative expenses.

The expected real rates of return by asset class are as follows:

Asset Class	New Strategic Allocation	Real Return Years 1 - 10[1]	Real Return Years 11+[2]
Global Equity	50.0%	4.80%	5.98%
Global Fixed Income	28.0%	1.00%	2.62%
Inflation Sensitive	-	0.77%	1.81%
Private Equity	8.0%	6.30%	7.23%
Real Estate	13.0%	3.75%	4.93%
Liquidity	1.0%	-	(0.92%)
Total	100%		

[1] An expected inflation of 2.5% used for this period

[2] An expected inflation of 3.0% used for this period

Change of Assumptions

In 2019, there were no changes to the discount rate. In 2018, demographic assumptions and inflation rate were changed in accordance to the CalPERS Experience Study and Review of Actuarial Assumptions December 2017. There were no changes in the discount rate.

NOTE 12 – DEFINED BENEFIT PENSION PLAN (Continued)

B. Net Pension Liability (Continued)

Discount Rate

The discount rate used to measure the total pension liability for PERF C was 7.15%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current member contribution rates and that contributions from employers will be made at statutorily required rates, actuarially determined. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Pension Plan Fiduciary Net Position

Information about the pension plan's assets, deferred outflows of resources, liabilities, deferred inflows of resources, and fiduciary net position are presented in CalPERS' audited financial statements, which are publicly available reports that can be obtained at CalPERS' website, at www.calpers.ca.gov. The plan's fiduciary net position and additions to/deductions from the plan's fiduciary net position have been determined on the same basis used by the pension plan, which is the economic resources measurement focus and the accrual basis of accounting. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Investments are reported at fair value.

The plan fiduciary net position disclosed in the GASB 68 accounting valuation report may differ from the plan assets reported in the funding actuarial valuation report due to several reasons. First, for the accounting valuations, CalPERS must keep items such as deficiency reserves, fiduciary self-insurance and other post-employment benefits (OPEB) expense included as assets. These amounts are excluded for rate setting purposes in the funding actuarial valuation. In addition, differences may result from early Comprehensive Annual Financial Report closing and final reconciled reserves.

C. Proportionate Share of Net Pension Liability

The following table shows the District's proportionate share of the net pension liability over the measurement period.

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (c) = (a) - (b)
Balance at: 6/30/2018 (Valuation Date)	$ 10,203,946	$ 8,124,103	$ 2,079,843
Balance at: 6/30/2019 (Measurement Date)	$ 11,374,999	$ 9,046,256	$ 2,328,743
Net Changes during 2018-19	$ 1,171,053	$ 922,153	$ 248,900

NOTE 12 – DEFINED BENEFIT PENSION PLAN (Continued)

C. Proportionate Share of Net Pension Liability (Continued)

The District's net pension liability for the Plan is measured as the proportionate share of the net pension liability. The net pension liability of the Plan is measured as of June 30, 2019, and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2018 rolled forward to June 30, 2019 using standard update procedures. The District's proportion of the net pension liability was determined by CalPERS using the output from the Actuarial Valuation System and the fiduciary net position, as provided in the CalPERS Public Agency Cost-Sharing Allocation Methodology Report, which is a publicly available report that can be obtained at CalPERS' website, at www.calpers.ca.gov. The changes in the District's proportionate share of the net pension liability were as follows:

December 31, 2019	
Proportionate Share - December 31, 2018 (measurement date June 30, 2018)	0.021583%
Proportionate Share - December 31, 2019 (measurement date June 30, 2019)	0.022726%
Change - Increase (Decrease)	0.001143%

December 31, 2018	
Proportionate Share - December 31, 2017 (measurement date June 30, 2017)	0.021444%
Proportionate Share - December 31, 2018 (measurement date June 30, 2018)	0.021583%
Change - Increase (Decrease)	0.000139%

Sensitivity of the Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the District's proportionate share of the net pension liability of the Plan as of the measurement date, calculated using the discount rate of 7.15 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage-point lower (6.15 percent) or 1 percentage-point higher (8.15 percent) than the current rate:

December 31, 2019

	Discount Rate - 1% (6.15%)	Current Discount Rate (7.15%)	Discount Rate + 1% (8.15%)
Plan's Net Pension Liability	$ 3,858,716	$ 2,328,743	$ 1,065,860

December 31, 2018

	Discount Rate - 1% (6.15%)	Current Discount Rate (7.15%)	Discount Rate + 1% (8.15%)
Plan's Net Pension Liability	$ 3,460,143	$ 2,079,843	$ 940,428

NOTE 12 – DEFINED BENEFIT PENSION PLAN (Continued)

C. Proportionate Share of Net Pension Liability (Continued)

Subsequent Events

There were no subsequent events that would materially affect the results presented in this disclosure.

Recognition of Gains and Losses

Under GASB 68, gains and losses related to changes in total pension liability and fiduciary net position are recognized in pension expense systematically over time.

The first amortized amounts are recognized in pension expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to pensions and are to be recognized in future pension expense.

The amortization period differs depending on the source of the gain or loss:

Difference between projected and actual earnings	5 year straight-line amortization
All other amounts	Straight-line amortization over the expected average remaining service lives of all members that are provided with benefits (active, inactive and retired) as of the beginning of the measurement period

The expected average remaining service lifetime (EARSL) is calculated by dividing the total future service years by the total number of plan participants (active, inactive, and retired) in the Public Agency Cost-Sharing Multiple-Employer Plan (PERF C).

The EARSL for PERF C for the measurement period ending June 3, 2019 is 3.8 years, which was obtained by dividing the total service years of 530,470 (the sum of remaining service lifetimes of the active employees) by 140,593 (the total number of participants: active, inactive, and retired) in PERF C. Inactive employees and retirees have remaining service lifetimes equal to 0. Total future service is based on the members' probability of decrementing due to an event other than receiving a cash refund.

D. Pension Expense and Deferred Outflows and Deferred Inflows of Resources Related to Pensions

As of the start of the measurement period (July 1, 2018), the District's net pension liability was $2,079,843. For the measurement period ending June 30, 2019 (the measurement date), the District incurred a pension expense/(income) of $242,066.

NOTE 12 – DEFINED BENEFIT PENSION PLAN (Continued)

D. Pension Expense and Deferred Outflows and Deferred Inflows of Resources Related to Pensions (Continued)

As of December 31, 2019 and 2018, the District has deferred outflows and deferred inflows of resources related to pensions as follows:

December 31, 2019

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	$ 161,741	$ (12,532)
Changes of Assumptions	111,043	(39,364)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	(40,714)
Change in Employer's Proportion	167,416	-
Difference in Actual vs Projected Contributions	22,040	(24,186)
Pension Contributions Subsequent to Measurement Date	167,636	-
Total	**$ 629,876**	**$ (116,796)**

December 31, 2018

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	$ 237,108	$ (58,111)
Changes of Assumptions	79,800	(27,155)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	10,281	-
Change in Employer's Proportion	20,150	(37,623)
Difference in Actual vs Projected Contributions	177,020	(36,448)
Pension Contributions Subsequent to Measurement Date	141,225	-
Total	**$ 665,584**	**$ (159,337)**

NOTE 12 – DEFINED BENEFIT PENSION PLAN (Continued)

D. Pension Expense and Deferred Outflows and Deferred Inflows of Resources Related to Pensions (Continued)

These amounts above are net of outflows and inflows recognized in the 2018-19 measurement period expense. Contributions subsequent to the measurement date of $167,636 reported with deferred outflows of resources will be recognized as a reduction of the net pension liability in the upcoming fiscal year. Other amounts reported as deferred outflows and deferred inflows of resources related to pensions will be recognized in future pension expense as follows:

Fiscal Year Ended December 31:	Deferred Outflows/(Inflows) of Resources
2020	$ 267,439
2021	24,950
2022	44,830
2023	8,225
2024	-

E. Payable to the Pension Plan

At December 31, 2019, the District reported a payable of $0 for the outstanding amount of contributions to the pension plan required for the year ended December 31, 2019.

NOTE 13 – COMMITMENTS

In 2004, the Beaumont Basin Watermaster (Watermaster) was created to manage the groundwater excavations, replenishment thereof, and storage of supplemental water within the Beaumont Basin. The Watermaster consists of representatives from the Beaumont-Cherry Valley Water District, the City of Banning, the City of Beaumont, the South Mesa Water Company, and the Yucaipa Valley Water District. The District is a member agency of the Watermaster and contributes a varied annual amount to the Watermaster to fund its operations. For the years ended December 31, 2019 and 2018, the District contributed $25,171 and $37,874, respectively.

NOTE 14 – CONTINGENCIES

In the ordinary course of operations, the District is subject to claims and litigation from outside parties. After consultation with legal counsel, the District believes the ultimate outcome of such matters, if any, will not have a material adverse effect on the financial position of the District.

NOTE 15 – RISK MANAGEMENT

The District is exposed to various risks of loss related to torts, theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The District is a member of the Association of California Water Agencies/Joint Powers Insurance Authority (ACWA/JPIA), an intergovernmental risk sharing joint powers authority created to provide self-insurance programs for California water agencies. The purpose of the ACWA/JPIA is to arrange and administer programs of self-insured losses and to purchase excess insurance coverage. At December 31, 2019, the District participated in the liability, property, and workers' compensation programs of the ACWA/JPIA as follows:

- General and auto liability, public officials and employees' errors and omissions: Total risk financing limits of $2,000,000, combined single limit at $2,000,000 per occurrence. The District purchased additional excess coverage layers: $60 million for general, auto and public officials liability, which increases the limits on the insurance coverage noted above.

In addition to the above, the District also has the following insurance coverage:

- Employee dishonesty coverage up to $100,000 per loss includes public employee dishonesty, forgery or alteration and theft, computer fraud, disappearance and destruction coverages, subject to a $1,000 deductible per occurrence.
- Property loss is paid at the replacement cost for property on file, if replaced within two years after the loss, otherwise paid on an actual cash value basis, to a combined total of $100 million per occurrence, subject to a $1,000 deductible per occurrence. Mobile equipment and vehicles have a $1,000 deductible and $500 deductible per occurrence, respectively.
- Boiler and machinery coverage for the replacement cost up to $100 million per occurrence, subject to various deductibles depending on the type of equipment.
- Workers' compensation insurance up to California statutory limits for all work related injuries/illnesses covered by California law.

Settled claims have not exceeded any of the coverage amounts in any of the last three fiscal years and there was no reduction in the District's insurance coverage during the year ended December 31, 2019. Liabilities are recorded when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated net of the respective insurance coverage.

NOTE 16 – SUBSEQUENT EVENT

On March 11, 2020, the World Health Organization declared the novel strain of coronavirus (COVID-19) a global pandemic and recommended containment and mitigation measures worldwide. The COVID-19 outbreak in the United States has caused business disruption through mandated and voluntary closings of businesses and shelter in place orders for all but those deemed essential services. While the business disruption is currently expected to be temporary, there is considerable uncertainty around the duration of the closings and shelter in place orders. As a result, the outbreak has caused uncertainty in the financial markets. Although many of the District's services are considered essential, the District was closed to the public, certain other services transitioned to online-only, and because the District's major revenue source is directly impacted by these events, it is probable that this matter will negatively impact the District. However, the ultimate financial impact and duration cannot be estimated at this time.

Required Supplementary Information

Beaumont-Cherry Valley Water District

Required Supplementary Information
Schedule of Proportionate Share of the Net Pension Liability and Related Ratios as of the Measurement Date
Last 10 Years*

Measurement Date	Employer's Proportion of the Collective Net Pension Liability[1]	Employer's Proportionate Share of the Collective Net Pension Liability	Employer's Covered Payroll	Employer's Proportionate Share of the Net Pension Liability as a Percentage of the Employer's Covered Payroll	Pension Plan's Fiduciary Net Position as a Percentage of the Total Pension Liability
6/30/2015	0.020719%	$ 1,422,127	$ 1,716,891	82.83%	82.06%
6/30/2016	0.020557%	$ 1,778,844	$ 1,894,097	93.92%	75.87%
6/30/2017	0.021444%	$ 2,126,622	$ 1,969,047	108.00%	75.39%
6/30/2018	0.021583%	$ 2,079,843	$ 2,128,022	97.74%	79.62%
6/30/2019	0.022726%	$ 2,328,743	$ 2,455,799	94.83%	79.53%

[1] Proportion of the collective net pension liability represents the plan's proportion of PERF C, which includes both the Miscellaneous and Safety Risk pools excluding the 1959 Survivors Risk Pool.

* Measurement date 6/30/2014 (fiscal year 2015) was the 1st year of implementation. Additional years will be presented as they become available.

Beaumont-Cherry Valley Water District

Required Supplementary Information
Schedule of Plan Contributions
Last 10 Years*

Fiscal Year	Contractually Determined Contributions	Contributions in Relation to the Contractually Determined Contributions	Contribution Deficiency (Excess)	Employer's Covered Payroll	Contributions as a Percentage of Covered Payroll
12/31/2015	$ 275,729	$ (275,729)	$ -	$ 1,914,001	14.41%
12/31/2016	237,259	(237,259)	-	1,985,446	11.95%
12/31/2017	241,633	(241,633)	-	2,019,541	11.96%
12/31/2018	275,682	(275,682)	-	2,393,812	11.52%
12/31/2019	303,397	(303,397)	-	2,532,417	11.98%

* Measurement date 6/30/2014 (fiscal year 2015) was the 1st year of implementation. Additional years will be presented as they become available.

Notes to Schedule:

Change in Benefit Terms: None

Changes in Assumptions: In 2018, demographic assumptions and inflation rate were changed in accordance to the CalPERS Experience Study and Review of Actuarial Assumptions December 2017. There were no changes in the discount rate. In 2017, the accounting discount rate was reduced from 7.65 percent to 7.15 percent. In 2016, there were no changes. In 2015, amounts reported reflect an adjustment of the discount rate from 7.5 percent (net of administrative expense) to 7.65 percent (without a reduction for pension plan administrative expense). In 2014, amounts reported were based on the 7.5 percent discount rate.

Beaumont-Cherry Valley Water District

Required Supplementary Information
Schedule of Changes in Other Post-Employment Benefits and Related Ratios
Last Ten Years*

Fiscal Year	2018	2019
Measurement Period	2017	2018
Total OPEB Liability		
Service cost	$ 108,164	$ 104,143
Interest	48,433	54,966
Changes in assumptions	(64,185)	90,015
Benefit payments	(12,565)	(29,345)
Net change in total OPEB liability	79,847	219,779
Total OPEB liability - beginning	1,251,010	1,330,857
Total OPEB liability - ending (a)	1,330,857	1,550,636
Plan Fiduciary Net Position		
Contributions – employer	-	-
Net investment income	-	-
Benefit payments	-	-
Administrative expense	-	-
Net change in plan fiduciary net position	-	-
Plan fiduciary net position - beginning	-	-
Plan fiduciary net position - ending (b)	-	-
Net OPEB liability - ending (a) - (b)	$1,330,857	$1,550,636
Plan fiduciary net position as a percentage of the total OPEB liability	0.0%	0.0%
Covered-employee payroll	$2,186,445	$2,353,519
Net OPEB liability as a percentage of covered employee payroll	60.9%	65.9%

Notes to schedule:

Changes in assumptions: Discount rate changed from 3.87% in 2018 to 3.50% in 2019.

The District does not have assets accumulated in a trust that meet the criteria of GASB 75 to pay related benefits.

*Historical information is required for measurement periods for which GASB 75 is applicable. Future years' information will be displayed up to 10 years as information becomes available. Fiscal year 2018 was the first year of implementation.

Statistical Section

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Beaumont-Cherry Valley Water District

Net Position by Component
Last Ten Years

	2010	2011	2012	2013	2014
Net investment in capital assets	$ 99,800,836	$ 99,194,309	$ 98,791,875	$ 117,924,668	$ 116,054,562
Restricted					
Capital commitments	-	-	-	-	2,138,747
Notes receivable	-	-	-	-	-
Unrestricted	7,090,191	5,283,208	5,827,344	5,499,646	13,498,835
Total net position	$ 106,891,027	$ 104,477,517	$ 104,619,219	$ 123,424,314	$ 131,692,144

	2015	2016	2017	2018	2019
Net investment in capital assets	$ 115,246,313	$ 114,241,568	$ 112,850,063	$ 115,174,259	$ 114,636,883
Restricted					
Capital commitments	9,225,608	10,226,231	20,668,475	26,250,409	29,534,286
Notes receivable	-	-	619,227	573,627	523,466
Unrestricted	14,338,676	25,294,018	26,777,618	28,191,312	27,472,086
Total net position	$ 138,810,597	$ 149,761,817	$ 160,915,383	$ 170,189,607	$ 172,166,721

Source: *Beaumont-Cherry Valley Water District*

Beaumont-Cherry Valley Water District

Changes in Net Position
Last Ten Years

	2010	2011	2012	2013
OPERATING REVENUES				
Metered water sales	$ 4,170,001	$ 4,766,022	$ 5,139,923	$ 5,046,558
Water service charges	1,810,098	2,188,438	2,339,128	2,544,173
Water importation pass-through charges	1,025,996	1,326,091	2,318,837	2,321,236
Water pumping power pass-through charges	1,349,287	1,617,081	1,663,191	1,685,246
Development and installation charges	228,986	127,141	146,889	271,122
Other revenue	381,094	288,708	364,628	369,537
Total operating revenues	8,965,462	10,313,481	11,972,596	12,237,872
OPERATING EXPENSES [1]				
Salaries and employee benefits	2,404,984	3,094,522	4,040,757	3,780,225
Pension expense (credit)	-	-	-	-
Energy expenses			1,231,156	1,435,343
Water purchases	1,815,459	3,125,537	2,642,003	2,607,642
Administration	187,758	196,422	552,707	270,533
Operations	3,051,149	2,877,985	281,110	297,048
Maintenance and repairs	-	-	577,422	272,990
Depreciation	1,998,033	2,002,794	2,072,402	2,528,691
Insurance	-	-	95,208	96,385
Professional fees	-	-	211,580	295,528
Other expenses	193,713	199,934	11,749	11,246
Total operating expenses	9,651,096	11,497,194	11,716,094	11,595,631
Operating Income (loss)	(685,634)	(1,183,713)	256,502	642,241
NONOPERATING REVENUES (EXPENSES)				
Interest earnings	89,198	127,905	110,426	84,830
Rental income	22,031	20,507	22,969	17,815
Other revenue	193,834	101,383	43,092	3,889
Gain/loss on disposal of capital assets	4,500	-	-	(41,421)
Interest expense	(38,278)	(137,271)	(122,975)	(49,968)
Amortization of deferred charges	(13,742)	(18,322)	-	-
Other non-operating expenses	(104,659)	-	-	-
Total nonoperating revenues (expenses)	152,884	94,202	53,512	15,145
Income (loss) before contributions	(532,750)	(1,089,511)	310,014	657,386
CAPITAL CONTRIBUTIONS				
Donated capital assets	-	-	-	-
Capital contribution to other government	-	-	-	-
Capacity charges	1,853,106	579,869	66,382	1,025,791
Total capital contributions	1,853,106	579,869	66,382	1,025,791
SPECIAL ITEM				
Change in assumptions - OPEB	-	-	-	-
Change in net position	1,320,356	(509,642)	376,396	1,683,177
Net position, beginning of year	106,824,178	106,891,027	104,477,517	104,619,219
Prior period adjustment	(1,253,507)	(1,903,868)	(234,694)	17,121,918
Net position, end of year	$ 106,891,027	$ 104,477,517	$ 104,619,219	$ 123,424,314

Note:
(1) Amounts may appear to be inconsistent and incomparable as classifications of operating expenses changed in 2012

Source: *Beaumont-Cherry Valley Water District*

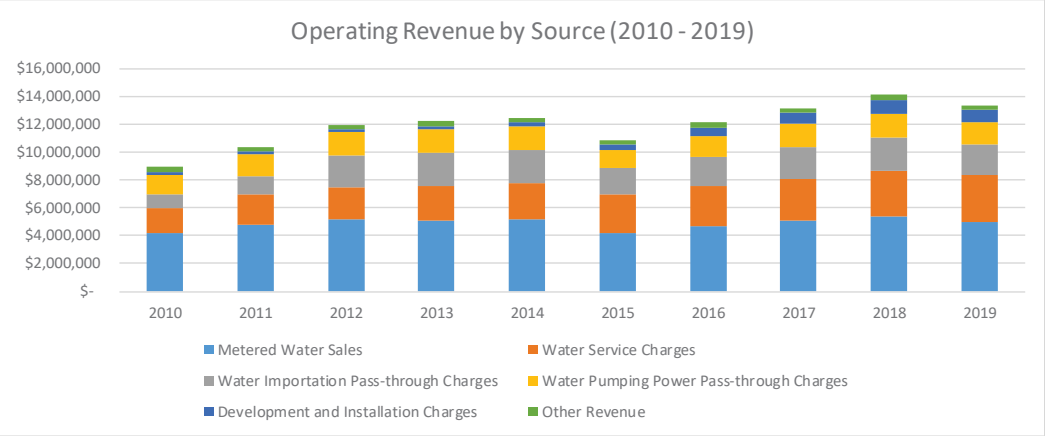
(continued)

2014	2015	2016	2017	2018	2019
$ 5,174,292	$ 4,165,087	$ 4,655,883	$ 5,060,758	$ 5,375,165	$ 4,933,445
2,623,140	2,756,998	2,865,733	3,014,752	3,238,643	3,403,608
2,334,731	1,889,751	2,102,694	2,288,455	2,424,212	2,237,051
1,674,936	1,355,677	1,508,460	1,641,681	1,739,022	1,604,661
315,244	348,830	653,251	818,430	979,629	851,465
313,807	315,952	353,419	353,433	403,970	321,521
12,436,150	10,832,295	12,139,440	13,177,509	14,160,641	13,351,751
2,985,138	3,076,232	2,974,987	3,395,058	3,855,018	4,214,548
-	394,267	(225,040)	(87,514)	92,646	242,066
1,772,112	1,371,858	1,344,733	1,598,665	1,760,641	1,621,377
1,396,410	879,066	2,954,123	4,308,030	3,842,357	5,200,241
173,873	381,598	193,382	284,724	313,973	508,291
468,345	236,757	234,245	292,991	420,403	586,603
469,552	591,554	604,118	515,645	493,357	536,022
2,514,369	2,517,384	2,528,643	2,591,208	2,575,804	2,707,811
80,162	78,285	75,502	73,674	73,530	75,858
310,590	184,169	228,162	250,504	144,908	272,752
10,736	10,503	10,978	12,115	11,334	29,730
10,181,287	9,721,673	10,923,833	13,235,100	13,583,971	15,995,299
2,254,863	1,110,622	1,215,607	(57,591)	576,670	(2,643,548)
55,597	84,254	180,342	350,406	1,121,500	1,668,981
21,007	20,103	20,577	21,715	20,934	23,805
291,671	35,528	1,101	89,591	24,681	3,328
3,310	-	(7,898)	(37,031)	-	15,840
(300)	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
371,285	139,885	194,122	424,681	1,167,115	1,711,954
2,626,148	1,250,507	1,409,729	367,090	1,743,785	(931,594)
-	1,092,505	1,004,624	-	2,423,839	313,440
-	-	-	-	-	(569,812)
2,677,180	6,296,897	8,536,867	11,270,398	5,282,211	2,989,469
2,677,180	7,389,402	9,541,491	11,270,398	7,706,050	2,733,097
2,964,502	-	-	-	-	-
8,267,830	8,639,909	10,951,220	11,637,488	9,449,835	1,801,503
123,424,314	131,692,144	138,810,597	149,761,817	160,915,383	170,365,218
-	(1,521,456)	-	(483,922)	-	-
$ 131,692,144	$ 138,810,597	$ 149,761,817	$ 160,915,383	$ 170,365,218	$ 172,166,721

Beaumont-Cherry Valley Water District

Operating Revenue by Source
Last Ten Years

Fiscal Year	Metered Water Sales	Water Service Charges	Water Importation Pass-through Charges	Water Pumping Power Pass-through Charges	Development and Installation Charges	Other Revenue	Totals
2010	$ 4,170,001	$ 1,810,098	$ 1,025,996	$ 1,349,287	$ 228,986	$ 381,094	$ 8,965,462
2011	4,766,022	2,188,438	1,326,091	1,617,081	127,141	288,708	10,313,481
2012	5,139,923	2,339,128	2,318,837	1,663,191	146,889	364,628	11,972,596
2013	5,046,558	2,544,173	2,321,236	1,685,246	271,122	369,537	12,237,872
2014	5,174,292	2,623,140	2,334,731	1,674,936	315,244	313,807	12,436,150
2015	4,165,087	2,756,998	1,889,751	1,355,677	348,830	315,952	10,832,295
2016	4,655,883	2,865,733	2,102,694	1,508,460	653,251	353,419	12,139,440
2017	5,060,758	3,014,752	2,288,455	1,641,681	818,430	353,433	13,177,509
2018	5,375,165	3,238,643	2,424,212	1,739,022	979,629	403,970	14,160,641
2019	4,933,445	3,403,608	2,237,051	1,604,661	851,465	321,521	13,351,751

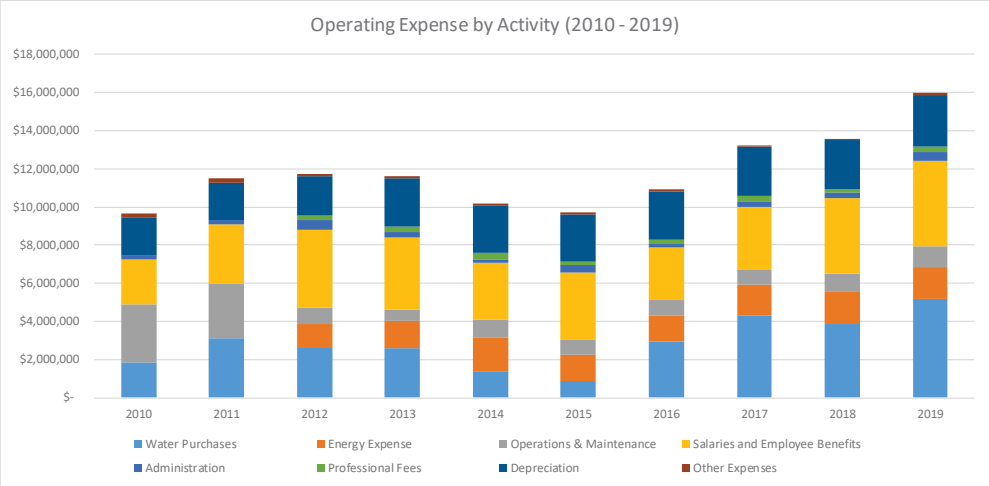


Source: *Beaumont-Cherry Valley Water District*

Beaumont-Cherry Valley Water District

Operating Expense by Activity[(1)(2)]
Last Ten Years

Fiscal Year	Salaries and Employee Benefits	Water Purchases	Energy Expense	Operations & Maintenance	Administration	Professional Fees	Depreciation	Other Expenses	Totals
2010	$ 2,404,984	$ 1,815,459	$ -	$ 3,051,149	$ 187,758	$ -	$ 1,998,033	$ 193,713	$ 9,651,096
2011	3,094,522	3,125,537	-	2,877,985	196,422	-	2,002,794	199,934	11,497,194
2012	4,040,757	2,642,003	1,231,156	858,532	552,707	211,580	2,072,402	106,957	11,716,094
2013	3,780,225	2,607,642	1,435,343	570,038	270,533	295,528	2,528,691	107,631	11,595,631
2014	2,985,138	1,396,410	1,772,112	937,897	173,873	310,590	2,514,369	90,898	10,181,287
2015	3,470,499	879,066	1,371,858	828,311	381,598	184,169	2,517,384	88,788	9,721,673
2016	2,749,947	2,954,123	1,344,733	838,363	193,382	228,162	2,528,643	86,480	10,923,833
2017	3,307,544	4,308,030	1,598,665	808,636	284,724	250,504	2,591,208	85,789	13,235,100
2018	3,947,664	3,842,357	1,760,641	913,760	313,973	144,908	2,575,804	84,864	13,583,971
2019	4,456,614	5,200,241	1,621,377	1,122,625	508,291	272,752	2,707,811	105,588	15,995,299



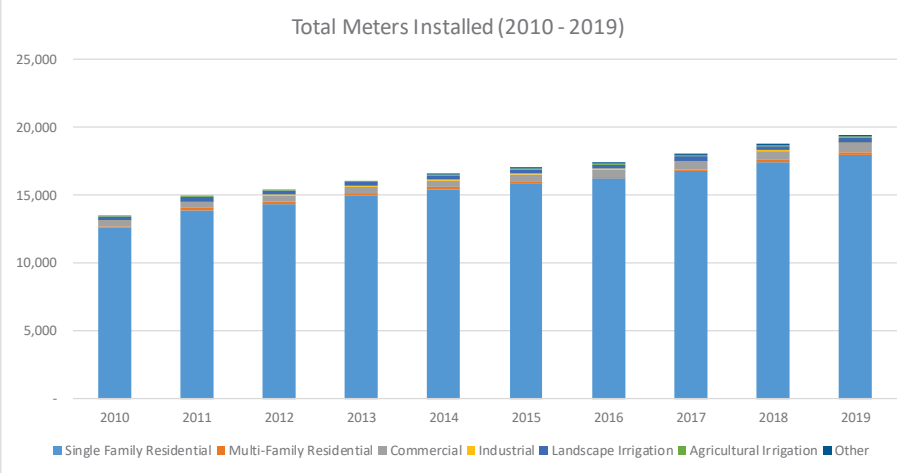
Notes:
(1) Amounts may appear to be inconsistent and incomparable as classifications of operating expenses changed in 2012
(2) Some amounts from the Changes in Net Position schedule are grouped together for comparability

Source: *Beaumont-Cherry Valley Water District*

Beaumont-Cherry Valley Water District

Customers by Type
Last Ten Years

Fiscal Year	Single Family Residential	Multi-Family Residential	Commercial	Industrial	Landscape Irrigation	Agricultural Irrigation	Other	Totals
2010	12,578	114	453	23	286	82	-	13,536
2011	13,921	122	494	26	288	84	-	14,935
2012	14,388	130	507	26	297	86	-	15,434
2013	14,981	140	536	31	311	89	-	16,088
2014	15,436	140	540	31	314	90	1	16,552
2015	15,860	140	546	31	321	90	2	16,990
2016	16,222	141	560	31	326	89	1	17,370
2017	16,768	141	631	31	337	88	1	17,997
2018	17,430	159	692	33	354	88	1	18,757
2019	18,004	159	700	33	364	87	2	19,349



Source: *Beaumont-Cherry Valley Water District*

Beaumont-Cherry Valley Water District

Principal Customers
Current and Seven Years Ago [1]

	2019		2010			
Customer	Annual Consumption (hcf)	Percentage of Total Consumption	Annual Consumption (hcf)	Percentage of Total Consumption	Change in Consumption	Percentage of Change
City of Beaumont	261,504	5.33%	323,495	6.73%	(61,991)	-19.16%
Beaumont Unified School District	172,906	3.53%	157,291	3.27%	15,615	9.93%
K Hovnanian's Four Seasons	168,244	3.43%	75,843	1.58%	92,401	121.83%
Highland Springs Country Club	68,570	1.40%	51,032	1.06%	17,538	34.37%
Perricone Juices	60,791	1.24%	26,483	0.55%	34,308	129.55%
Solera Oak Valley Greens	49,122	1.00%	64,616	1.34%	(15,494)	-23.98%
Fairway Canyon Community Association	47,094	0.96%	54,593	1.14%	(7,499)	-13.74%
Highland Springs Owners Association	23,702	0.48%	28,546	0.59%	(4,844)	-16.97%
Oak Valley II Community Association	23,467	0.48%	-	0.00%	23,467	100.00%
Country Highlands MHC	23,432	0.48%	30,631	0.64%	(7,199)	-23.50%
	898,832	18.33%	812,530	16.91%	86,302	
Total Water Consumed	4,903,165	100.00%	4,805,082	100.00%		

Notes:
(1) Data for years prior to 2010 not available

Source: *Beaumont-Cherry Valley Water District*

Beaumont-Cherry Valley Water District

Revenue Rates
Last Ten Years

Charges for Water Used (per ccf)

Fiscal Year	Single-Family Residential Tier 1	Single-Family Residential Tier 2	Multi-Family Residential Tier 1	Multi-Family Residential Tier 2	Commercial/ Fire Service	Landscape	Agricultural Irrigation	Construction
2010	$ 0.80	$ 0.88	$ 0.80	$ 0.82	$ 0.82	$ 0.96	$ 0.84	$ 0.96
2011	0.91	1.00	0.91	0.93	0.94	1.09	0.96	1.09
2012	0.96	1.05	0.96	0.98	0.99	1.15	1.01	1.15
2013	0.96	1.05	0.96	0.98	0.99	1.15	1.01	1.15
2014	0.96	1.05	0.96	0.98	0.99	1.15	1.01	1.15
2015	0.96	1.05	0.96	0.98	0.99	1.15	1.01	1.15
2016	0.96	1.05	0.96	0.98	0.99	1.15	1.01	1.15
2017	0.96	1.05	0.96	0.98	0.99	1.15	1.01	1.15
2018	0.96	1.05	0.96	0.98	0.99	1.15	1.01	1.15
2019	0.96	1.05	0.96	0.98	0.99	1.15	1.01	1.15

Domestic Service Charge (bi-monthly)

Fiscal Year	5/8"	3/4"	1"	1.5"	2"	3"	4"	6"	8"	10"	12"
2010	15.00	22.50	37.50	75.01	120.01	240.02	375.03	750.05	1,200.08	1,725.12	2,325.16
2011	17.04	25.56	42.61	85.21	136.34	272.67	426.05	852.10	1,363.36	1,959.83	2,641.51
2012	18.01	27.02	45.03	90.06	144.09	288.18	450.28	900.55	1,440.88	2,071.27	2,791.71
2013	18.01	27.02	45.03	90.06	144.09	288.18	450.28	900.55	1,440.88	2,071.27	2,791.71
2014	18.01	27.02	45.03	90.06	144.09	288.18	450.28	900.55	1,440.88	2,071.27	2,791.71
2015	18.01	27.02	45.03	90.06	144.09	288.18	450.28	900.55	1,440.88	2,071.27	2,791.71
2016	18.01	27.02	45.03	90.06	144.09	288.18	450.28	900.55	1,440.88	2,071.27	2,791.71
2017	18.01	27.02	45.03	90.06	144.09	288.18	450.28	900.55	1,440.88	2,071.27	2,791.71
2018	18.01	27.02	45.03	90.06	144.09	288.18	450.28	900.55	1,440.88	2,071.27	2,791.71
2019	18.01	27.02	45.03	90.06	144.09	288.18	450.28	900.55	1,440.88	2,071.27	2,791.71

Source: *Beaumont-Cherry Valley Water District*

Beaumont-Cherry Valley Water District

Ratios of Outstanding Debt by Type
Last Ten Years

Fiscal Year	General Obligation Bonds	Revenue Bonds	Notes Payable	Capital Leases	Loans Payable	Total Outstanding Debt	Per Capita	Share of Personal Income
2010	$ -	$ -	$4,530,000	$ -	$ -	$4,530,000	$ 122	0%
2011	-	-	3,585,000	-	-	3,585,000	92.99	0%
2012	-	-	2,600,000	-	-	2,600,000	66.07	0%
2013	-	-	-	-	-	-	-	0%
2014	-	-	-	-	-	-	-	0%
2015	-	-	-	-	-	-	-	0%
2016	-	-	-	-	-	-	-	0%
2017	-	-	-	-	-	-	-	0%
2018	-	-	-	-	-	-	-	0%
2019	-	-	-	-	-	-	-	0%

Source: *Beaumont-Cherry Valley Water District*

Beaumont-Cherry Valley Water District

Debt Coverage
Last Ten Years

Fiscal Year	Net Revenues	Operating Expenses	Net Available Revenues	Principal	Interest	Total	Debt Coverage Ratio
2010	$ 11,123,631	$ (7,653,063)	$ 3,470,568	$ 470,000	$ -	$ 470,000	7.38
2011	11,143,145	(9,494,400)	1,648,745	945,000	145,256	1,090,256	1.74
2012	12,215,465	(9,643,692)	2,571,773	985,000	112,976	1,097,976	2.61
2013	13,370,197	(9,066,940)	4,303,257	2,600,000	71,938	2,671,938	1.66
2014	15,481,605	(7,666,918)	7,814,687	-	300	300	-
2015	17,269,077	(7,204,289)	10,064,788	-	-	-	-
2016	20,878,327	(8,395,190)	12,483,137	-	-	-	-
2017	24,909,619	(10,643,892)	14,265,727	-	-	-	-
2018	20,609,967	(11,008,167)	9,601,800	-	-	-	-
2019	18,037,334	(13,287,488)	4,749,846	-	-	-	-

Source: *Beaumont-Cherry Valley Water District*

Beaumont-Cherry Valley Water District

Demographic and Economic Statistics
Last Ten Years

Calendar Year	Population	County of Riverside Median Household Income	County of Riverside Per Capita Personal Income	County of Riverside Unemployment Rate
2010	37,278	$ 57,768	$ 24,431	11.2%
2011	38,553	58,365	24,516	12.9%
2012	39,353	57,096	23,863	14.2%
2013	40,424	56,529	23,591	14.9%
2014	42,117	63,523	23,660	14.3%
2015	43,629	56,603	23,783	12.9%
2016	45,349	57,972	24,443	11.3%
2017	46,179	60,100	36,800	4.3%
2018	49,630	63,900	39,300	4.1%
2019	51,475	63,900	39,300	3.6%

Sources:
Population Source: State of California Department of Finance;
County Source: Riverside County Economic Development Agency

Beaumont-Cherry Valley Water District

Principal Employers for the Community Area [1]
Current Year [3]

Employer	2019 [3] Number of Employees	2019 [3] Percent of Total Employment [2]
County of Riverside	21,215	30.19%
March Air Reserve Base	9,000	12.81%
University of California, Riverside	8,735	12.43%
Kaiser Permanente Riverside Medical Center	5,592	7.96%
Corona-Norco Unified School District	4,989	7.10%
Pechanga Resort & Casino	4,683	6.66%
Riverside Unified School District	4,335	6.17%
Hemet Unified School District	4,302	6.12%
Eisenhower Medical Center	3,743	5.33%
Moreno Valley Unified School District	3,684	5.24%
Total	70,278	100.00%

Notes:
(1) Community Area defined as the County of Riverside
(2) Total employment for the ten major employers for the community area
(3) County of Riverside Economic Development Agency last updated 2018

Source: *Riverside County Economic Development Agency*

Beaumont-Cherry Valley Water District

Full-time and Part-time District Employees by Department
Last Ten Years[1]

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Department										
Engineering	2	2	2	2	2	2	3	5	5	6
Finance & Administrative Services	11	13	7	8	6	10	10	12	13	13
IT	0	0	1	1	1	1	1	1	1	1
Human Resources	0	0	0	0	0	0	0	0	0	1
Operations										
Source of Supply	4	4	3	3	3	3	3	4	4	4
Transmission and Distribution	13	12	11	12	12	11	11	10	13	13
Customer Service and Meter Reading	3	3	3	3	3	3	3	3	3	3
Total	33	34	27	29	27	30	31	35	39	41

Notes:
(1) As of 12/31 of each year

Beaumont-Cherry Valley Water District

Operating Indicators by Function
Last Ten Years

Function/Program	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
District Service Area (square miles)	28	28	28	28	28	28	28	28	28	28
Water mains (miles)	282	282	282	282	282	282	282	282	282	303
Fire hydrants	1,248	1,310	1,375	1,443	1,515	1,590	1,669	1,752	1,840	2,131
Number of reservoirs (non-potable)	-	1	1	1	1	1	1	1	1	1
Reservoir Capacity (MG)	-	2	2	2	2	2	2	2	2	2
Storage Tanks	13	13	13	13	13	13	13	13	13	20
Storage Capacity (MG)	23	23	23	23	23	23	23	23	23	23
Number of wells	22	21	21	21	21	21	21	21	21	21
Well Capacity (GPM)	23,175	23,175	23,175	23,175	23,175	23,175	23,175	23,175	23,175	23,175

Source: *Beaumont-Cherry Valley Water District*

Beaumont-Cherry Valley Water District
Regular Board Meeting
June 10, 2020

Item **9**

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Review of Allocation of Water Supply Credits for Riverside County Assessor's Parcel No. 401-071-039, located on Rancho Drive, north of Orchard Street and south of Bonita Drive in the Community of Cherry Valley**

Staff Recommendation

Receive and File

Background

The Applicant, Kurt Latham, has requested water service from the District for a proposed single family residence to be constructed on an existing parcel of land located on Rancho Drive and further identified as Riverside County Assessor's Parcel No. 401-071-039.

Subject property is located on Rancho Drive, north of Orchard Street and south of Bonita Drive in the Community of Cherry Valley, California (see Figure 1 – Location Map, attached). Said property has not yet been assigned a physical mailing address. This parcel is currently within the District's Service Boundary and the District has confirmed there is an 8-inch water main fronting the property in Rancho Drive. The Applicant plans to build a single family residence on the subject parcel. The Applicant will need to secure the necessary approvals from the County of Riverside.

The subject parcel is approximately 2.3 acres in size and was originally part of the 100 lot Bonita Vista Mutual Water Company Service Area Annexation which took place in or around 2003. At that time, the District arranged for project financing through the property owners to pay for activities related to the annexation process as well as construction of the required service facilities and connection fees. This property has paid those fees at this time but has yet to connect to the District facilities.

Stephen Bell, the original owner during the annexation proceedings financed 9 water shares for two (2) of three (3) parcels he owned within the Mutual Water Company service area. One of the parcels (APN 401-071-024) does not have water shares tied to it, as it is an undevelopable lot (due to it being narrow). The remaining two (2) parcels (APNs 401-071-038 and 401-071-039) total over nine (9) acres and have paid for 9 shares (or services). Due to the County of Riverside's Land Use Designation lot sizing of Very Low Density Residential (VLDR) which identifies lot sizes as 1-acre lot minimums, APN 401-071-039 was allotted two (2) water shares.

On December 18, 2018, District staff provided Mr. Bell Staff analysis of financing activities related to the shares and Mr. Bell's current standing on the parcels in our letter dated 12/18/2018 regarding this matter (see Figure 2 – Verification of Service Letter). The following year, Mr. Bell paid off the outstanding finance balance for the nine (9) water shares which includes the two (2) water shares (services) associated with APN 401-071-039. When Mr. Bell paid off the balance, he informed the District of his intentions to sell both parcels and wanted to assure the prospective buyers that the water service was secured. The District informed Mr. Bell that the buyer of either

property would need to provide the District with appropriate documentation of ownership after the sale of the property.

Recently, District Staff was contacted by Kurt Latham while APN 401-071-039 was in escrow providing District staff with the required documentation. Mr. Latham further informed staff that currently, the site development only proposed to utilize one (1) water service for one proposed single family residence. The impact of this residence on the District's water supply system is minimal and has been planned for as part of the Bonita Vista Mutual Water Company (BVMWC) Annexation and Water Service financing activity. At this time, District Staff wishes to memorialize the completed research and provide a record of ongoing requirements related to these parcels as they related to the BVMWD Annexation and Water Service proceedings. Since service to these properties have previously been provided by Board action and District Facilities and Financing Agreements, no further Board action is required.

Final meter size will be determined by the Applicant. Fire Flow requirements will be determined by the County of Riverside Fire Department and said requirements will dictate actual required Fire Hydrant Fire Flows and residential fire sprinkler requirements for the residence.

Conditions:

The Applicant shall conform to all District requirements for water service and all County of Riverside requirements.

1. The Applicant will be required to pay front footage fees along all property frontages where facilities are currently installed.
2. To minimize the use of potable water, the District requires the applicant to conform to the County of Riverside Landscaping Ordinances which pertains to water efficient landscape requirements and the following:
    a. Landscaped areas which have turf, shall have "smart irrigation controllers" which use Evapotranspiration (ET) data to automatically control the watering. Systems shall have an automatic rain sensor to prevent watering during and shortly after rainfall, automatically determine watering schedule based on weather conditions, and not require seasonal monitoring changes. Orchard areas, if any, shall have drip irrigation.
    b. Landscaping in non-turf areas should be drought-tolerant, consisting of planting materials native to the region. Irrigation systems for these areas should be drip or bubbler type.

Fiscal Impact:

Fees related to the subject property taking service from the District have been paid as part of the 2003 Bonita Vista Annexation Agreement. The applicant shall be responsible for future costs associated with fire flow analysis.

Attachments

Figure 1 – Location Map

Figure 2 – Verification of Service Letter

Staff Report prepared by Aaron Walker, Engineering Office Assistant

FIGURE 1 – Location Map

Beaumont-Cherry Valley Water District

Phone: (951) 845-9581 Fax: (951) 845-0159
Email: info@bcvwd.org

http://www.bcvwd.org

December 18, 2018

Stephen Bell
3902 Sheridan Place
Carlsbad, CA 92008

Subject: Verification of Service Status Regarding Riverside County Assessor's Parcel Numbers 401-071-024, 401-071-039, and 401-071-038 (Finance Standing of 9 Shares) Cherry Valley, CA

Dear Mr. Bell:

The District has conducted an audit on Riverside County Assessor's Parcel Numbers (APN) 401-071-024, 401-071-039, and 401-071-038. The District identified an original financing amount of **FORTY-NINE THOUSAND FIVE HUNDRED DOLLARS AND 00/100 ($49,500.00)** for nine (9) water shares (see Attachment 1 – Special Assessments). The nine (9) water shares are based on the number of connections to serve the potential needs of the three (3) subject parcels, assuming that the County of Riverside Land Use Designation Summary Table (Attachment 2) which identifies VLDR minimum lot sizing of 1 acre is maintained. The three (3) subject parcels Land Use Designations were identified as VLDR (see Attachment 3 – Riverside County Parcel Reports).

August 15, 2003, an Annexation Agreement was recorded by the County of Riverside (see Attachment 4 – Annexation Agreement) and said agreement was based on nine (9) water shares for the subject parcels at **FIVE THOUSAND FIVE HUNDRED DOLLARS AND 00/100 ($5,500.00)** each. The District has reviewed the amortization payment schedule for subject parcels and as of December 11, 2018, the District has identified the following information:

Amount Paid to Date	Principal Balance	Projected Interest Balance	Projected Payoff Date *
$24,777.39	$24,722.61	$13,063.83	04/15/2028

*Note: The payoff date is based on the annexation agreement, and the amortization schedule (Attachment 5) reflects the remaining balance and schedule.

Per the Annexation Agreement, signed July 8, 2003, Item "C" states the cost of the Bonita Vista Water System shall be borne by the existing shareholders of Bonita Vista. The District has identified the property owner has financed nine

Beaumont-Cherry Valley Water District

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Email: info@bcvwd.org

http://www.bcvwd.org

(9) of the 100 original water shares. The District will provide water service to the subject properties assuming all obligations to provide service are met including, but not limited to, the full payment for nine (9) water shares and the Rules and Regulations Governing Water Service as amended by the Board of Directors from time to time (referenced in Section "6" of the Annexation Agreement).

The District has identified (based on Section "6" of the Annexation Agreement) that the dwelling unit lot designation allows:

- APN 401-071-038 a share limit to seven (7) water shares of the 100 original water shares
- APN 401-071-039 a share limit to two (2) water shares of the 100 original water shares

The District has identified (based on Section "6" Of the Annexation Agreement) that the dwelling unit lot designation does not allow APN 401-071-024 any shares of the 100 original water shares.

The Applicant shall conform to all District requirements for water service and all County of Riverside requirements regarding installation of service once payment is made in-full.

1. County of Riverside identifies APN's 401-071-024, 401-071-039, and 401-071-038 as Very Low Density Residential (VLDR) lots. The VLDR lots are subject to a land use designation minimum of 1 acre.
2. Should the property owner sell property or change of ownership occur, owner shall adhere to the Annexation Agreement Section "14" which states "Property owner hereby agrees to provide district with written notice within ten (10) days after Property Owner has agreed to sell, give, donate or otherwise alienate the Property to a third party. The written notice shall include the following:
   a. Name and address of the proposed transferee;
   b. Name of the Escrow Company handling the transaction;
   c. Date of close of escrow; and
   d. Name of Title Company issuing the title policy.

Beaumont-Cherry Valley Water District

Phone: (951) 845-9581 Fax: (951) 845-0159
Email: info@bcvwd.org

http://www.bcvwd.org

Property Owner hereby authorizes the District to examine and copy any records concerning the sale of the Property."

3. If applicable, the Applicant shall connect to the non-potable water system for irrigation supply. To minimize the use of potable water, the District requires the applicant conform to the City of Beaumont Landscaping Ordinances and Zoning Requirements and/or County of Riverside Landscaping Ordinances (as applicable) which pertains to water efficient landscape requirements and the following:

   a. Landscaped areas which have turf shall have "smart irrigation controllers" which use Evapotranspiration (ET) data to automatically control the watering. Systems shall have an automatic rain sensor to prevent watering during and shortly after rainfall and automatically determine watering schedule based on weather conditions, and not require seasonal monitoring changes. Orchard areas, if any, shall have drip irrigation.

   b. Landscaping in non-turf areas should be drought tolerant consisting of planting materials. Irrigation systems for these areas should be drip or bubbler type.

We look forward to working with you in the coming months and please feel free to contact the office should you have any questions.

Sincerely,

Mark Swanson, P.E.
Senior Engineer
BCVWD

MS/aw

Attachments:

1. Attachment 1 – Special Assessments
2. Attachment 2 – Land Use Designations Summary Table
3. Attachment 3 – Riverside County Parcel Reports
4. Attachment 4 – Annexation Agreement
5. Attachment 5 – Amortization Schedule

ATTACHMENT 1

SPECIAL ASSESSMENTS

Special Assessments

Assessment Listing

Beaumont-Cherry Valley Water District
560 Magnolia Avenue
Beaumont CA 92223
(951) 845-9581
www.bcvwd.org

User: llopez
Printed: 12/12/2018 - 7:43 AM
First Sort: Assessment Type
Second Sort: (None)

Assessment No	Assessment Date	Tax Lot	Cust	Customer Name	Billing Cycle	Interest Fee	Interest Rate	Assessment Status
00036	6/15/2008	401-071/038-6	013723	Steve Bell	BV02	Interest	2.74%	Active

Assessment Type	Lot No	Service Address	Bill Method	Principal Fee	Original Principal	Principal Balance
BonitaVista	017999		Fixed Principal		$49,500.00	$24,722.61
				Payments Received thru 11/30/2018	-$24,777.39	

Summary of (None):

Total Original Principal:	49,500.00	
Total Principal Balance:		24,722.61
Total Outstanding Principal:		0.00

Summary of Assessment Type: BonitaVista

Total Original Principal:	**49,500.00**	
Total Principal Balance:		**24,722.61**
Total Outstanding Principal:		**0.00**

Grand Total Original Principal:	**49,500.00**
Grand Total Principal Balance:	**24,722.61**
Grand Total Outstanding Principal:	**0.00**

1 Records

ATTACHMENT 2

LAND USE DESIGNATION SUMMARY TABLE

Table LU 4 Land Use Designations Summary

Foundation Component	Area Plan Land Use Designation	Building Intensity Range (du/ac or FAR) [1, 2,3]	Notes
Agriculture	Agriculture (AG)	10 ac min.	• Agricultural land including row crops, groves, nurseries, dairies, poultry farms, processing plants, and other related uses. • One single-family residence allowed per 10 acres except as otherwise specified by a policy or an overlay.
Rural	Rural Residential (RR)	5 ac min.	• Single-family residences with a minimum lot size of 5 acres. • Allows limited animal keeping and agricultural uses, recreational uses, compatible resource development (not including the commercial extraction of mineral resources) and associated uses and governmental uses.
	Rural Mountainous (RM)	10 ac min.	• Single-family residential uses with a minimum lot size of 10 acres. • Areas of at least 10 acres where a minimum of 70% of the area has slopes of 25% or greater. • Allows limited animal keeping, agriculture, recreational uses, compatible resource development (which may include the commercial extraction of mineral resources with approval of a SMP) and associated uses and governmental uses.
	Rural Desert (RD)	10 ac min.	• Single-family residential uses with a minimum lot size of 10 acres. • Allows limited animal keeping, agriculture, recreational, renewable energy uses including solar, geothermal and wind energy uses, as well as associated uses required to develop and operate these renewable energy sources, compatible resource development (which may include the commercial extraction of mineral resources with approval of SMP), and governmental and utility uses.
Rural Community	Estate Density Residential (RC-EDR)	2 ac min.	• Single-family detached residences on large parcels of 2 to 5 acres. • Limited agriculture, intensive equestrian and animal keeping uses are expected and encouraged.
	Very Low Density Residential (RC-VLDR)	1 ac min.	• Single-family detached residences on large parcels of 1 to 2 acres. • Limited agriculture, intensive equestrian and animal keeping uses are expected and encouraged.
	Low Density Residential (RC-LDR)	½ ac min.	• Single-family detached residences on large parcels of ½ to 1 acre. • Limited agriculture, intensive equestrian and animal keeping uses are expected and encouraged.
Open Space	Conservation (C)	N/A	• The protection of open space for natural hazard protection, and natural and scenic resource preservation. Existing agriculture is permitted.
	Conservation Habitat (CH)	N/A	• Applies to public and private lands conserved and managed in accordance with adopted Multi Species Habitat and other Conservation Plans.
	Water (W)	N/A	• Includes bodies of water and natural or artificial drainage corridors. • Extraction of mineral resources subject to SMP may be permissible provided that flooding hazards are addressed and long term habitat and riparian values are maintained.
	Recreation (R)	N/A	• Recreational uses including parks, trails, athletic fields, and golf courses. • Neighborhood parks are permitted within residential land uses.
	Rural (RUR)	20 ac min.	• One single-family residence allowed per 20 acres. • Extraction of mineral resources subject to SMP may be permissible provided that scenic resources and views are protected.
	Mineral Resources (MR)	N/A	• Mineral extraction and processing facilities. • Areas held in reserve for future mineral extraction and processing.
Community Development	Estate Density Residential (EDR)	2 ac min.	• Single-family detached residences on large parcels of 2 to 5 acres. • Limited agriculture and animal keeping is permitted, however, intensive animal keeping is discouraged.
	Very Low Density Residential (VLDR)	1 ac min.	• Single-family detached residences on large parcels of 1 to 2 acres. • Limited agriculture and animal keeping is permitted, however, intensive animal keeping is discouraged.
	Low Density Residential (LDR)	½ ac min.	• Single-family detached residences on large parcels of ½ to 1 acre. • Limited agriculture and animal keeping is permitted, however, intensive animal keeping is discouraged.
	Medium Density Residential (MDR)	2 - 5 du/ac	• Single-family detached and attached residences with a density range of 2 to 5 dwelling units per acre. • Limited agriculture and animal keeping is permitted, however, intensive animal keeping is discouraged. • Lot sizes range from 5,500 to 20,000 sq. ft., typical 7,200 sq. ft. lots allowed.
	Medium High Density Residential (MHDR)	5 - 8 du/ac	• Single-family attached and detached residences with a density range of 5 to 8 dwelling units per acre. • Lot sizes range from 4,000 to 6,500 sq. ft.
	High Density Residential (HDR)	8 - 14 du/ac	• Single-family attached and detached residences, including townhouses, stacked flats, courtyard homes, patio homes, townhouses, and zero lot line homes.
	Very High Density Residential (VHDR)	14 - 20 du/ac	• Single-family attached residences and multi-family dwellings.
	Highest Density Residential (HHDR)	20+ du/ac	• Multi-family dwellings, includes apartments and condominium. • Multi-storied (3+) structures are allowed.

Table LU 4 Land Use Designations Summary

Foundation Component	Area Plan Land Use Designation	Building Intensity Range (du/ac or FAR) [1, 2,3]	Notes
Community Development	Commercial Retail (CR)	0.20 - 0.35 FAR	• Local and regional serving retail and service uses. The amount of land designated for Commercial Retail exceeds that amount anticipated to be necessary to serve the County's population at build out. Once build out of Commercial Retail reaches the 40% level within any Area Plan, additional studies will be required before CR development beyond the 40% will be permitted.
	Commercial Tourist (CT)	0.20 - 0.35 FAR	• Tourist related commercial including hotels, golf courses, and recreation/amusement activities.
	Commercial Office (CO)	0.35 - 1.0 FAR	• Variety of office related uses including financial, legal, insurance and other office services.
	Light Industrial (LI)	0.25 - 0.60 FAR	• Industrial and related uses including warehousing/distribution, assembly and light manufacturing, repair facilities, and supporting retail uses.
	Heavy Industrial (HI)	0.15 - 0.50 FAR	• More intense industrial activities that generate significant impacts such as excessive noise, dust, and other nuisances.
	Business Park (BP)	0.25 - 0.60 FAR	• Employee intensive uses, including research & development, technology centers, corporate offices, "clean" industry and supporting retail uses.
	Public Facilities (PF)	≤ 0.60 FAR	• Civic uses such as County administrative buildings and schools.
	Community Center (CC)	5 - 40 du/ac 0.10 - 0.3 FAR	• Includes combination of small-lot single family residences, multi-family residences, commercial retail, office, business park uses, civic uses, transit facilities, and recreational open space within a unified planned development area. This also includes Community Centers in adopted specific plans.
	Mixed Use Planning Area		• This designation is applied to areas outside of Community Centers. The intent of the designation is not to identify a particular mixture or intensity of land uses, but to designate areas where a mixture of residential, commercial, office, entertainment, educational, and/or recreational uses, or other uses is planned.

Overlays and Policy Areas

Overlays and Policy Areas are not considered a Foundation Component. Overlays and Policy Areas address local conditions and can be applied in any Foundation Component. The specific details and development characteristics of each Policy Area and Overlay are contained in the appropriate Area Plan.

Community Development Overlay (CDO)	• Allows Community Development land use designations to be applied through General Plan Amendments within specified areas within Rural, Rural Community, Agriculture, or Open Space Foundation Component areas. Specific policies related to each Community Development Overlay are contained in the appropriate Area Plan.
Community Center Overlay (CCO)	• Allows for either a Community Center or the underlying designated land use to be developed.
Rural Village Overlay (RVO) and Rural Village Overlay Study Area (RVOSA)	• The Rural Village Overlay allows a concentration of residential and local-serving commercial uses within areas of rural character. • The Rural Village Overlay allows the uses and maximum densities/intensities of the Medium Density Residential and Medium High Density Residential and Commercial Retail land use designations. • In some rural village areas, identified as Rural Village Overlay Study Areas, the final boundaries will be determined at a later date during the consistency zoning program. (The consistency zoning program is the process of bringing current zoning into consistency with the adopted general plan.)
Watercourse Overlay (WCO)	• The Watercourse Overlay designates watercourses, including natural or controlled stream channels and flood control channels.
Specific Community Development Designation Overlay	• Permits flexibility in land uses designations to account for local conditions. Consult the applicable Area Plan text for details.
Policy Areas	• Policy Areas are specific geographic districts that contain unique characteristics that merit detailed attention and focused policies. These policies may impact the underlying land use designations. At the Area Plan level, Policy Areas accommodate several locally specific designations, such as the Limonite Policy Area (Jurupa Area Plan), or the Scott Road Policy Area (Sun City/Menifee Valley Area Plan). Consult the applicable Area Plan text for details.

NOTES:

[1] FAR = Floor Area Ratio, which is the measurement of the amount of non-residential building square footage in relation to the size of the lot. Du/ac = dwelling units per acre, which is the measurement of the amount of residential units in a given acre.

[2] The building intensity range noted is exclusive, that is the range noted provides a minimum and maximum building intensity.

[3] Clustering is encouraged in all residential designations. The allowable density of a particular land use designation may be clustered in one portion of the site in smaller lots, as long as the ratio of dwelling units/area remains within the allowable density range associated with the designation. The rest of the site would then be preserved as open space or a use compatible with open space (e.g., agriculture, pasture or wildlife habitat). Within the Rural Foundation Component and Rural Designation of the Open Space Foundation Component, the allowable density may be clustered as long as no lot is smaller than ½ acre. This ½ acre minimum lot size also applies to the Rural Community Development Foundation Component. However, for sites adjacent to Community Development Foundation Component areas, 10,000 square foot minimum lots are allowed. The clustered areas would be a mix of 10,000 and ½ acre lots. In such cases, larger lots or open space would be required near the project boundary with Rural Community and Rural Foundation Component areas.

Table LU-5
Population per Square Mile

Area Plan Designation	Population per Square Mile					
	Western Riverside County Excluding REMAP			Eastern Riverside County Including REMAP		
	Minimum	Projected	Maximum	Minimum	Projected	Maximum
Open Space-Rural	0	50	100	0	48	94
Agriculture, Rural Mountainous, Rural Desert	0	289	577	0	273	540
Rural Residential	166	249	500	196	294	587
Estate Density Residential	393	687	916	356	622	830
Very Low Density Residential	1,341	1,341	1,916	1,393	1.393	1,991
Low Density Residential	2,472	2,967	5,934	2,464	2,957	5,917
Medium Density Residential	4,168	7,294	12,155	3,937	6,889	11,483
Medium High Density Residential	12,056	15,673	22,391	10,030	13,039	18,627
High Density Residential	18,240	25,080	30,867	16,663	22,912	28,200
Very High Density Residential	35,363	42,941	54,654	27,805	33,764	42,971
Highest Density Residential/Community Center	59,827	89,741	105,577	44,303	66,455	78,181

Agriculture

Valle Vista Orchards

One of Riverside County's most important land uses in terms of historic character and economic strength is its widespread and diverse agriculture lands. Agriculture production is one of the largest industries in terms of dollar value in the County and competes successfully in the global economy. It is clear that agricultural uses provide important employment opportunities for many County residents. Agricultural uses also preserve a lifestyle choice that is synonymous with the County's history and character. In fact, it is agriculture that defines the unique character of many communities in Riverside County, and helps to define the edges of and provide separation between developed areas. Many people are drawn to Riverside County for the very character that agricultural uses provide and there is a solid commitment to ensuring that these uses remain an integral part of the County's future. The importance of agricultural uses and the sensitivity of development in and around agricultural areas is reflected in the RCIP Vision:

> *"Agricultural land that remains economically viable, either as a permanent or temporary economic resource, is well protected by policies, ordinances and design regulations applicable to new development that may be planned nearby."*

However, as mentioned in this Vision Statement, there is a potential for agricultural uses to conflict with adjacent uses. This is due to mounting growth pressures near and within significant agricultural regions. Many existing

ATTACHMENT 3

RIVERSIDE COUNTY PARCEL REPORTS

Riverside County Parcel Report

APN(s) 401071024

MAPS/IMAGES

PARCEL

APN	401-071-024-3
Previous APN	000-000-000
Owners	Not Available Online
Address	401-071-024 NOT AVAILABLE
Mailing Address	401-071-024 737 ORANGE AVENUE BEAUMONT CA 92223 92223
Legal Description	401-071-024 Recorded Book/Page: Subdivision Name: Lot/Parcel: Block: Tract Number: 0
Lot Size	401-071-024 Recorded lot size is 0.54 acres
Property Characteristics	401-071-024 Year Constructed: 0000 Number of Baths: 0 Number of Bedrooms: 0 Construction Type: SPECIAL CONSTRUCTION Garage Type: Property Area (sq ft): 0 Roof Type: UNKNOWN Number of Stories: Pool: NO Central Cool: NO Central Heat: NO
Supervisorial District	MARION ASHLEY, DISTRICT 5
City Boundary	Contact the city for more information
Land Use Designations	RC-VLDR
Zoning Classifications (ORD. 348)	Zoning: R-A-1 CZ Number: 0

PLUS PERMITS & CASES

Administrative Cases

Case	Case Description	Status
N/A	N/A	N/A

Building and Safety Cases

Case	Case Description	Status
N/A	N/A	N/A

Code Cases

Case	Case Description	Status
CV1802766		OPEN

Fire Cases

Case	Case Description	Status
FHAZ1404677		CLOSED
FHAZ1501214		CLOSED

Planning Cases

Case	Case Description	Status
N/A	N/A	N/A

Survey Cases

Case	Case Description	Status
N/A	N/A	N/A

Transportation Cases

Case	Case Description	Status
N/A	N/A	N/A

DEPARTMENT of ENVIRONMENTAL HEALTH PERMITS

Septic Permits

Record Id	Application Date	Plan Check Approved Date	Final Inspection Date	Approved Date
N/A	N/A	N/A	N/A	N/A

Well Water Permits

Record Id	PE	Permit Paid Date	Permit Approved Date	Well Finaled Date
N/A	N/A	N/A	N/A	N/A

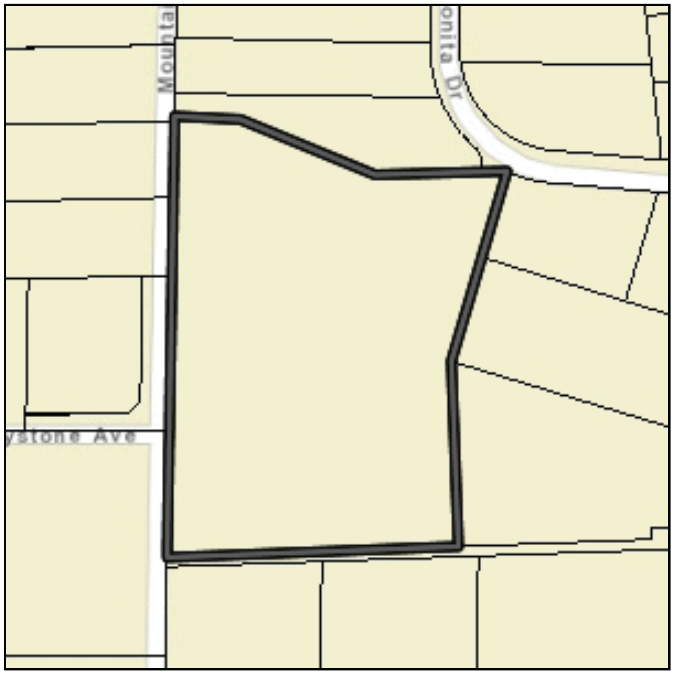
* DISCLAIMER *

Maps, permit information and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

Riverside County Parcel Report

APN(s) 401071038

MAPS/IMAGES



PARCEL

APN	401-071-038-6
Previous APN	401-071-023
Owners	Not Available Online
Address	401-071-038 NOT AVAILABLE
Mailing Address	401-071-038 P O BOX 653 BEAUMONT CA 92223
Legal Description	401-071-038 Recorded Book/Page: Subdivision Name: Lot/Parcel: Block: Tract Number: 0
Lot Size	401-071-038 Recorded lot size is 7.79 acres
Property Characteristics	401-071-038 Year Constructed: 0000 Number of Baths: 0 Number of Bedrooms: 0 Construction Type: SPECIAL CONSTRUCTION Garage Type: Property Area (sq ft): 0 Roof Type: UNKNOWN Number of Stories: Pool: NO Central Cool: NO Central Heat: NO
Supervisorial District	MARION ASHLEY, DISTRICT 5
City Boundary	Contact the city for more information
Land Use Designations	RC-VLDR
Zoning Classifications (ORD. 348)	Zoning: R-A-1 CZ Number: 0

PLUS PERMITS & CASES

Administrative Cases

Case	Case Description	Status
N/A	N/A	N/A

Building and Safety Cases

Case	Case Description	Status
N/A	N/A	N/A

Code Cases

Case	Case Description	Status
CV1003932		CLOSED
CV1802764		OPEN

Fire Cases

Case	Case Description	Status
FHAZ0101360		CLOSED
FHAZ0200379		CLOSED
FHAZ0302805		CLOSED
FHAZ0400959		CLOSED
FHAZ0500576		CLOSED
FHAZ0703980		CLOSED
FHAZ0802979		CLOSED
FHAZ0901258		CLOSED
FHAZ1000602		CLOSED
FHAZ1100675		CLOSED
FHAZ1201599		CLOSED
FHAZ1301849		CLOSED
FHAZ1404680		CLOSED
FHAZ1501217		CLOSED
FHAZ1603048		CLOSED
FHAZ1610735		CLOSED
FHAZ1700912		CLOSED
FHAZ1800685		CLOSED
FHAZ9102051		CLOSED
FHAZ9301297		CLOSED
FHAZ9400384		CLOSED
FHAZ9503070		CLOSED
FHAZ9602930		CLOSED
FHAZ9705196		CLOSED
FHAZ9802665		CLOSED

Planning Cases

Case	Case Description	Status
CFG03351	CFG FOR EA39884	PAID
EA39884	EA FOR PM32167	APPROVED
PDB03590	HABITAT ASSESSMENT FOR NARROW ENDEMICS	APPROVED
PM32167	SCHED H DIVISION OF 7.7 AC INTO 4 1-AC PCLS W/1 RE	APPROVED

Survey Cases

Case	Case Description	Status
FPM32167	DIVIDE 7.79 ACRES INTO 4 PARCELS	PEND CORRECTION
MAP32167		ISSUED

Transportation Cases

Case	Case Description	Status
N/A	N/A	N/A

DEPARTMENT of ENVIRONMENTAL HEALTH PERMITS

Septic Permits

Record Id	Application Date	Plan Check Approved Date	Final Inspection Date	Approved Date
N/A	N/A	N/A	N/A	N/A

Well Water Permits

Record Id	PE	Permit Paid Date	Permit Approved Date	Well Finaled Date
N/A	N/A	N/A	N/A	N/A

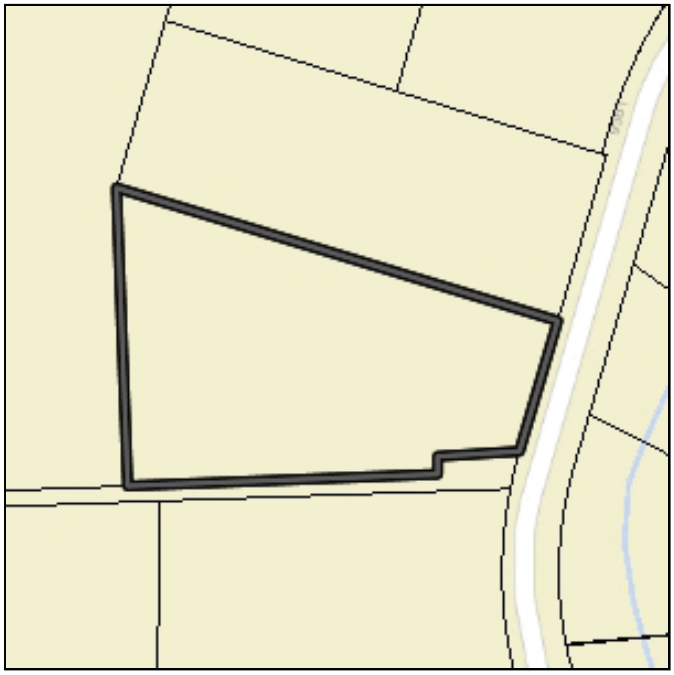
*** DISCLAIMER ***

Maps, permit information and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

Riverside County Parcel Report

APN(s) 401071039

MAPS/IMAGES



PARCEL

APN	401-071-039-7
Previous APN	401-071-023
Owners	Not Available Online
Address	401-071-039 NOT AVAILABLE
Mailing Address	401-071-039 737 ORANGE AVENUE BEAUMONT CA 92223
Legal Description	401-071-039 Recorded Book/Page: Subdivision Name: Lot/Parcel: Block: Tract Number: 0
Lot Size	401-071-039 Recorded lot size is 2.33 acres
Property Characteristics	401-071-039 Year Constructed: 0000 Number of Baths: 0 Number of Bedrooms: 0 Construction Type: SPECIAL CONSTRUCTION Garage Type: Property Area (sq ft): 0 Roof Type: UNKNOWN Number of Stories: Pool: NO Central Cool: NO Central Heat: NO
Supervisorial District	MARION ASHLEY, DISTRICT 5
City Boundary	Contact the city for more information
Land Use Designations	RC-VLDR
Zoning Classifications (ORD. 348)	Zoning: R-A-1 CZ Number: 0

PLUS PERMITS & CASES

Administrative Cases

Case	Case Description	Status
N/A	N/A	N/A

Building and Safety Cases

Case	Case Description	Status
N/A	N/A	N/A

Code Cases

Case	Case Description	Status
CV1802765		OPEN

Fire Cases

Case	Case Description	Status
FHAZ0101361		CLOSED
FHAZ0200378		CLOSED
FHAZ0302806		CLOSED
FHAZ0400958		CLOSED
FHAZ0500577		CLOSED
FHAZ0802981		CLOSED
FHAZ0901259		CLOSED
FHAZ1000603		CLOSED
FHAZ1100676		CLOSED
FHAZ1201600		CLOSED
FHAZ1301850		CLOSED
FHAZ1404681		CLOSED
FHAZ1501218		CLOSED
FHAZ1603049		CLOSED
FHAZ1610734		CLOSED
FHAZ1700913		CLOSED
FHAZ1800686		CLOSED
FHAZ9102052		CLOSED
FHAZ9400385		CLOSED
FHAZ9503069		CLOSED
FHAZ9602931		CLOSED
FHAZ9705195		CLOSED
FHAZ9802666		CLOSED

Planning Cases

Case	Case Description	Status
N/A	N/A	N/A

Survey Cases

Case	Case Description	Status
N/A	N/A	N/A

Transportation Cases

Case	Case Description	Status
N/A	N/A	N/A

DEPARTMENT of ENVIRONMENTAL HEALTH PERMITS

Septic Permits

Record Id	Application Date	Plan Check Approved Date	Final Inspection Date	Approved Date
N/A	N/A	N/A	N/A	N/A

Well Water Permits

Record Id	PE	Permit Paid Date	Permit Approved Date	Well Finaled Date
N/A	N/A	N/A	N/A	N/A

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ATTACHMENT 4

ANNEXATION AGREEMENT

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Page 1 of 18
Recorded in Official Records
County of Riverside
Gary L. Orso
Assessor, County Clerk & Recorder

M	S	U	PAGE	SIZE	DA	PCOR	NOCOR	SMF	MISC.
	1		16					✓	
								✓	06
A	R	L			COPY	LONG	REFUND	NCHG	EXAM

Recording Requested By
And When Recorded Return To:

Beaumont-Cherry Valley Water District
P.O. Box 2037
Beaumont, CA. 92223-2037
Attention: General Manager

C
AG

ANNEXATION AGREEMENT

THIS ANNEXATION AGREEMENT ("Agreement") is entered in to this 8TH day of JULY, 2003 for identification purposes only, by and between BEAUMONT-CHERRY VALLEY WATER DISTRICT, a public agency of the State of California ("District") and STEPHEN BELL & THEA M. BELL ("Property Owner").

RECITALS

A. Property Owner is the owner of certain real property located in the County of Riverside, State of California and legally described on Exhibit "A" attached hereto and by this reference incorporated herein ("Property").

B. The Property is currently not within the service boundaries of the District.

C. Property Owner is currently a shareholder in Bonita Vista Mutual Water Company, a California corporation ("Bonita Vista"). Bonita Vista is a mutual water company formed pursuant to the provisions of California law. Bonita Vista and its shareholders have determined that Bonita Vista can no longer effectively serve its shareholders due to the deterioration of its water system. Bonita Vista has requested and District has agreed, subject to certain conditions, that District serve Bonita Vista's customers on or after the Closing Date as defined in that certain Agreement for Transfer of Assets ("Transfer Agreement") by and between Bonita Vista and District.

D. District, Property Owner and Bonita Vista acknowledge that: (1) A new water system must be constructed to serve the shareholders of Bonita Vista ("Bonita Vista Water System"); (2) the cost of the Bonita Vista Water System shall be borne by the existing shareholders of Bonita Vista. A general description of the Bonita Vista Water System is set forth on Exhibit "B" attached hereto and by this reference incorporated herein.

E. Property Owner agrees to be responsible for 1/100th of the costs of construction of the Bonita Vista Water System to serve Bonita Vista's customers, including but not limited to, transmission lines, permits, approvals, licenses and entitlements from all approving governmental authorities easements and fee title to real property and costs associated with the California Environmental Quality Act.

F. Property Owner has requested District to annex the Property into District's service boundaries and District is willing to annex the Property into District's service boundaries on the terms and conditions set forth in this Agreement.

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Prior to the District's obligation to provide water to the Property, Property Owner shall comply with the District's rules and regulations with respect to the service of water.

2. Prior to the District's obligation to provide water to the Property, the District and/or Bonita Vista shall file an application with the Local Agency Formation Commission of the County of Riverside ("LAFCO") for the annexation of the Property into the District's service area. The resolution adopted by LAFCO approving the annexation of the property shall be in such form and content as shall be reasonably satisfactory to the District and shall provide, in part, that the District shall be designated as the conducting authority and is authorized to proceed without notice, hearing or election to complete the annexation. Property Owner shall cooperate with District's efforts to obtain approval for annexation. Cooperation shall include, without limitation, execution by Property Owner of petitions, approvals, powers of attorneys and authorizations which are required in District's reasonable judgment.

3. On or after the approval of the annexation by LAFCO, District shall develop plans and construct the water system described in Exhibit "B" attached hereto.

4. (a) District shall be authorized to acquire such easements or fee title to real property as is necessary for the Bonita Vista Water System, which documents are satisfactory to District as to content, form, location and width which assures District's unequivocal right to construct, own, operate, maintain, replace, repair, enlarge, reconstruct, remove and improve the Bonita Vista Water System.

(b) Property Owner hereby grants to District a non-exclusive permanent easement over, under, across and on the Property necessary to construct, operate, maintain, replace, repair, enlarge, reconstruct, remove and improve the Bonita Vista Water System.

5. On or after the execution of the Annexation Agreement and completion of the plan for construction the District will install the water system to serve Bonita Vista. Nothing herein shall be construed as an obligation on the part of the District to cause the construction of the Bonita Vista Water System until all of the shareholders of Bonita Vista execute an annexation agreement in such form and content as this Agreement.

6. Upon the construction, installation and acceptance by the District of the Bonita Vista Water System, the title thereto shall automatically vest in the District and become a part of the District's water system. Property Owner shall, upon written request, execute and deliver to District, a bill of sale in such form and content acceptable to District. The bill of sale shall acknowledge District's title and ownership of the Bonita Vista Water System. Thereafter, the District shall, at its expense, maintain, repair and operate such facilities and provide service to the Property pursuant to the rules and regulations, as the same are now in effect or may hereinafter be amended.

7. Upon the completion of the planning and construction of the Bonita Vista Water System, including engineering and costs of acquiring rights-of-way or fee title to real property, District shall:

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(a) Send notice to the Property Owner at the address set forth in Paragraph 21, of the completion thereof, which notice shall include the costs of the Bonita Vista Water System and the Property Owner's Share; and

(b) Record in the Office of the County Recorder of the County of Riverside, an amendment to the Agreement ("Declaration") attached hereto as Exhibit "C" and by this reference incorporated herein. The Declaration shall set forth the precise amount owed to District by Property Owner or the successor owner of the Property. Although it is the intention of the Property Owner and District to fully vest herein without notice, permission or consent of Property Owner, or his/her successors or assigns, Property Owner hereby appoints District as his/her true and lawful attorney-in-fact to act in the name, place and stead and for his/her use or benefit to establish the precise amount owed by Property Owner.

8. (a) Property Owner shall pay the Property Owner's Share with interest at the rate of LAIF plus 1-1/2% percent (%) per annum. It is understood that the interest due shall be calculated on the basis of a three hundred sixty (360) day period and that the term "per annum" means said three hundred sixty (360) day period. The principal and interest shall be amortized over a Twenty (20) year period. Property Owner hereby agrees on behalf of Property Owner and Property Owner's successors-in-interest to the Property, that District shall collect the Property Owner's Share through the water billing from the District beginning the following month after the recordation of the Declaration and shall continue bi-monthly thereafter until all principal and interest are paid in full.

(b) The Property Owner's Share may be prepaid at any time without penalty.

(c) Any amounts received by District from Property Owner hereunder on account of the Property Owner's Share shall be applied in the following order: first, to any fees due for late payments pursuant to subparagraph

(d) Above; second, to any payment made by District for or on behalf of Customer, under or pursuant to this Agreement; Third, to accrued and unpaid interest; and thereafter against the unpaid Property Owner's Share.

9. Any of the following shall constitute an Event of Default hereunder:

(a) If Property Owner fails or neglects to perform, keep, or observe any term, provision, covenant, condition, agreement, warranty or representation set forth in this Agreement other than the failure to make a payment as set forth in subparagraph (b) below and such failure is not cured within fifteen (15) calendar days of receipt by Property Owner of a written notice of such failure from District; and

(b) If Property Owner fails or neglects to make any payment of Property Owner's Share and/or interest as provided in the Agreement when due.

10. Upon the occurrence of any of the Events of Default, the District, in addition to its other rights hereunder or allowed by law, may at its option without prior demand or notice do any or all of the following:

(a) Declare the unpaid principal and accrued and unpaid interest for the Property Owner's Share immediately due and payable;

(b) Cause the delinquent principal and interest or the entire unpaid principal and interest to be reported to the board of supervisors and the auditor of the County of Riverside. Property Owner agrees and authorizes the County of Riverside to add the amount declared delinquent by District to become a part of the annual taxes next levied upon the Property;

(c) To proceed directly against Property Owner to satisfy the indebtedness of Property Owner to District and, in that regard, District shall be entitled to all of the rights, privileges and benefits available by law; and

(d) District may deliver to Property Owner and record with the Riverside County Recorder a certificate or notice of claim of lien (which, among other things, may, but need not, recite the nature of the violation, the legal description of the Property or portion thereof affected by such violation, the record or reputed owner thereof, District's name and address, and the remedies being pursued by District or the amount of any such claim being charged). If the violation recited in such lien claim has not been cured to District's satisfaction and any recited amounts so charged have not been paid within thirty (30) days thereafter, District or its authorized representative, may foreclose such lien by a sale conducted pursuant to Sections 2934, 2924B and 2924C of the California Civil Code, as amended from time to time, or other statutes applicable to the exercise of powers of sale in deeds of trust or in any other manner permitted by law. District, through its authorized representatives, may bid on and acquire any land subject to such lien at any such foreclosure sale. If the violations recited in such lien claim are timely cured and any recited amounts timely paid as provided above, District shall forthwith record an appropriate release of such lien at Property Owner's sole expense.

11. No failure by District to exercise its rights as to a continuing or previous violation, shall constitute a waiver of District's right to require such payment at any time or times while this Agreement is still in effect and so long as any such violation may continue.

(a) District shall be entitled to advance any sums District, in its sole discretion, deems necessary to protect and preserve the security for its rights and interest under this Agreement, all of which advances (together with interest at the rate of ten percent (10%) per annum) shall be secured by the lien of this Agreement described in subsection (b) below and shall be subject to the power of sale provisions in this Agreement if Property Owner fails to reimburse District for such advances with ten (10) days after demand from District.

(b) (i) Property Owner hereby mortgages the Property to District with power of sale for the purpose of securing any or all required payments under the Agreement and any or all advances made or other expenses incurred by District pursuant to this Agreement.

(ii) In the event Property Owner fails to pay all or any portion of the indebtedness secured hereby within ten (10) days after written demand from District, setting forth the amount of any such indebtedness upon determination as provided hereinabove, then District may enforce its lien hereunder pursuant to the procedures set forth in subsection 10 (d) above, or may immediately declare

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a default hereunder and cause a written notice of default and election to sell the Property ("Notice of Default") to be prepared and filed for record in the Office of the Recorder of Riverside County, California. After three (3) months, or such shorter time as may be allowed by law shall have elapsed from the recordation of such Notice of Default, and after a notice of sale has been given to the extent required by the then applicable law, District, without further legal action or demand on Property Owner, may cause the Property to be sold at such time and place as may be fixed in said notice of sale or at such time and place to which the sale may be postponed as hereinafter provided without additional notice, either as a whole or in separate parcels, and in such order as District alone may determine, at public auction to the highest bidder for cash in lawful money of the United States at the time of sale, or upon such other terms as District may consider advisable. Property Owner shall have no right to direct or determine whether the Property shall be sold as a whole or in separate parcels, or the order of sale of separate parcels or the portion of the Property to be sold if only a portion is sold. District may postpone the sale of the Property by public announcement thereof at the time and place of sale and from time to time thereafter by public announcement at the time and place of the preceding postponement. In conducting or postponing any such sale, District shall cause to be delivered to the buyer or buyers, one or more duly exercised deed or deeds conveying the Property so sold, subject to all the provisions of this Agreement, but without any covenant or warranty, either expressed or implied. The recitals in such deed or deeds with regard to any such matters of fact shall be conclusive proof of the truthfulness thereof against the buyer at such sale, its successors and assigns, and all other persons. Any person may bid in or purchase at such sale. Property Owner hereby agrees to surrender, immediately and without demand, possession of the Property and all improvements thereon to the buyer at such sale. No such sale shall release or extinguish any rights, remedies or provisions contained in this Agreement in the event of any further violation of any provision of this Agreement by Property Owner.

(c) District shall apply the proceeds of such sale in the following manner and order:

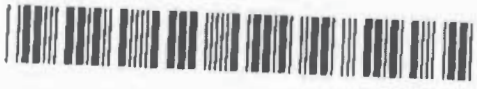
(i) Expenses of such sale and all costs, fees, charges and expenses of District, including costs of evidence of title and reasonable attorneys' fees;

(ii) All sums secured thereby; and

(iii) The remainder, if any, to the person or persons legally entitled thereto.

(d) In addition to the foregoing, District may foreclose the lien created hereby by court action in the manner provided by the laws then applicable to this Agreement, in which case Property Owner agrees to pay all costs and expenses thereof, including reasonable attorneys' fees as the court may determine.

(e) All interest, fees, costs and expenses required to be paid by Property Owner hereunder shall also be secured by this Agreement, but the combination of all such required interest shall not exceed the maximum rate permitted by law.



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12. The parties hereto agree that District shall not be required to furnish water or other services to the Property, or any portion thereof, should Property Owner fail to comply with any of the terms and conditions set forth herein after the receipt of any applicable notice (if required) and the expiration of any applicable cure period. Should District initiate water or other services to the Property and Property Owner fails to comply with any of the terms set forth herein, District may, at its option, terminate water and other services to the Property after the receipt of any applicable notice (if required) and the expiration of any applicable cure periods until full compliance with the terms hereof.

13. Despite any other provision in this Agreement, in no event will the amount paid or agreed to be paid to the District as interest hereunder exceed the highest lawful rate applicable to this Agreement. If the District ever receives interest in amounts which exceed the highest lawful rate applicable to this Agreement, such amount which would be excess of permissible interest will not be deemed as interest but will be applied to the reduction of unpaid principal.

14. Property Owner hereby agrees to provide District with written notice within ten (10) days after Property Owner has agreed to sell, give, donate or otherwise alienate the Property to a third party. The written notice shall include the following:

(a) Name and address of the proposed transferee;

(b) Name of the Escrow Company handling the transaction;

(c) Date of close of escrow; and

(d) Name of Title Company issuing the title policy.

Property Owner hereby authorizes the District to examine and copy any records concerning the sale of the Property.

15. On the execution of this Agreement, Property Owner shall deliver to District an executed and acknowledged quitclaim deed in such form and content as set forth on Exhibit "C" attached hereto and by such reference incorporated herein ("Deed"). Such Deed provides that District shall be Property Owner's agent for use of any rights to surface and subsurface waters in, on or under the Property. At such time as Property Owner or Property Owner's successors and assigns, shall request that District no longer provide water to the Property, District shall execute and deliver a quitclaim deed, which deed shall quitclaim the surface and subsurface rights held by District as agent.

16. Property Owner hereby acknowledges that water service shall be provided from such sources and facilities as shall be available to the District. In the event sufficient water is unavailable to service all of the District's Property Owners and lands, including the Property, service to the Property may be subject to a reduction in service, as determined by the Board of Directors of the District.

17. District's or Property Owner's failure to insist on performance of any of the terms or conditions of this Agreement or the exercise of any right, remedy or privilege, or District's or Property Owner's waiver of any breach hereunder, shall not thereafter be deemed a subsequent waiver of any other terms, conditions, or rights, remedies or privileges, whether of the same or similar type. No party will be deemed to have waived any rights under this Agreement unless

the waiver is made in writing and signed by the waiving party or that party's duly authorized representative. All rights and remedies provided for under this Agreement are cumulative.

18. The parties agree to cooperate with each other in furthering the purposes of this Agreement. The parties hereby agree to take such other actions and execute such other reasonable documents as are consistent with this Agreement and as are reasonably necessary to effectuate this Agreement; provided, however, that the foregoing shall not require District to take any legislative action or exercise its discretion in any particular manner.

19. This Agreement contains the final and complete agreement between the parties with respect to the matters herein discusses and supersedes all previous communications and agreements between them, either oral or written, to the extent such prior communications and agreements are not consistent with this Agreement.

20. In the event that any action or proceeding is commenced between Property Owner and District to enforce or interpret any term of this Agreement, the prevailing party in such action or proceeding, in addition to all other relief to which it may be entitled, shall be entitled to recover from the other party the prevailing party's costs of suit and reasonable attorneys' fees. The attorneys' costs and fees shall include, without limitation, attorneys' costs and fees incurred on appeal and those incurred in enforcing any judgment rendered in any such action or proceeding. Such attorneys' costs and fees may be recovered as an element of costs in the underlying action or proceeding or in a separate recovery action.

21. All notices shall be in writing and shall be considered given:

(a) when delivered in person to the recipient named below; or

(b) three days after deposit in the United States mail, postage prepaid, addressed to the recipient names below, or

(c) on the date of delivery shown in the records of the telegraph company after transmission by telegraph to the recipient names below; or

(d) on the date of delivery by facsimile transmission to the recipient named below.

All notices shall be addressed as follows:

If to District:

General Manager
Beaumont-Cherry Valley Water District
P.O. Box 2037
Beaumont, CA. 92223-2037
Facsimile: 909/845-0159

If to Property Owner:

STEPHEN BELL & THEA M. BELL
38745 VALLEY VIEW
BEAUMONT, CA 92223

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Either party may, by notice given at any time, require subsequent notices to be given to another person or entity, whether a party or an officer or representative of a party, or to a different address, or both. Notices given before actual receipt of notice of change shall not be invalidated by the change.

22. This Agreement and its provisions shall in all respects be interpreted, construed, enforced, and governed by and under the laws of the State of California, without regard to its conflict of laws principles.

23. Any action or proceeding brought respecting this Agreement shall be instituted and maintained in the appropriate court in the County of Riverside, California. Property Owner hereby foregoes and waives any provision of law providing for a change of venue from such courts on the grounds that District is or may be a party to any such action or proceeding.

24. This Agreement may be modified only by another written instrument duly authorized, executed acknowledged and recorded, by both Property Owner and District.

25. The provisions of this Agreement are specifically made severable. If any clause, provision, right, or remedy provided for herein is determined to be unlawful or unenforceable, the remainder of this Agreement shall remain in effect and shall be enforced as if such clause, provision, right, or remedy were not contained herein.

26. The language in all parts of this Agreement shall in all respects be construed as a whole according to its fair meaning, and not strictly for or against either Property Owner or District. This Agreement is the product of mutual negotiation and drafting efforts. Accordingly, the judicial rule of construction that ambiguities in a document are to be construed against the drafter of that document shall have no application to the interpretation or enforcement of this Agreement.

27. This Agreement may be executed in one or more counterparts, each of which shall be an original and all such counterparts together shall constitute the entire agreement of the parties hereto.

28. Each individual executing this Agreement hereby represents and warrants that he or she has the full power and authority to execute this Agreement on behalf of the named parties.

29. Property Owner shall neither assign its rights nor delegate its obligations hereunder without obtaining District's prior written consent shall be void and of no effect. Notwithstanding the foregoing, the terms, conditions and obligations of this Agreement shall be binding upon and inure to the benefit of the heirs, successors and assigns of the parties hereto and any owner of the Property.

30. Within thirty (30) days after the execution of this Agreement, Property Owner shall cause all mortgages and deeds of trust to which the Property is subject, to be subordinated to the lien of this Agreement and the Deed of Trust.

31. This Agreement shall not be extinguished or altered in any way, by any party, including Property Owner, without the prior written and recorded consent of District.

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32. Property Owner hereby subjects the Property herein to the terms and provisions set forth in this Agreement. Property Owner hereby declares his/her specific intent that the terms and provisions set forth herein shall be deemed covenants running with the land and shall pass to and be binding upon the owners of the Property. Each and every contract, deed or other instrument hereafter executed covering or conveying the Property or any portion thereof, shall conclusively be held to have been executed, delivered and accepted subject to such terms and conditions regardless of whether such terms and conditions are set forth in such contract, deed or other instruments.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the date first above written.

DISTRICT:

BEAUMONT-CHERRY VALLEY WATER DISTRICT, a public agency of the State of California

By C. J. Butcher
General Manager

PROPERTY OWNER:

Stephen Bell
Thea M. Bell

By Stephen Bell
Its Thea M. Bell

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EXHIBIT "A"

The following described real property in the unincorporated area of Cherry Valley, County of Riverside, State of California:

Portions of the Southwest quarter of the Northwest quarter of Section 22, Township 2 South, Range 1 West, San Bernardino Base and Meridian, more particularly described as follows:

PARCEL 1:

That portion of the Southwest quarter of the Northwest quarter of Section 22, Township 2 South, Range 1 West, San Bernardino Meridian, Described as follows:

COMMENCING at the Southwest quarter of the Northwest quarter of the Southwest quarter of said section;
Thence North 00° 56' 30" East, on the West line of said section, 1,568.41 feet;
Thence North 87° 41' 00" East, 491.67 feet to the true point of beginning;
Thence North 02° 13' 00" West, 317.97 feet;
Thence South 73° 25' 00" East, 484.00 feet;
Thence South 16° 35' 00" West, 150.00 feet to the Northeast corner of that certain well site conveyed to Bonita Vista Mutual Water Company by deed recorded September 3, 1948 in Book 1009, Page 8 of Official Records;
Thence South 87° 47' 00" West, 83.96 feet to the Northwest corner of said well site;
Thence South 02° 13' 00" East, 20.00 feet;
Thence South 87° 47' 00" West, 325.88 feet to the true point of beginning;

EXCEPTING therefrom one-half of all oil and mineral rights as reserved in deed from J. Drew Funk and Ruby M. Funk, husband and wife, to Andreas Birgel and Franziska Birgel, husband and wife, dated December 29, 1958 and recorded January 29, 1959 as Instrument No. 7831, Official Records.

Said property is also shown on Record of Survey on file in Book 16, Page 68 of Records of Survey.

PARCEL 2:

That portion of the Southwest Quarter of the Northwest Quarter of Section 22, Township 2 South, Range 1 West, San Bernardino Meridian, described as follows:

COMMENCING at the Southwest corner of the Northwest quarter of the Southwest quarter of said section;
Thence North 00° 56' 30" East, on the West line of said section, 1,568.41 feet to the true point of beginning;
Thence North 00° 56' 30" East, on the west line of said section, 745.98 feet to the Southwest corner of Bonita Vista Rancho Unit No. 2, as shown by map on file in Book 26, Pages 78 and 79 of Maps, Records of Riverside County, California;
Thence along the Southerly line of said Bonita Vista Rancho Unit No. 2, the following courses and descriptions:
South 86° 35' 30" East 109.75 feet;
South 67° 22' 30" East 244.00 feet;
North 89° 16' 30" East, 224.77 feet to the Northwest corner of that certain parcel conveyed to Lawrence J. Doleshal and Beryl M. Doleshal, his wife, by deed filed for record March 29, 1951 as Instrument No. 13250, Official Records;
Thence South 16° 35' 00" West, on the Westerly line of said Parcel and the Southwesterly Extension thereof, 325.20 feet;
Thence South 02° 13' 00" East, 317.97 feet;
Thence South 87° 47' 00" West 491.67 feet, to the true point of beginning;

EXCEPTING therefrom one-half of all oil and mineral rights as reserved in Deed from J. Drew Funk and Ruby M. Funk, husband and wife, to Andreas Birgel and Franziska Birgel, husband and wife, dated December 29, 1958 and Recorded January 29, 1959 as Instrument No. 7831, Official Records.

Said property is also shown on Record of Survey on file in Book 16, Page 68 of Records of Survey.

PARCEL 3:

That portion of the Southwest quarter of the Northwest quarter of Section 22, Township 2 South, Range 1 West, San Bernardino Meridian, described as follows:

COMMENCING at the Southwest corner of the Northwest quarter of the Southwest quarter of said section;
Thence North 00° 56' 30" East, on the West line of said section, 1,568.41 feet;
Thence North 87° 47' 00" East, 491.67 feet;
Thence North 02° 13' 00" West, 317.97 feet to the true point of beginning;
Thence North 16° 35' 00" East, 180.00 feet to the Southwest corner of that certain parcel conveyed to Lawrence J. Doleshal and Beryl M. Doleshal, his wife, by deed recorded March 29, 1951 as Instrument No. 13250, Official Records;
Thence South 73° 25' 00" East, on the Southerly line of said parcel, 484.00 feet;
Thence South 16° 35' 00" West 180.00 feet;
Thence north 73° 25' 00" West, 484.00 feet to the true point of beginning;

EXCEPTING therefrom one-half of all oil and mineral rights as reserved in Deed from J. Drew Funk and Ruby M. Funk, husband and wife, to Andreas Birgel and Franziska Birgel, husband and wife, dated December 29, 1958 and recorded January 29, 1959 as Instrument No. 7831, Official Records.

Said property is also shown on Record of Survey on file in Book 16, Page 68 of Records of Survey.

Address: APN 401-071-023, Cherry Valley, CA 92223

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EXHIBIT "B"

Rancho Drive and Bonita Drive will have approximately 5,327 feet of new 8" ductile iron pipe installed. An additional 828 feet will be installed north of Bonita Drive past and around the existing tank to serve an additional 5 lots north of Bonita Drive. Eucalyptus Drive will have approximately 800 feet from Rancho Drive to Mountain View Drive then north approximately 2,070 feet picking up Erlinda Court and continuing north to the north property line of parcel number 401-07-38 turning east on easement road back to Bonita Drive approximately 939 feet. Approximately 395 feet will go east on Cherry Tree Lane and tie into an existing line. One regulator on the west loop of Bonita Drive will be installed. 24 fire hydrants at 400-foot intervals will be installed. All meter services will be installed in the right-of-way in front of all lots with the consumer to tie in new meter. Total footage of the pipeline is estimated to be approximately 10,358 feet of pipe. Total number of services for this project is 100.

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

Beaumont-Cherry Valley Water District
P.O. Box 2037
Beaumont, CA 92223
Attn: Chuck Butcher
General Manager

QUITCLAIM DEED

THIS QUITCLAIM DEED is executed this 8TH day of JULY, 2003 for identification purposes only, by and between the person or persons listed on the signature line below ("Quitclaimer") and BEAUMONT-CHERRY VALLEY WATER DISTRICT, a public agency ("Quitclaimee").

Quitclaimer hereby grants to Quitclaimee all of the water rights arising out of and in connection with that certain real property located in the County of Riverside, State of California, and more particularly described in Exhibit "A" attached hereto and by this referenced incorporated herein ("Property"), including but not limited to, overlying rights, underlying rights, appropriate and prescriptive rights and all other rights to surface and subsurface water rights. At such time as Quitclaimee no longer is obligated to provide water to the Property, Quitclaimee shall quitclaim the water rights referred to herein to the then owner of the Property.

Quitclaimer:

Stephen Bell

Thea M Bell

Quitclaimee:

BEAUMONT-CHERRY VALLEY WATER DISTRICT, a public agency

By: C. Butcher
Chuck Butcher

2003-627008
08/15/2003 08:00A
13 of 16

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Riverside } ss.

On July 8, 2003 (Date) before me, Julie Audet, Notary Public (Name and Title of Officer (e.g., "Jane Doe, Notary Public"))

personally appeared Stephen Bell (Name(s) of Signer(s)),

[ ] personally known to me
[X] proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

JULIE AUDET
Commission # 1375375
Notary Public - California
Riverside County
My Comm. Expires Sep 17, 2006

WITNESS my hand and official seal.

Julie Audet
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Annexation Agreement

Document Date: July 8, 2003 Number of Pages: 13

Signer(s) Other Than Named Above: —

Capacity(ies) Claimed by Signer

Signer's Name: Stephen Bell

[ ] Individual
[ ] Corporate Officer — Title(s): _____
[ ] Partner — [ ] Limited [ ] General
[ ] Attorney-in-Fact
[ ] Trustee
[ ] Guardian or Conservator
[ ] Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

2003-627008
08/15/2003 08:00A
14 of 16

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Riverside } ss.

On July 9, 2003 (Date) before me, Julie Audet, Notary Public (Name and Title of Officer (e.g., "Jane Doe, Notary Public"))

personally appeared Thea M. Bell (Name(s) of Signer(s))

[ ] personally known to me
[X] proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

JULIE AUDET
Commission # 1375375
Notary Public - California
Riverside County
My Comm. Expires Sep 17, 2006

WITNESS my hand and official seal.

Julie Audet
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Annexation Agreement

Document Date: July 8, 2003 Number of Pages: 13

Signer(s) Other Than Named Above: —

Capacity(ies) Claimed by Signer

Signer's Name: Thea M. Bell

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

[ ] Individual
[ ] Corporate Officer — Title(s):
[ ] Partner — [ ] Limited [ ] General
[ ] Attorney-in-Fact
[ ] Trustee
[ ] Guardian or Conservator
[ ] Other:

Signer Is Representing:

2003-627008
08/15/2003 08:00A
15 of 16

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Riverside } ss.

On July 28, 2003 (Date) before me, Julie Audet, Notary Public (Name and Title of Officer (e.g., "Jane Doe, Notary Public"))

personally appeared C. J. Butcher (Name(s) of Signer(s))

☒ personally known to me
☐ proved to me on the basis of satisfactory evidence

JULIE AUDET
Commission # 1375375
Notary Public - California
Riverside County
My Comm. Expires Sep 17, 2006

to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

WITNESS my hand and official seal.

Julie Audet
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Annexation Agreement

Document Date: July 8, 2003 Number of Pages: 13

Signer(s) Other Than Named Above: —

Capacity(ies) Claimed by Signer

Signer's Name: C. J. Butcher

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

☐ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney-in-Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

Signer Is Representing: _____

 Prod. No. 5907 Reorder: Call Toll-Free 1-800-876-6827

2003-627008
08/15/2003 08:00A
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ATTACHMENT 5
AMORTIZATION SCHEDULE

Amortization Schedule

Assessment No:	00036	Customer Number:	013723	Customer Name:	Steve Bell
Tax Lot:	401-071/038-6	As of:	12/11/2018	Principal Balance:	24,722.61
Service Address:		Projected Interest to be Paid:	13,063.83	Total Interest Paid:	9,789.55
		Projected Payoff Date:	04/15/2028	YTD Interest Paid:	570.16

Period Ending	Bill Amount	Principal	Interest
12/15/2018	546.94	433.73	113.21
02/15/2019	546.78	433.73	113.05
04/15/2019	539.39	433.73	105.66
06/15/2019	540.98	433.73	107.25
08/15/2019	538.99	433.73	105.26
10/15/2019	537.01	433.73	103.28
12/15/2019	535.02	433.73	101.29
02/15/2020	534.66	433.73	100.93
04/15/2020	527.86	433.73	94.13
06/15/2020	529.06	433.73	95.33
08/15/2020	527.08	433.73	93.35
10/15/2020	525.09	433.73	91.36
12/15/2020	523.11	433.73	89.38
02/15/2021	522.55	433.73	88.82
04/15/2021	516.33	433.73	82.60
06/15/2021	517.15	433.73	83.42
08/15/2021	515.16	433.73	81.43
10/15/2021	513.18	433.73	79.45
12/15/2021	511.19	433.73	77.46
02/15/2022	510.44	433.73	76.71
04/15/2022	504.81	433.73	71.08
06/15/2022	505.23	433.73	71.50
08/15/2022	503.24	433.73	69.51
10/15/2022	501.26	433.73	67.53
12/15/2022	499.27	433.73	65.54
02/15/2023	498.33	433.73	64.60
04/15/2023	493.28	433.73	59.55
06/15/2023	493.31	433.73	59.58
08/15/2023	491.33	433.73	57.60
10/15/2023	489.34	433.73	55.61
12/15/2023	487.36	433.73	53.63
02/15/2024	486.22	433.73	52.49
04/15/2024	481.76	433.73	48.03
06/15/2024	481.40	433.73	47.67
08/15/2024	479.41	433.73	45.68
10/15/2024	477.42	433.73	43.69
12/15/2024	475.44	433.73	41.71
02/15/2025	474.10	433.73	40.37
04/15/2025	470.23	433.73	36.50
06/15/2025	469.48	433.73	35.75
08/15/2025	467.49	433.73	33.76
10/15/2025	465.51	433.73	31.78
12/15/2025	463.52	433.73	29.79
02/15/2026	461.99	433.73	28.26
04/15/2026	458.70	433.73	24.97
06/15/2026	457.56	433.73	23.83
08/15/2026	455.58	433.73	21.85
10/15/2026	453.59	433.73	19.86
12/15/2026	451.61	433.73	17.88
02/15/2027	449.88	433.73	16.15
04/15/2027	447.18	433.73	13.45
06/15/2027	445.65	433.73	11.92
08/15/2027	443.66	433.73	9.93
10/15/2027	441.67	433.73	7.94
12/15/2027	439.69	433.73	5.96
02/15/2028	437.77	433.73	4.04
04/15/2028	435.65	433.73	1.92

Beaumont-Cherry Valley Water District
Regular Board Meeting
June 10, 2020

Item 10

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Update of Annexation request for Properties Associated with Parcel Map 28348 and Update and Extension of "Will Serve Letter" for Development located on Parcels 1 and 9 of Parcel Map 28348**

Staff Recommendation

Consideration of update and approve the following actions for Parcel Map 28348 located within the City of Beaumont, California at the southwest corner of the intersection of West 4th Street and Risco Circle:

1. Rescind the Request of Approval for "Annexation and Will Serve Letter" for Parcel 9 (APN 417-220-009)
2. Approve the request for update of "Will Serve Letter" for Parcel 1 (APN 417-220-042)
3. Approve the request to amend the update of annexation of Parcel Map 28348 to include the entire map.

Background

This item has been brought before the Board of Directors on March 8, 2017 and December 12, 2018. At the March 8, 2017 Board of Directors meeting, the Board approved the request for "Annexation and Will Serve Letter" for a proposed office and warehouse facility (approx. 19,095 sf) on Assessor's Parcel No. (APN) 417-220-009 (Parcel 9 of Parcel Map No. 28348). It should be noted that at that time, the parcel map was referenced in the Agenda item and associated Staff Report as Parcel Map 26348 not 28348, however the correct Parcel Map (PM 28348) was attached as part of said addenda item documentation. Figure 1 and Figure 2, attached, hereafter identifies the parcels associated with Parcel Map 28348.

At that time, it was identified to the Board that this Parcel Map was prepared by the City of Beaumont and traded to a local area developer for property owned by that developer. Said traded property is located on the southeast corner of Beaumont Avenue and Brookside Avenue, where the current Beaumont Sports Park Complex is located. At that time, PM 28348 was supposed to be annexing through Riverside LAFCO into the District's Service Area, but for some reason that work was not completed. However, some buildings were constructed on properties associated with PM 28348. Due to annexation not being completed, the Board in 2017 identified, along with the property owner that all parcels associated with PM 28348 should be annexed into the District's Service Boundary at that time in order to correct this discrepancy.

At the Board of Director's Regular Meeting on December 12, 2018, the applicant requested an update to the Will Serve Letter for Parcel 9 based on the project as was proposed to the Board in March 2017. The applicant further identified that Rudolph Foods wished to build a

parking lot across the street (to the south) from their existing food production facility. The applicant therefore requested that the "Will Serve Letter" be updated to include a non-potable water service for landscaping associated with said parking lot as part of the Annexation process and associated "Will Serve Letter" update request (proposed parking lot on Parcel 1). The Board, at that time (December 2018), approved a request for update of Will Serve Letter (APN 417-220-009 [Parcel 9]), Request for annexation of Parcel Map 28348 (Parcels 2, 3, 4, 5, 6, 7, 8, 10, and 11) and new Will Serve Letter for PM 28348 Parcel 1 (APN 417-220-042).

Subsequent to the December 2018 meeting, District staff continued working with the applicant in preparing the Plan of Service (POS) (a requirement of the LAFCO annexation process) necessary for the annexation to move forward. In or about that time, Staff had received plans from Rudolph Foods for the development on Parcel 1 (APN 417-220-042) which indicated the parking lot development to be used by Rudolph Foods which required a non-potable (irrigation) water service necessary to irrigate the associated parking lot landscape areas.

The applicant's consultant prepared the said POS (see Attachment 1 – Plan of Service) and addressed the existing and proposed project components associated with all of PM 28348. Said POS further identified existing and proposed water demands associated with the overall Parcel Map, based on the various land uses of each parcel. The total area of the Parcel Map is approximately 30.25 acres.

Working with the applicant's consultant in furthering the Plan of Service, the District understands (and it is identified as such in the POS) that Parcel 9 (APN 417-220-009) is now being considered a vacant parcel with no proposed project or water use in the POS. The proposed project associated with Parcel 9 was in escrow when originally brought to the Board of Directors in 2017, but has since fallen out of escrow; therefore there is no proposed project (the reason for rescinding the Will Serve Letter associated with Parcel 9 at this time). Parcel 1 is depicted in the POS and in Table 1, below, as having a non-potable water demand to satisfy the irrigation needs of the landscaping associated with the parking lot. Finally, in the event there is some future project associated with Parcel 9, the current property owner will be required to secure a "Will Serve Letter" for said project.

The following Table 1 summarizes anticipated water use for Parcel 1:

Table 1 – Anticipated Water Uses

	Domestic Water Use		Recycled Water Use		Total Parcel Water Use	
Parcel	**Gallons per Day**	**Equivalent Dwelling Units**	**Gallons per Day**	**Equivalent Dwelling Units**	**Gallons per Day**	**Equivalent Dwelling Units**
1	0	0	1,222	2.106	1,222	2.106

Table 2 shows the parcels associated with PM 28348 and the respective land use for each:

Table 2 – Existing / Proposed Land Use

Parcels	Acreage	Existing/Proposed Land Use	Note:
1	1.21	Truck and Trailer Parking for Trailers Awaiting Loading and Unloading of Food Products (Approved by the City of Beaumont Planning Commission on May 8, 2018.)	Requested for Update to Will Serve Letter
2	1.29	Vacant (No use proposed at this time)	
3	1.66	Vacant (No use proposed at this time)	
4	1.62	Vacant (No use proposed at this time)	
5, 6, 7, 10, 11	7.1	ACSS Inc., Steel Fabricator (approx. 50k sf building)	Receiving Service from the District
8	1.19	Vacant (No use proposed at this time)	
9	1.2	Vacant (No use proposed at this time)	
12	4.22	Vacant (No use proposed at this time)	
13	2.38	Beaumont Wastewater Treatment Plant, pond facility	WWTP Pond Facility, No Service Provided to the Parcel from the District
14	2.29	Robertson's Ready Mix, materials and supplies storage	Material & Supply Storage, No Service Provided to the Parcel from the District
15	2.05	Robertson's Ready Mix, materials and supplies storage	Material & Supply Storage, No Service Provided to the Parcel from the District
16	4.04	Vacant (No use proposed at this time)	
Total	30.25		

Upon the completion of annexation of the parcel map into the District's Service Boundary, future development of the parcels identified in Table 2 as "Vacant" will be required to submit to the District for consideration of a Will Serve Letter.

Fiscal Impact

None. Annexation costs will be the responsibility of the applicant.

Figures and Attachments

Figure 1 – Parcels Associated with Parcel Map No. 28348

Figure 2 – Aerial Image of Parcels 1-16 of Parcel Map No. 28348

Attachment 1 – Parcel Map No. 28348 Plan of Service

Attachment 2 – December 12, 2018 Board of Directors Staff Report, Item 12 with Item 7 from March 8, 2017 Board of Directors Staff Report

Staff Report prepared by Mark Swanson, Senior Engineer

FIGURE 1
Parcels Associated with Parcel Map No. 28348

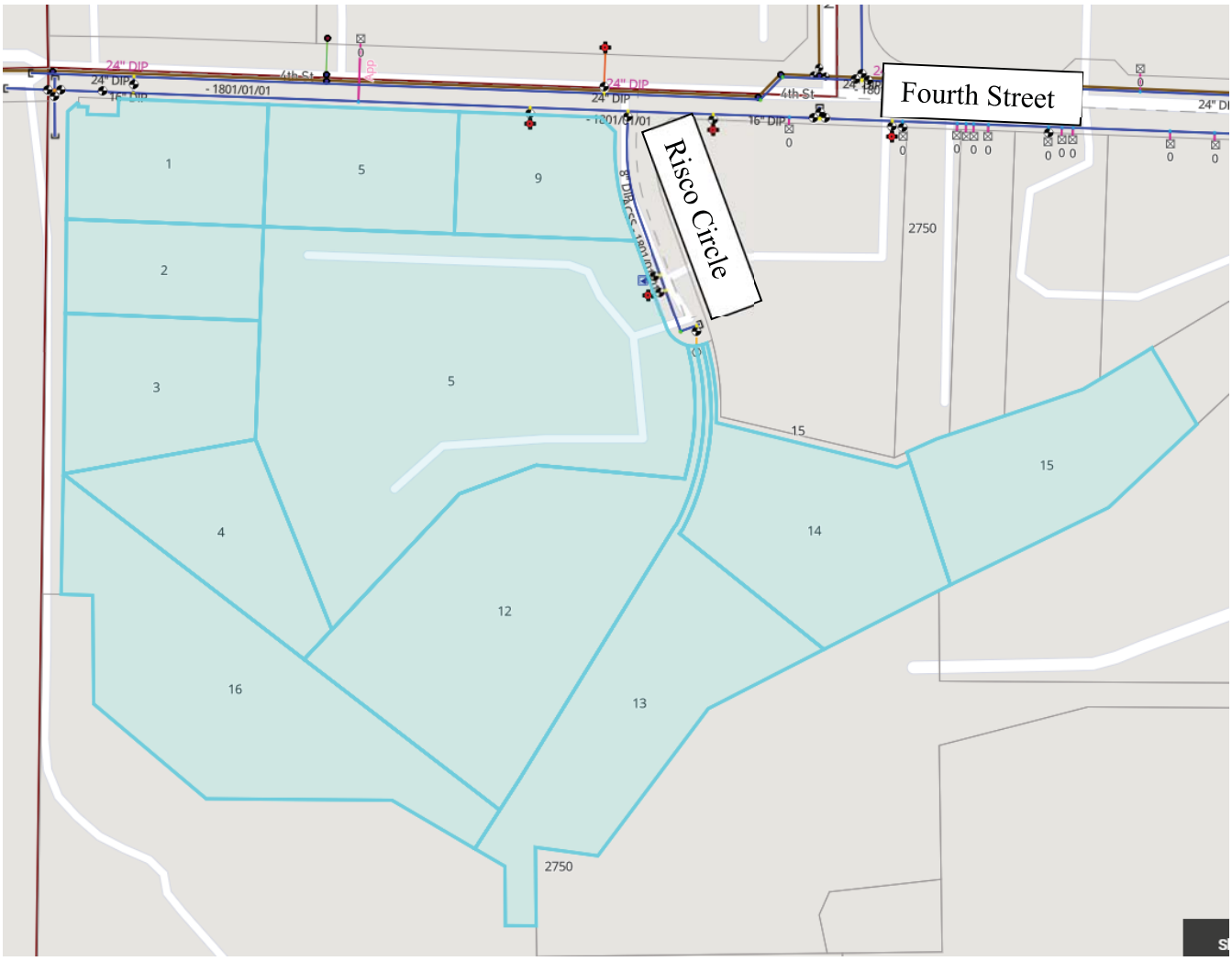


FIGURE 2
Aerial Image of Parcels 1-16 of Parcel Map No. 28348

BEAUMONT – CHERRY VALLEY WATER DISTRICT
PLAN OF SERVICES
for
Parcel Map No. 28348

Introduction

This Plan of Services covers an area of approximately 30.25 acres consisting of Parcels 1 through 16 as shown on Parcel Map (PM) No. 28348 recorded in Parcel Map Book 201 on pages 72 through 74, records of Riverside County, CA (hereinafter the "Project Area"). The Project Area is located south of Fourth Street, east of Risco Circle, and west of Viele Avenue in the city of Beaumont; in the north half of the southwest quarter of Section 9, Township 3 South, Range 1 West, San Bernardino Base and Meridian. The Annexation Area includes the following Assessor's Parcel Numbers:

- 417-220-009
- 417-220-014
- 417-220-015
- 417-220-017
- 417-220-022
- 417-220-026
- 417-220-028
- 417-220-036
- 417-220-037
- 417-220-038
- 417-220-039
- 417-220-041
- 417-220-042

The area covered by this Plan of Services is shown on **Figure 1 – Project Area**. The Project Area is within the service area of the City of Beaumont for wastewater treatment and is being annexed to the Beaumont-Cherry Valley Water District (the "District") for domestic and non-potable water services. The Project Area is within the District's sphere of influence.

Domestic Water Demand, Source, and Facilities

According to the District's *2015 Urban Water Management Plan*, the District's service area encompasses approximately 28 square miles, predominantly in Riverside County, including the city of Beaumont and the unincorporated community of Cherry Valley. The District also owns 1,524 acres of watershed land in Edgar Canyon (a portion of which is in San Bernardino County), where it operates some wells and reservoirs. The District has a service population of approximately 48,400 people with 16,985 service connections. The District's service area consists mainly of single-family residential customers, with a smaller number of multi-family residential, commercial, industrial, institutional/governmental, landscape, and agricultural irrigation connections.

Existing and proposed land uses for the Annexation Area and the estimated average daily domestic water demand are presented in **Table 1 – Estimated Average Daily Domestic Demand for the Annexation Area based on Existing Land Uses and Entitlements,** below, and **Table 2 – Estimated Average Daily Domestic Demand for the Annexation Area Based on Existing Use for Developed Parcels, and Beaumont General Plan Land Use Designation for the Rest of the Parcels**, which begins on the page following **Table 1**.

Table 1 – Estimated Average Daily Domestic Demand for the Annexation Area based on Existing Land Uses and Entitlements with Pending Applications

Parcels as shown on PM No. 28348	Acreage (per PM No. 28348)	Existing/Proposed Land Use[1]	Average Daily Water Demand (in GPD[2])	Estimated EDUs[6]
1	1.21	Truck and Trailer Parking for Trailers Awaiting Loading and Unloading of Food Products (Approved by the City of Beaumont Planning Commission on May 8, 2018.)	0[3]	0[3]
2	1.29	Vacant (No use proposed at this time.)	N/A[4]	N/A[4]
3	1.66	Vacant (No use proposed at this time.)	N/A[4]	N/A[4]
4	1.62	Vacant (No use proposed at this time.)	N/A[4]	N/A[4]
5, 6, 7, 10, 11	7.10	ACSS Inc., Steel Fabricator (approximately 50,000 SF building)	Already receiving service from the District	N/A
8	1.19	Vacant (No use proposed at this time.)	N/A[4]	N/A[4]
9	1.20	Vacant (No use proposed at this time.)	N/A[4]	N/A[4]
12	4.22	Vacant (No use proposed at this time.)	N/A[4]	N/A[4]
13	2.38	Beaumont Wastewater Treatment Plant, pond facility	0[5]	0[5]

Parcels as shown on PM No. 28348	Acreage (per PM No. 28348)	Existing/Proposed Land Use[1]	Average Daily Water Demand (in GPD[2])	Estimated EDUs[6]
14	2.29	Robertson's Ready Mix, materials and supplies storage	0[5]	0[5]
15	2.05	Robertson's Ready Mix, materials and supplies storage	0[5]	0[5]
16	4.04	Vacant (No use proposed at this time.)	N/A[4]	N/A[4]
Total for the Annexation Area			**0**	**0**

Notes:

1. Land Use based on the Beaumont Planning Department Staff Report for Minor Plot Plan PP2018-0094 and the ACSS website (https://acssinc.weebly.com/about-us.html).
2. GPD = gallons per day.
3. Parcel 1 is a parking lot and does not require domestic water service.
4. Average daily demand and estimated EDUs are shown as N/A for Parcels 1, 2, 3, 4, 8, 9, 12, 13, and 16 because no uses are proposed at this time.
5. Average daily demand and estimated EDUs are shown as 0 for Parcels 13, 14, and 15 because current uses on those parcels do not require water service.
6. EDU = equivalent dwelling unit.

As shown above in **Table 1**, based on existing land uses, the proposed annexation would not result in an increased domestic water demand.

Table 2 – Estimated Average Daily Domestic Demand for the Annexation Area Based on Existing Use for Developed Parcels, and Beaumont General Plan Land Use Designation for the Rest of the Parcels

Parcels as shown on PM No. 28348	Acreage (per PM No. 28348)	Existing Use /General Plan Designated Land Use[1]	Average Daily Water Demand (in GPD[2])	Estimated EDUs[6]
1	1.21	Truck and Trailer Parking for Trailers Awaiting Loading and Unloading of Food Products (Approved by the City of Beaumont Planning Commission on May 8, 2018.) Vacant/Industrial (No use proposed at this time.)	0[3]	0[3]
2	1.29	Vacant/Industrial (No use proposed at this time.)	2,580[4]	4.4
3	1.66	Vacant/Industrial (No use proposed at this time.)	3,320[4]	5.7
4	1.62	Vacant/Industrial (No use proposed at this time.)	3,240[4]	5.6
5, 6, 7, 10, 11	7.10	ACSS Inc., Steel Fabricator (approximately 50,000 SF building)	Already receiving service from the District	0
8	1.19	Vacant/Industrial (No use proposed at this time.)	2,380[4]	4.1
9	1.20	Vacant/Industrial (No use proposed at this time.)	2,400[4]	4.1
12	4.22	Vacant/Industrial (No use proposed at this time.)	8,440[4]	14.6

Parcels as shown on PM No. 28348	Acreage (per PM No. 28348)	Existing Use /General Plan Designated Land Use[1]	Average Daily Water Demand (in GPD[2])	Estimated EDUs[6]
13	2.38	Beaumont Wastewater Treatment Plant, pond facility	0[5]	0[5]
14	2.29	Robertson's Ready Mix, materials and supplies storage	0[5]	0[5]
15	2.05	Robertson's Ready Mix, materials and supplies storage	0[5]	0[5]
16	4.04	Vacant/Industrial (No use proposed at this time.)	8,080[4]	13.9
Total for the Annexation Area			**30,440**	**52.5**

Notes:

1. Land Use based on information in the Beaumont Planning Department Staff Report for Minor Plot Plan PP2018-0094, the ACSS website (https://acssinc.weebly.com/about-us.html), and the Beaumont General Plan (http://beaumontca.gov/DocumentCenter/Home/View/66)
2. GPD = gallons per day.
3. Parcel 1 is a parking lot and does not require domestic water service.
4. Average daily demand is calculated for Parcels 1, 2, 3, 4, 8, 9, 12, 13, and 16 based on the Beaumont General Plan land use designation of industrial and 2,000 gallons/day/acre, which is the factor used for industrial/commercial developments in the BCVWD Potable Water System Master Plan, adopted January 2016.
5. Average daily demand and estimated EDUs are shown as 0 for Parcels 13, 14, and 15 because current uses on those parcels do not require water service.
6. EDU = equivalent dwelling unit. Estimated EDUs for Parcels 1, 2, 3, 4, 8, 9, 12, 13, and 16 are based on 580 GPD/EDU.

As shown in **Table 2**, the proposed annexation would result in an increased average water use of approximately 30,440 gallons per day, which is equivalent to approximately 52.5 new EDUs. However, Parcel 1 is the only parcel seeking water supply/service from the District. The other parcels identified in **Table 2** will need to obtain a "Will Serve" letter from the District for each respective parcel's future development based on its respective project.

The District's 2015 Urban Water Management Plan (UWMP) states the District has over 16,000 connections and delivers just over 9,000 acre-feet per year (AFY) of potable water. Demand for non-potable (landscape) supplies is 514 AFY. In total, 9,792 AF were used within the District

in 2015. The 2015 UWMP projects the service population will almost double by 2040 and according to Table 4-2 of the 2015 UWMP, the 2040 projected potable and raw water demand is 25,381 AFY. Of the projected 2040 potable and raw water demand, approximately 22,000 AFY is projected to serve residential, commercial, industrial, institutional/governmental, agricultural, and other (i.e., metered construction and street sweeping water, etc.) uses; 398 AFY raw water to supplement the non-potable water system; 500 AFY in projected system losses; and 2,500 AFY of imported raw water for groundwater recharge (banked for future extractions during dry periods).

The source of potable water supply for the District is groundwater from 24 wells (1 well on standby) in Little San Gorgonio Creek (Edgar Canyon) and Beaumont Basin (also known as the Beaumont Storage Unit or the Beaumont Management Zone). The District facilitates the adjudication by replenishing what is pumped from the Beaumont Basin with imported State Project Water from the San Gorgonio Pass Water Agency (SGPWA), some which is used to recharge groundwater. As of the end of 2017, the District has "banked" approximately 32,295.7 acre-feet of water into the Beaumont Basin (about a 3-year supply). The 12,899 AFY of water used within the District in 2017 was sourced as follows:

- 1,270.4 AFY from groundwater from the Little San Gorgonio (Edgar Canyon),
- 2,790.6 AFY of unused Adjudication overlyer allocation
- 11,650 AFY from Groundwater from the Beaumont Basin, and
- 13,590 AFY purchased/imported water from the SGPWA, which includes:
    - 8,860.1 AFY used for Production Replenishment, and
    - 4,729.9 AFY transferred to banked groundwater storage.

The Annexation Area will connect to an existing District domestic water pipeline in 4th Street; thus no new off-site facilities are required. Land Use within the Annexation Area is consistent with the future development projections used in the District's UWMP and BCVWD White Papers 1 through 7 related to the regional supply, which are included as Attachment A.

Non-Potable Water

Non-potable water will be used for landscape irrigation. The District has over 40 miles of non-potable water transmission and distribution pipelines in place. This system includes a 2 million gallon recycled (non-potable) water reservoir. There are approximately 300 existing landscape connections to the recycled water system receiving about 1,300 acre-feet of water (per 2015 records). Additionally, District Well 26, can pump into either the potable or non-potable water system, and is currently pumping into the non-potable system to supplement it. In addition to current sources of water, the District anticipates increasing the use of recycled water, storm water capture, urban storm runoff capture, and additional groundwater supplies to meet future water demand. Year 2040 non-potable water supplies are projected to be 4,406 AFY.

Existing and proposed land uses for the Annexation Area and the estimated average daily non-potable water demand are presented in **Table 3**, on the following page.

Table 3 – Estimated Average Daily Non-Potable Demand for the Annexation Area Based on Existing Uses

Parcels as shown on PM No. 28348	Acreage (per PM No. 28348)	Landscape Demand[1]	Average Daily Water Demand (in GPD[2])	Estimated EDUs[6]
1	1.21	Truck and Trailer Parking for Trailers Awaiting Loading and Unloading of Food Products (Approved by the City of Beaumont Planning Commission on May 8, 2018.)	416[3]	0.7[3]
2	1.29	Vacant (No landscaping proposed at this time.)	N/A[4]	N/A[4]
3	1.66	Vacant (No landscaping proposed at this time.)	N/A[4]	N/A[4]
4	1.62	Vacant (No landscaping proposed at this time.)	N/A[4]	N/A[4]
5, 6, 7, 10, 11	7.10	ACSS Inc. Steel Fabricator (approximately 50,000 SF building)	N/A[5]	N/A[5]
8	1.19	Vacant (No landscaping proposed at this time.)	N/A[4]	N/A[4]
9	1.20	Vacant (No landscaping proposed at this time.)	N/A[4]	N/A[4]
12	4.22	Vacant (No landscaping proposed at this time.)	N/A[4]	N/A[3]

Parcels as shown on PM No. 28348	Acreage (per PM No. 28348)	Landscape Demand[1]	Average Daily Water Demand (in GPD[2])	Estimated EDUs[6]
13	2.38	Beaumont Wastewater Treatment Plant, pond facility (No landscaping proposed at this time.)	0[6]	0[6]
14	2.29	Robertson's Ready Mix, materials and supplies storage (No landscaping proposed at this time.)	0[6]	0[6]
15	2.05	Robertson's Ready Mix, materials and supplies storage (No landscaping proposed at this time.)	0[6]	0[6]
16	4.04	Vacant (No landscaping proposed at this time.)	N/A[4]	N/A[4]
Total for the Annexation Area			**416**	**0.7**

Notes:

1. Land Use based on information in the Beaumont Planning Department Staff Report for Minor Plot Plan PP2018-0094 and the ACSS website (https://acssinc.weebly.com/about-us.html)
2. GPD = gallons per day.
3. Average daily demand for Parcel 1 is based on the MAWA and ETWU Calculations for the parking lot. The ETWU is 151,821 gallons/year, which equals approximately 416 GPD. Estimated EDUs for Parcel 1 is based on 580 GPD/EDU
4. Average daily demand and estimated EDUs are shown as N/A for Parcels 1, 2, 3, 4, 8, 9, 12, 13, and 16 because no uses are proposed at this time.
5. Not receiving non-potable water service from the District.
6. Average daily demand and estimated EDUs are shown as 0 for Parcels 13, 14, and 15 because current uses on those parcels do not require water service.
7. EDU = equivalent dwelling unit.

State Legislation

California Environmental Quality Act (CEQA)

The District as Lead Agency adopted a Notice of Exemption (NOE) for the proposed annexation. A copy of the filed NOE is included as Attachment B.

Financing

Public financing for the development of the Project Area is not proposed. Development of the Project Area will be owner financed.

Sources: Riverside Co. GIS, 2019;
RCIT 2016 (imagery).

0 400 800 Feet

Figure 1 - Project Area

Annexation of PM 28348 to BCVWD

ALBERT A. WEBB ASSOCIATES

Attachment A

BCVWD White Papers Nos. 1 through 7

Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223
951-845-9581 www.bcvwd.org

DATE: September 6, 2017

TO: Board of Directors

FROM: Dan Jaggers, Interim General Manager

SUBJECT: Discussion of the Analysis of State Project Water (SPW) Requirements for SGPWA and BCVWD – White Paper No. 1

This white paper is the first of a series of white papers discussing San Gorgonio Pass Water Agency (SGPWA) and Beaumont Cherry Valley Water District's (BCVWD's) imported water needs to year 2050 – essentially build-out. Subsequent white papers will expand on this initial forecast and identify funding sources and possible strategies to secure and fund the future imported water needs.

Background:

There has been much discussion at past BCVWD and SGPWA Board meetings and presentations about imported water supply, the need for more "Table A" water, Nickel Water, Sites Reservoir, etc., but there has not been much analysis presented by the SGPWA as to the region's needs and BCVWD's specific needs with respect to the proposed water supply opportunities. Some of these needs include:

- What are SGPWA's regional needs for imported water and where will this water come from?
- What is the effect on BCVWD's imported water demands without recycled water supply? What is the ripple effect on SGPWA?
- What is the impact of demand reduction due to more efficient housing and landscaping in combination with rising costs for water?
- What planned participation should BCVWD have in future water supply opportunities?

This White Paper provides information to BCVWD Board Members and others so they have a better understanding of our current and future water supply needs when they make decisions and set policy for the District's and the Region's future.

BCVWD Engineering Staff has reviewed the SGPWA's supply needs taken from their 2015 Urban Water Management Plan (UWMP) and some of the additional supply sources they were or are considering and developed a set of bar graphs that illustrate how their demands and supply sources might look from now to 2050.

Table 2-2, shown below, extracted from SGPWA's 2015 UWMP, shows BCVWD's demands for 2010 and 2015. The data is correct, but is misleading.

TABLE 2-2
HISTORICAL (2010) AND CURRENT (2015) WATER DEMANDS ON SGPWA (AF)[a]

Agency Name	2010	2015
BCVWD[b][c]	5,727	2,773
City of Banning[c]	1338	694
YVWD[c]	713	454
Total Demands	7,778	3,921

Notes:
(a) Volumes shown are actual deliveries.
(b) 2010 Data provided by BCVWD; 2015 data from BCVWD 2015 UWMP.
(c) Data from retailer 2015 UWMPs.

During 2010 BCVWD was able to pump 6,802 acre-ft/year (AFY) of "temporary surplus" from the Beaumont Basin without replacement obligations. This reduced BCVWD's demand for imported water and a portion of the 5,727 acre-ft (AF) shown above was "banked" for future use. So the "5727 AF" in Table 2 would not be BCVWD's "normal" demand on the SGPWA.

The 2015 demand of 2,773 AF was reflective of reduced water consumption due to the mandated water conservation measures and the reduced amount of SPW available to SGPWA that year due to the low State Water Project Allocation (20% in 2015). Under "normal conditions" BCVWD's imported water demand in 2015 would have reflected a number closer to 7,565 AF and SGPWA SPW demands would have been closer to 9,000 (AFY).

Table 2-4, extracted from SGPWA's 2015 UWMP, shows BCVWD's imported water demands and the SGPWA's total projected demands. The demands given to the SGPWA by BCVWD were adjusted slightly by BCVWD in the preparation of BCVWD's 2015 UWMP.

TABLE 2-4
PROJECTED WATER DEMANDS ON SGPWA (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD[a]	10,860	12,476	14,087	15,886	17,334
City of Banning[b]	-	501	1,344	2,237	2,718
YVWD[c]	1,809	1,967	2,162	2,391	2,644
Other[d]	500	1,600	2,800	3,900	5,000
Total Water Demands	**13,169**	**16,544**	**20,393**	**24,414**	**27,696**

Since the SGPWA UWMP only has forecasts to 2040, BCVWD made some estimates of the SGPWA's demands for 2045 and 2050 by extrapolating the reported demands from 2040. The extension to 2050 was done to identify water supply needs beyond the limits of the current UWMPs.

Some Basic Assumptions

1. SWP reliability in any given year is 62% to 64%; SGPWA used 62% in their UWMP which was the basis for this analysis. Their "Table A" amount is 17,300 AFY. "Table A" refers to the amount of water in SGPWA's contract with the Department of Water Resources

(DWR). It is used by DWR to allocate available water supplies to State Water Contractors such as SGPWA. There is no guarantee that full "Table A" is available every year (100% allocation). It has averaged 66.7% over the last 25 years; so the reliability percentages above are reasonable. This means that SGPWA can only count on approximately 10,700 AFY of SPW in any given year.

2. SGPWA is collecting a "fee" to purchase water to bring their "Table A" to 100% reliability. BCVWD believes this will happen over the years and the assumption in this analysis is that the SGPWA will have 100% reliable "Table A" by 2050 through gradual purchases of "Table A" water rights or other long term supply options. It may occur sooner than this, and if it does, that will improve the water supply situation.
3. In SGPWA's UWMP there is reference to "Yuba Accord" water. SGPWA has a long term agreement to purchase water from the Yuba County Water Agency through DWR. Over the years SGPWA has received about 300 AFY. It is assumed this will continue into the future.
4. SGPWA's UWMP states they are in final negotiations with San Bernardino Valley Municipal Water District (Valley District, formerly "Muni") for 5,000 AFY of "Table A" in years when Valley's Board declares a surplus. SGPWA states that this would be on the average of 2 out of 5 years (40% of the time), so it is assumed that 2,000 AFY can be obtained in any one year and this will continue in the future.
5. SGPWA has been in negotiations with a) Antelope Valley-East Kern Water Agency (AVEK) for water from the Nickel Farms (AVEK Nickel Water), for 1,700 AFY for 20 years with a first right to extending it another 20 years; b) a confidential individual or organization in the Southern Central Valley for 1,000 AFY to improve SPW reliability; and c) a confidential organization for 50,000 AF over a 10 year period (5,000 AFY) just to name a few. The AVEK Nickel Water is not subject to the DWR SWP reliability issues.
6. SGPWA has made a commitment of 10,000 AF and BCVWD has committed to 4,000 AF to the Sites Project Authority to fund Phase I of the Sites Reservoir Study; The Sites Reservoir has been preliminarily modeled using the Cal SIM model and its yield is determined to be 500,000 AFY; but only 250,000 AFY is actually guaranteed to the project participants at this time. Portions of the remaining 250,000 AFY may be under the control of the resource agencies for the benefit of fish and migratory birds[1]. Any unused portion of the 250,000 AFY, after the resource agencies "buy in," will revert back to the project participants. The Sites Project Authority participants requested more than 250,000 AF of the "guaranteed" water and so the Authority developed and allocated two classes of water: Class 1 and Class 2. Class 1 water is guaranteed if the project moves forward. After Phase I study is complete and all of the project participants, including the resource agencies, are committed, any remaining Class 2 water will be converted to Class 1 for each project participant. The Authority believes this might be as much as 50% of a participant's Class 2 water.

[1] Sites Project Authority (2017). Sites Reservoir Project, Program Administrator Position: Request for Qualifications and Proposal, June 23.

The SGPWA agreement with the Sites Authority is for 14,000 AF which included BCVWD's 4,000 AF share (28.571%). The split is shown below in Table 1.

Table 1
Original Agreement

	Total, AF	SGPWA, AF	BCVWD, AF
Class 1	7,966	5,690	2,276
Class 2	6,034	4,310	1,724
Total	14,000	10,000	4,000

Sometime after the original offer to SGPWA, one of the original participants decided not to participate, freeing up 10,000 AF Class 1 water which was then allocated to all of the participating State Water Project/Central Valley Project Contractor Participants. SGPWA's share of the reallocation was about 8.33%. The result of this reallocation is shown in Table 2. SGPWA and BCVWD's Class 2 water allocation were then reduced accordingly so the total participation remained the same.

Table 2
Adjusted Agreement

	Total, AF	SGPWA, AF	BCVWD, AF
Class 1	8,799	6,285	2,514
Class 2	5,201	3,715	1,486
Total	14,000	10,000	4,000

Discussions with SGPWA indicates there may be another participant that withdrew. Staff reviewed the minutes of the Authority's board meeting and determined that the agency that withdrew was Westlands Water District. Westlands had 11,380 AF of Class 1 water, which would result in a reallocation to SGPWA of about 949 AF. This should result in a final adjusted agreement shown in Table 3.

Table 3
Final Adjusted Agreement after Westland Withdrawal

	Total, AF	SGPWA, AF	BCVWD, AF
Class 1	9,748	6,963	2,785
Class 2	4,252	3,037	1,215
Total	14,000	10,000	4,000

The final project yield could range from the Class 1 water amounts in Table 3 to a likely maximum amount shown in Table 4 which is based on 50% of Class 2 being converted to Class 1 as stated above.

Table 4
Final Probable Maximum Yield of Sites Water

	Total, AF	SGPWA, AF	BCVWD, AF
Class 1	11,874	8,481	3,393

It is possible, depending on the resources agencies funding, that the Class 1 water amounts shown in Table 4 could be greater, i.e., the resource agencies fund less of the

project. It is also a very remote possibility that the full 500,000 AFY yield could be allocated to the project participants.

The project schedule for Sites estimates completion is approximately 2029. For purposes of this analysis it is assumed that water would not be available until 2035.

7. BCVWD's demands were extracted from their 2015 UWMP, (Table 6-26), with the 2045 demand extended forward to 2050. These demands were founded in the 2016 Potable Water Master Plan.
8. BCVWD's imported water demands were based on BCVWD using the following local sources:
    - Edgar Canyon Groundwater – 2,200 AFY
    - Beaumont Basin Groundwater, including forbearance water,
    - Recharged captured stormwater from MDP pipeline (Grand Avenue) and recharged urban runoff from water quality basins
    - Recycled Water
    - Non-potable groundwater from mouth of Edgar Canyon and San Timoteo Creek

    The quantities and more details can be found in Table 6-26 of BCVWD's 2015 UWMP.

SGPWA Imported Water Supplies to 2050

Figure 1 shows a stacked bar graph of the various sources of imported water supply that the SGPWA already has, has committed to, or is in serious negotiations for. Figure 1 assumes the yield from Sites Reservoir is based on the Total Likely Maximum Yield of 11,874 AF shown in Table 4. This assumes conversion of 50% of Class 2 water to Class 1 water. This represents a likely upper bound for Sites Reservoir water. There is no adjustment for reliability. Also shown in Figure 1 are the SGPWA's total demands for imported water from their UWMP appropriately extended along with BCVWD's imported water demands.

Also shown are BCVWD's need for imported water if recycled water from YVWD and the City of Beaumont are not available. Figure 1 shows that the Sites Reservoir is essential to meeting SGPWA's demands to 2050. Figure 1 and the figures to follow show there is a significant deficiency in 2030. It will be imperative that SGPWA secure a short term supply to meet that demand until Sites Reservoir comes on line or use retail water agencies water in storage, develop a banking program for any available water to cover the shortfall, or some combination of same.

Figure 2 shows SGPWA's sources of imported water assuming none of SGPWA's Sites Reservoir Class 2 water is converted to Class 1 water. This is a likely lower limit of supply from sites and represents a reduction of about 18%. There is no other adjustment for reliability. In Figure 2, SGPWA's 2045 and 2050 demands slightly exceed the available water supply. This is nothing to be alarmed about at this time; it is still 25 to 30 years away and sufficient time exists to secure additional supplies if needed. There will likely be some conservation measures that will bring the "demand curve" down. For example, new sources of imported water are very expensive. This will be reflected in the water rates and result in a reduction in demand.

The status of Sites Reservoir should be known by 2020, or sooner, if it will move forward. At this time it is not known if the Sites Reservoir yield will be subject to the reliability issues experienced SWP. BCVWD staff has posed this question to the Sites Project Authority, but to date the Authority has not responded. To see the impact of reduced reliability, a worst case scenario, Figure 3 was prepared. It is based on receiving only 62% of the minimum Class 1 water, i.e., no conversion of Class 2 water to Class 1 water. Figure 3 shows that SGPWA will need additional water sources even as Sites Reservoir comes on line. With conservation, it is possible that the need for an additional source(s) can be deferred for a few years. In any case, it is imperative that the Sites Reservoir yield reliability be determined as soon as possible as this is critical to long term water supplies for the SGPWA.

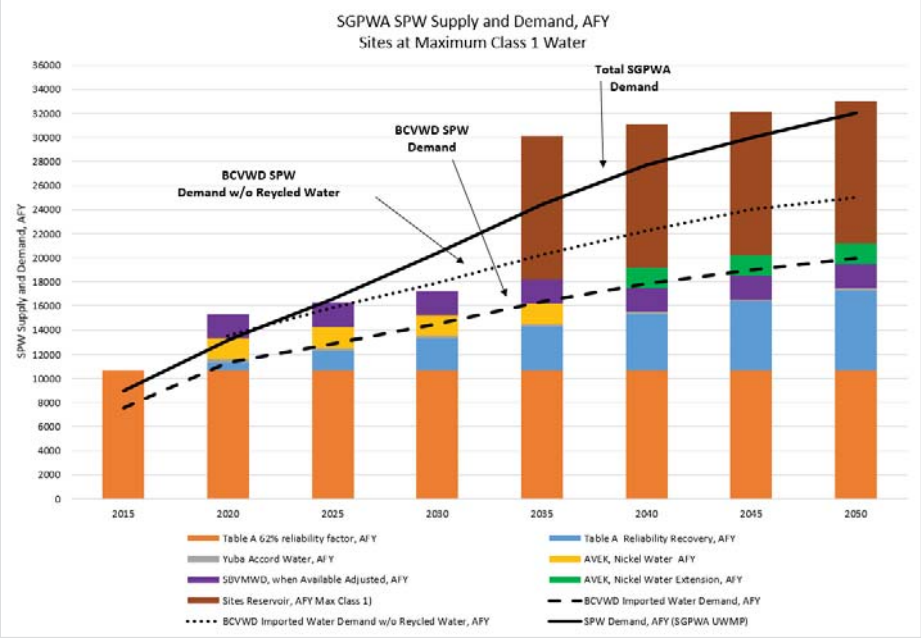


Figure 1
SGPWA Imported Water Sources and Demands
(Sites Reservoir at Maximum Class 1 Water)

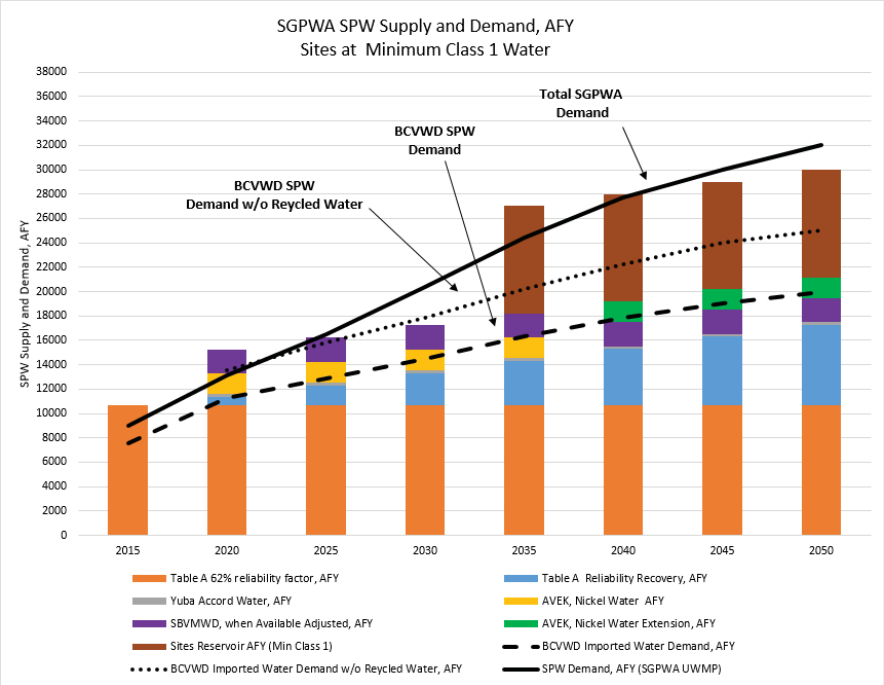


Figure 2
SGPWA Imported Water Sources and Demands
(Sites Reservoir at Minimum Class 1 Water)

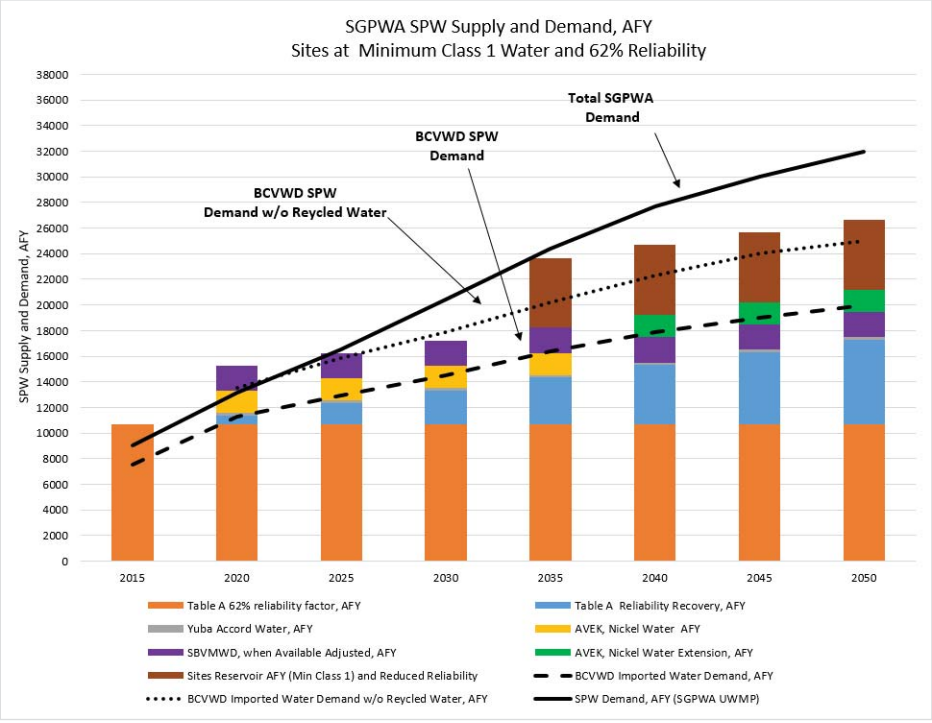


Figure 3
SGPWA Imported Water Sources and Demands
(Sites Reservoir at Minimum Class 1 Water with only 62% Reliability)

BCVWD's Long Term Imported Water Needs

BCVWD Engineering Staff analyzed BCVWD's long term water supply situation similar to the analysis presented above for SGPWA. The assumptions presented above for SGPWA were also applicable to BCVWD; but BCVWD has some additional constraints since they are only a portion of SGPWA's demand. Additional assumptions:

- BCVWD's share of SGPWA's "Table A", "Table A" reliability enhancement, Yuba Accord Water, AVEK Nickel Water, Sites Reservoir Water, etc. is based on BCVWD's portion of the SGPWA's total demand. BCVWD's share of the demand can be extracted from the SGPWA 2015 UWMP and is 85.9% in 2020 declining to 64.5% by 2040 and projected, by BCVWD to be 60% by 2050.
- BCVWD has committed to 4,000 AF from Sites Reservoir.

Figure 4 shows BCVWD's long term imported water supply. There are three (3) demand lines plotted:

- Demand for imported water assuming local water resource projects (stormwater capture etc.) and recycled water from YVWD and City of Beaumont are utilized.
- Demand for imported water without recycled water.
- Demand for imported water assuming conservation. A 20% reduction in BCVWD total water demand was assumed by 2040 and 25% by 2050. The imported water supply is about 58% of BCVWD's total supply, so the reduction in imported water demand will only be 58% of the conservation reduction.

The Sites Reservoir supply is based on having maximum Class 1 water, 3,393 AFY from Table 4 above along with BCVWD's share of SGPWA's 8,481 Sites Reservoir supply. This probably represents a likely maximum supply from Sites Reservoir. It shows that under this scenario and assuming recycled water use, BCVWD will have more than adequate water supply to 2050 and beyond. The plot further shows that the "50,000 AF for 10 years" currently being considered, may not be needed if Sites Reservoir is completed.

Figure 4 and the figures to follow show a short-fall in 2030, but that can be overcome by banking additional water between now and 2030 and using that water to meet demands until Sites Reservoir is fully functional.

Figure 5 shows BCVWD's imported water supply and demands under the same assumptions as Figure 4, but with Sites Reservoir yielding the minimum Class 1 supply. This is a likely minimum supply. The plot shows that BCVWD will likely have adequate water supply to 2045 and with conservation, well beyond 2050.

Figures 4 and 5 show that BCVWD have adequate imported water supplies until 2025 assuming SGPWA secures AVEK Nickel Water and continues to aggressively purchase water rights to bring their Table A to 100% reliability. This will provide some time to determine if Sites Reservoir will be implemented. If Sites Reservoir is not implemented, additional sources of imported water are needed. BCVWD will be about 4,000 AFY "short" in 2035 without Sites Reservoir.

Figure 6 represents a worst case scenario with Sites Reservoir at minimum Class 1 water and 62% reliability. Figure 6 shows that with conservation, even under this worst case, BCVWD will be able to meet its demand till 2050.

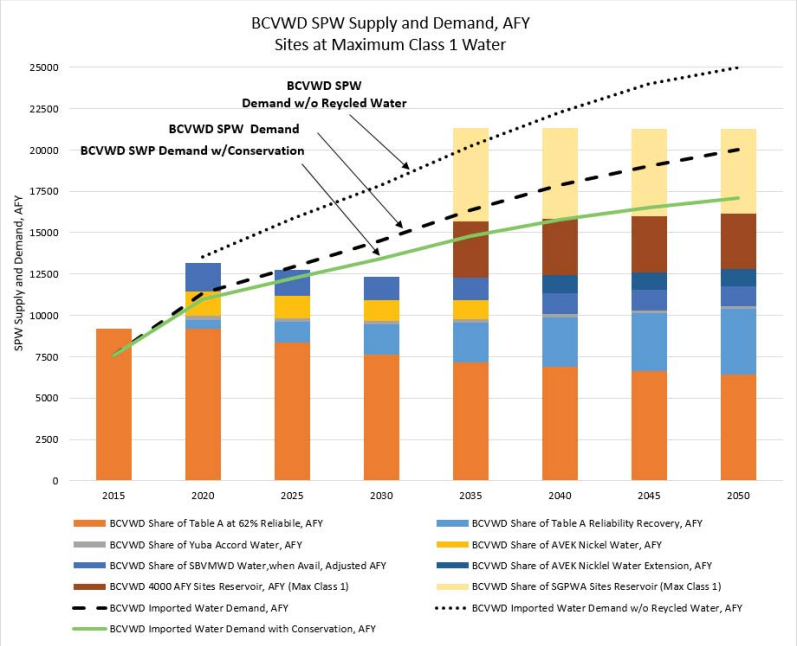


Figure 4
BCVWD Imported Water Sources and Demands
(Sites Reservoir Yield at Maximum Class 1 Water)

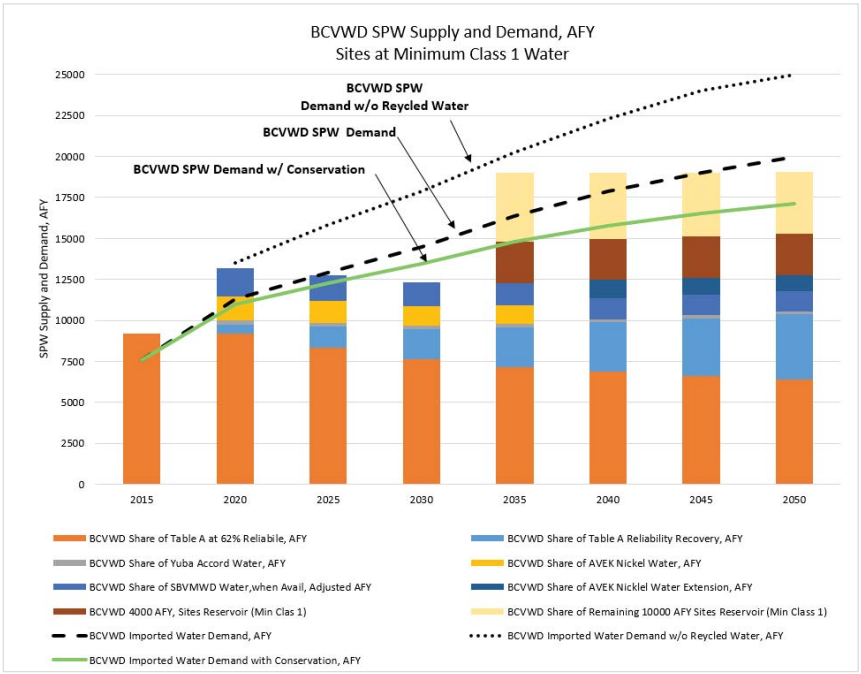


Figure 5
BCVWD Imported Water Sources and Demands
(Sites Reservoir at Minimum Class 1 Water)

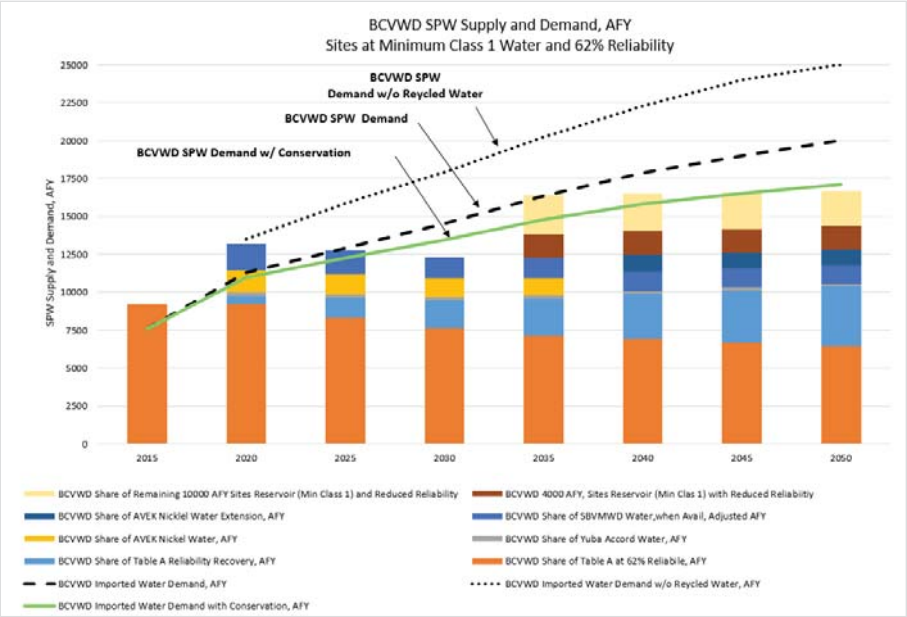


Figure 6
BCVWD Imported Water Sources and Demands
(Sites Reservoir at Minimum Class 1 Water and 62% Reliability)

Conclusions

1. Recycled water and maximization of local water resources by BCVWD is crucial to meeting long term water demands and minimizing BCVWD's dependence on imported water.
2. The SGPWA must secure Nickel Water and other long term contracts to bring their "Table A" amount from 62-64% reliability to 100% reliability. The figures in this report assume "Table A" will be 100% reliable by 2050.
3. Sites Reservoir is critical to meeting long term water demands. It is essential to determine if Sites Reservoir yield is subject to reliability reductions.
4. Water conservation should be encouraged to minimize the need for imported water.
5. These water demand and supply scenarios should be revisited periodically, certainly at least every five years.

Acknowledgments

This white paper supports a series of presentations made by BCVWD management to the Board of Directors and members of the public. Additional information is contained in those presentations.

Analyses and evaluations in support of the white paper and presentations were prepared by BCVWD staff, Joseph C. Reichenberger P.E., BCEE, Senior Engineer under the direction of

and with input from Dan Jaggers P.E., General Manager. Extensive analyses were prepared by Kaden Johnsen, Engineering Assistant, with help from Ivan Garcia, Engineering Intern.

Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223
951-845-9581 www.bcvwd.org

DATE: November 15, 2017

TO: Dan Jaggers, General Manager

FROM: Joe Reichenberger PE, Senior Engiineer

SUBJECT: Role of Groundwater Storage and Banking in Meeting State Project Water (SPW) Requirements for SGPWA and BCVWD – White Paper No. 2

This white paper summarizes a presentation to BCVWD's Board of Directors on October 11, 2017 continuing the discussion of San Gorgonio Pass Water Agency (SGPWA) and Beaumont Cherry Valley Water District's (BCVWD's) imported water needs to year 2050 – essentially build-out. This white paper focusses on the role of groundwater storage in overcoming short term deficiencies between imported water demand and imported water supply.

Background:

White Paper No. 1 identified BCVWD and SGPWA imported water requirements over the next 30 years or so based on the respective agencies' 2015 Urban Water Management Plans (UWMPs). White Paper No. 1 also listed a number of sources of imported water ("water portfolio") and the timing of the leasing, purchasing, or construction of these sources. Since the leasing and/or purchasing of the various sources in the portfolio will not be able to match the demand exactly, there will be times in the future that supplies will either exceed demand or be less the demand. Banking and groundwater storage in the Beaumont Groundwater Basin (Beaumont Basin) can be used advantageously as a strategy to better balance supply and demand.

The Beaumont Basin is an adjudicated groundwater basin, operated on a long-term safe yield basis, and managed by the Beaumont Basin Watermaster. When the Beaumont Basin was adjudicated, a minimum volume of 200,000 acre-ft (AF) was provided for banking (conjunctive use) of imported water available during wet years for used during dry years when imported water supply is reduced. Groundwater banking can also be used on a short term to partially overcome the reduced reliability of the SPW.

The Adjudication and Groundwater Storage

The Adjudication allocated the basin safe yield to the overlying parties. The Basin's appropriator parties (BCVWD, City of Banning, Yucaipa Valley Water District, and South Mesa Water Company) were assigned no rights except that in the event the overlying parties did not use the entire safe yield, the unused portion was reallocated to the appropriator parties based on an allocation percentage in the Adjudication and credited to the appropriator's groundwater storage account. The appropriator parties were given credit, acre-ft for acre-ft, for supplying recycled water and/or potable water to the overlying parties or their successors which also went into the appropriator's groundwater storage account. The appropriator parties could only pump stored groundwater or banked imported water without a replacement or replenishment obligation.

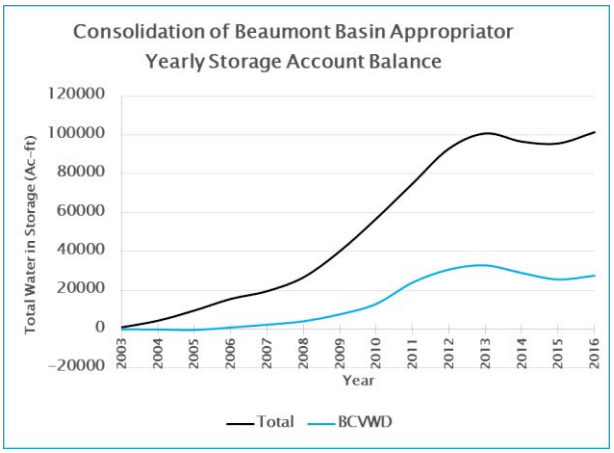
The current storage accounts in the Beaumont Basin are as follows:

City of Banning	80,000 AF
City of Beaumont	30,000 AF
BCVWD	80,000 AF
South Mesa Water Company	20,000 AF
Yucaipa Valley Water District	50,000 AF
Morongo Band of Mission Indians	20,000 AF
SGPWA	10,000 AF
Total	290,000 AF

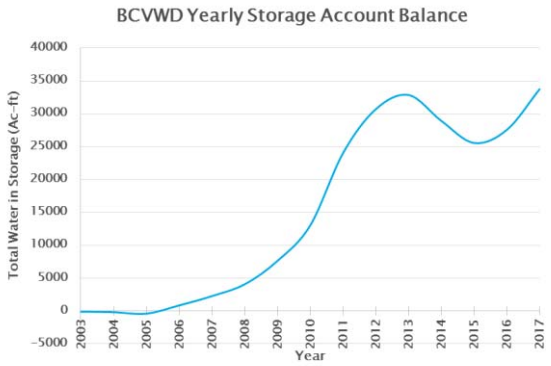
At the end of calendar year 2016 there was a total of 101,425 AF of water in storage; about 35% "full." Having a total capacity of 290,000 AF available for storage will be an advantage in overcoming short term shortages in SPW availability. Figure 1 shows the accumulation in storage from all of the parties and BCVWD. BCVWD had 27,565 AF of the total. These totals are increasing in 2017 as more SPW was available from SGPWA. BCVWD projects over 33,000 AF in BCVWD's storage account by the end of 2017. This represents about three years of BCVWD's total current annual water demand and about five times BCVWD's annual imported water requirements.

The Water Portfolio

SGPWA has contract with the Department of Water Resources (DWR) for 17,300 AF of SPW (Table A). However, that amount of water is not available year-in – year-out. In any given year, DWR forecasts that only about 60 to 64% of a State Water Contractor's Table A can be counted on. A reliability of 62% was used by SGPWA in their 2015 UWMP. It is possible this could be reduced to 60% at some point in the future. Figure 2 shows the SWP Table A allocations since 1992. The average over the 25 year period was 66.7%, slightly larger than DWR's projection. DWR's projection is lower because it considers future development condition rather than historical deliveries. But Figure 2, nevertheless, does show the variability from year to year. BCVWD is easily able to accommodate this variation through the banked groundwater.



Historical Water in Storage



BCVWD Projected to End of 2017

Figure 1
Historical Groundwater in Storage in the Beaumont Basin

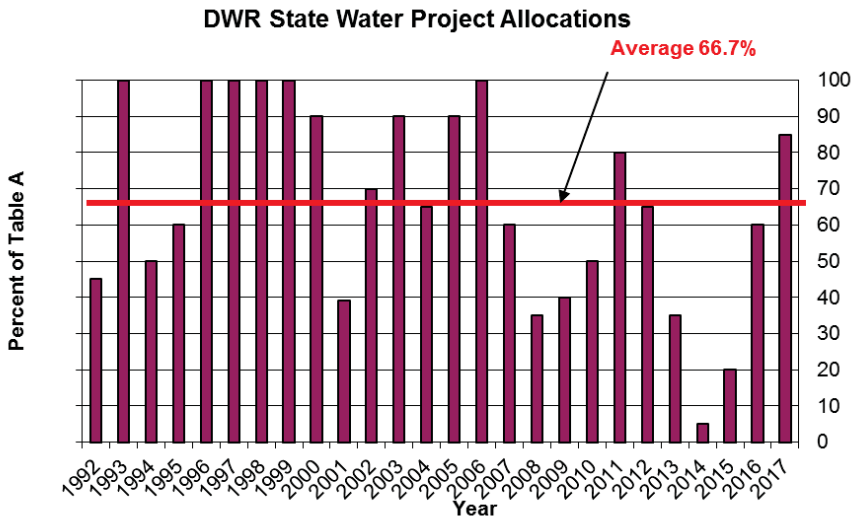


Figure 2
Historic DWR SWP Delivery Allocations

At the time of this analysis SGPWA was considering the following water sources for its portfolio in addition to its Table A at about 60 to 64% reliability:

- Table A reliability recovery to 100% reliability by 2050
- Antelope Valley-East Kern (AVEK) for water from the Nickel Farms (AVEK Nickel Water), 1,700 AFY for 20 years with a first right to extending it another 20 years
- San Bernardino Valley Municipal Water District (Valley District, formerly "Muni") for 5,000 AFY of "Table A" in years when Valley's Board declares a surplus. SGPWA states that this would be on the average of 2 out of 5 years (40% of the time), so it is assumed that 2,000 AFY can be obtained in any one year and this will continue in the future.

- "Yuba Accord" water. SGPWA has a long term agreement to purchase water from the Yuba County Water Agency through DWR. Over the years SGPWA has received about 300 AFY (as stated in their 2015 UWMP. It is assumed this will continue into the future.
- SGPWA has made a commitment of 10,000 AF and BCVWD has committed to 4,000 AF to the Sites Project Authority to fund Phase I of the Sites Reservoir Study. White Paper No.1 described in the detail the yield from Sites Reservoir which SGPWA and BCVWD can count on. There is some uncertainty to the final allocation of the yield from Sites Reservoir depending on finalization of the participants and the extent to which the resources agencies participate. This is discussed in White Paper No. 1. The results of this uncertainty in presented in Table 1, below, which shows a likely minimum yield of Class 1 water to SGPWA and BCVWD and a probably maximum yield if some of the Class 2 water is not fully taken by the resources agencies and the remaining portion of Class 2 water is reallocated to the project participants as additional Class 1 water.

Table 1
Sites Reservoir Minimum and Maximum Yield to BCVWD and SGPWA

Condition		Total, AF	SGPWA, AF	BCVWD, AF
Minimum Yield, adjusted without Westlands WD	Class 1	9,748	6,963	2,785
Probable Maximum Yield	Class 1	11,874	8,481	3,393

It is possible, depending on the resources agencies funding, that the Class 1 water amounts shown in Table 1 could be greater, i.e., the resource agencies fund less of the project. It is also a very remote possibility that the full 500,000 AFY yield could be allocated to the project participants instead of only 250,000 AFY, the basis of the amounts in Table 1. At this point it is not known if the yields from Sites Reservoir, in Table 1 above, will be subject to the reliability factor of 62% like the current Table A SPW.

- White Paper No. 1 included a discussion on the SGPWA's discussion with a confidential organization for 50,000 AF over a 10 year period (5,000 AFY). This source is no longer under consideration in this White Paper No. 2.
- The California Water Fix is not considered in this White Paper No. 2.

Year-by-Year Analysis of SGPWA Imported Water Supply and Demand

Based on the water supply portfolio presented above, BCVWD expanded the analysis in White Paper No.1 to a year-by-year analysis to determine the benefit and effectiveness of groundwater banking, and subsequent extraction, in meeting short term differences between imported water supply and demand.

BCVWD Staff analyzed three possible scenarios:

- A **"best case" scenario** where the maximum possible amount of Class 1 water is secured from the Sites Reservoir.

- The **most likely scenario** where supply is assumed to be between the "best" and "worst" case; for this case the minimum amount of Class 1 water is secured from the Sites Reservoir at 100% reliability.
- A **"worst case" scenario** where the minimum amount of Class 1 water is secured from the Sites Reservoir at 62% reliability

In all three cases, the imported water supply sources and amounts are identical until the Sites Reservoir comes on line.

In all of the analyses to follow, the SGPWA imported water demand was extracted from the Agency's 2015 UWMP adjusted and projected to year 2050 as described in White Paper No. 1. The analyses also assume that the current Table A 62% reliability will be gradually brought to 100% reliability through water purchases by SGPWA from 2020 through 2050.

Other assumptions include:

- AVEK Nickel Water delivery starts in year 2020 and continues to year 2040 and the agreement is extended for another 20 years to beyond 2050.
- SBVMWD water is available every year (2,000 AFY).
- Yuba Acord water is available every year (300 AFY)
- Sites Reservoir water delivery starts in year 2035
- Water conservation and demand reduction from new landscape ordinances, more efficient plumbing and appliances in new homes is not reflected in the demands
- BCVWD's imported water requirements provided to SGPWA reflect the use of recycled water shown in Table 2 below. If recycled water is not available or used, BCVWD's and SGPWA's imported water demands would increase accordingly.

Table 2
Projected BCVWD Recycled Water Use

Year	2015	2020	2025	2030	2035	2040	2045	2050
BCVWD Recycled Water, AFY	0	2,196	2,193	3,387	3,882	4,406	5,000	5,000

SGPWA Best Case Scenario

Figure 3 shows the SGPWA Demand from White Paper No.1, projected to 2050, showing the sources of imported water from the water portfolio year by year. Figure 3 also shows that demand for imported water exceeds the supply from 2017 to 2020, and from year 2026 through year 2035 at the time when Sites Reservoir water deliveries will be available. Under the Best Case scenario, Sites Reservoir will meet the demands through 2050.

Figure 4 shows the annual surplus/deficit in imported water supply and demand and the accumulated surplus/deficit in the imported water supply over time beginning in year 2015 under the best case scenario. This assumes SGPWA and its member agencies, e.g., BCVWD, City of Banning, YVWD, will bank water during years when the imported water supply exceeds demands.

Figure 4 shows that even though there are deficiencies between imported water supply sources and imported water demand from years 2017 to 2020 and years 2024 to 2035, the maximum accumulated deficit or shortfall was only 22,000 AF. Once Sites Reservoir water deliveries occur, this accumulated deficit is quickly refilled. The Beaumont Basin can easily accommodate the 22,000 AF deficiency where the SGPWA and its member agencies have a total of 290,000 AF of allocated storage capacity in the Beaumont Basin. As of the end of 2016, the SGPWA and its members had over 100,000 AF in storage and projected increase further in 2017 due to the wet year in Northern California. Assuming normal water years, this cumulative volume will increase. But the strategy has to be to import as much water as the contracts allow and bank any surplus in the Beaumont Basin.

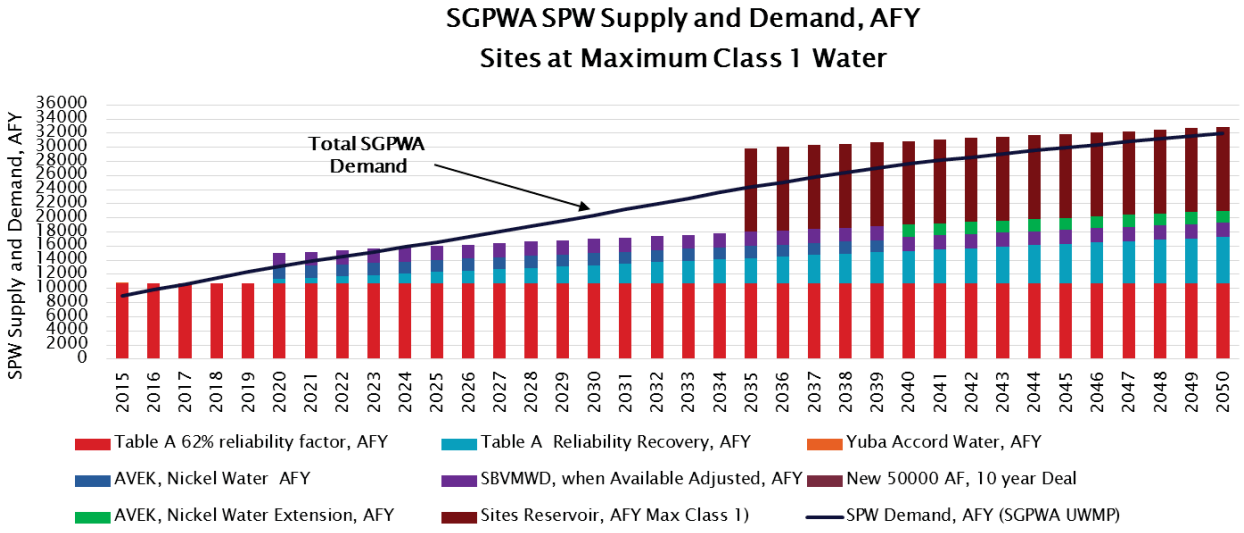


Figure 3
SGPWA Imported Water Supply and Demand – Best Case

SGPWA Most Likely Scenario

Figure 5 shows the SGPWA Demand and the sources of imported water from the water portfolio year by year in the Most Likely Case. It is assumed that Sites Reservoir water deliveries are the minimum yield amount from Table 1. Figure 5 also shows that demand for imported water exceeds the supply from 2017 to 2020, and from year 2026 through year 2035 at the time when Sites Reservoir water deliveries will be available. This is similar to the "Best Case" analysis presented in Figures 3 and 4 above. Under the Best Case scenario, Sites Reservoir will only meet the demands through 2042 but the shortfall by year 2050 is very small and will easily be accommodated by the likely reduction in demand due to conservation and more efficient plumbing and appliances as described above.

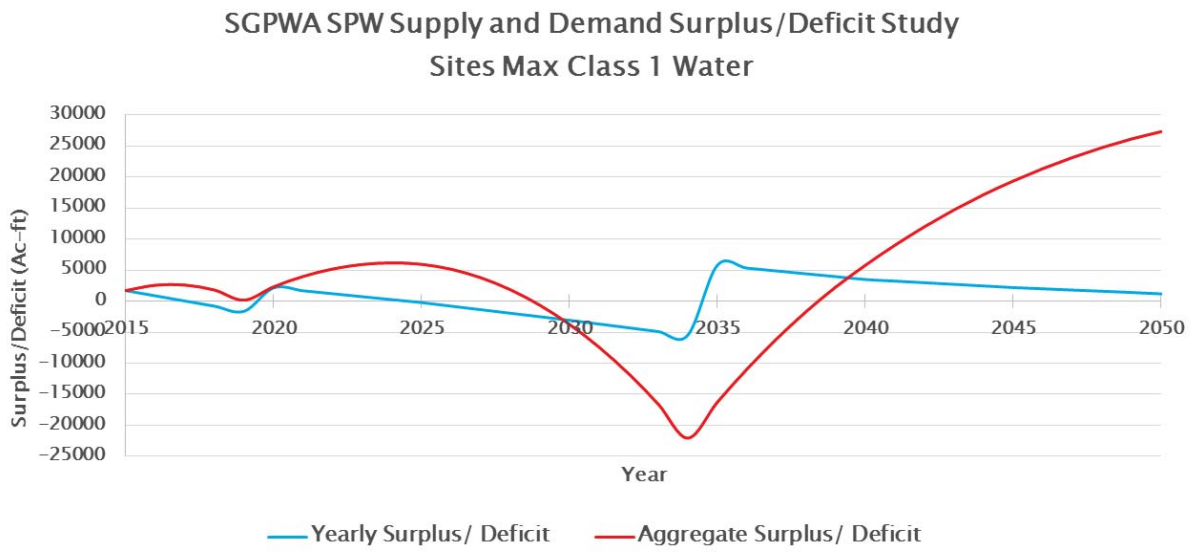


Figure 4
SGPWA Imported Water Supply Surplus/Deficit – Best Case

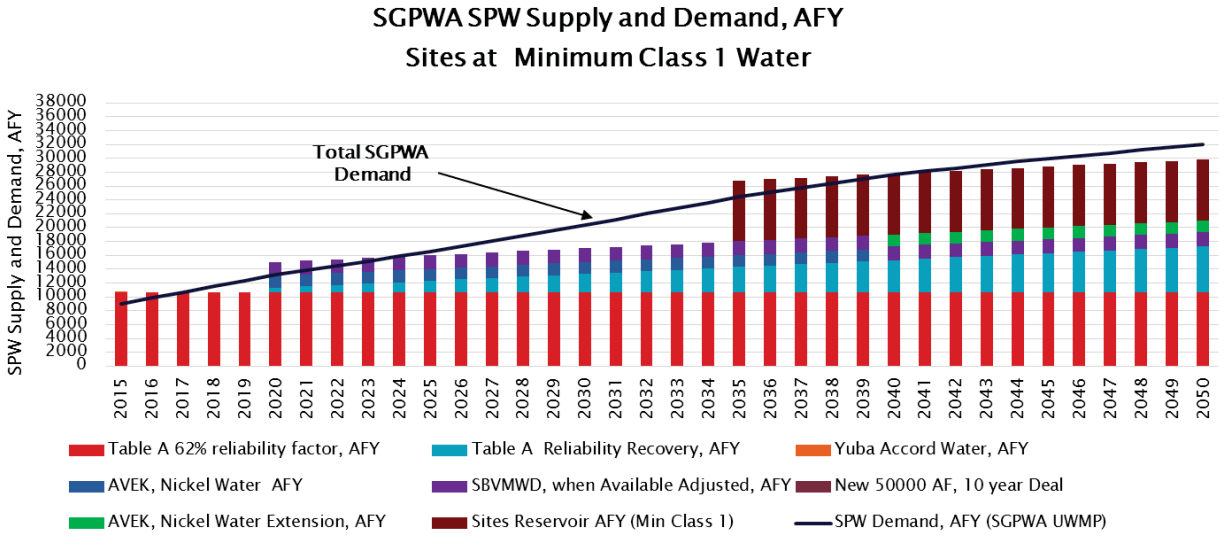


Figure 5
SGPWA Imported Water Supply and Demand – Most Likely Case

Figure 6 shows the annual surplus/deficit in imported water supply and demand and the accumulated surplus/deficit in the imported water supply over time beginning in year 2015 under the Most Likely Case scenario. This assumes SGPWA and its member agencies, e.g., BCVWD, City of Banning, YVWD, will bank water during years when the imported water supply exceeds demands.

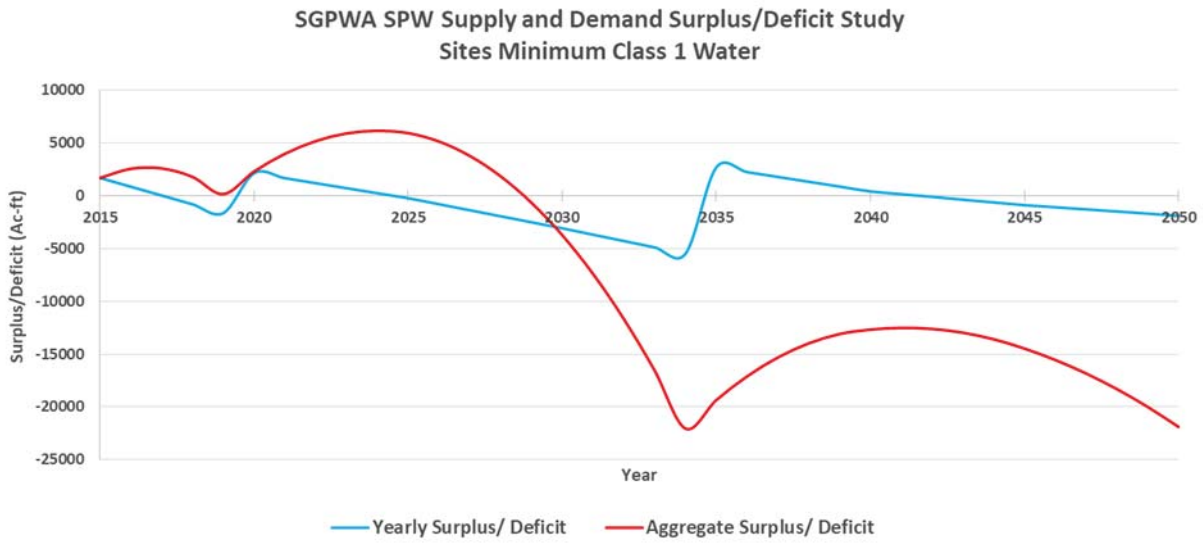


Figure 6
SGPWA Imported Water Supply Surplus/Deficit – Most Likely Case

Figure 6 shows that even though there are deficiencies between imported water supply sources and imported water demand from years 2017 to 2020 and years 2024 to 2035, the maximum accumulated deficit or shortfall was only 22,000 AF similar to the "Best Case" analysis. The Beaumont Basin can easily accommodate the 22,000 AF deficiency as discussed above in the "Best Case" analysis. Once Sites Reservoir water deliveries occur, this accumulated deficit is partially refilled.

Figure 6 shows that there will be adequate water supply until about 2040 or so and that unless there is a reduction in the demand due to conservation, which is likely to occur over time, the accumulated deficit will not be fully replenished. If demand reduction does not occur, additional water supply will be needed beyond Sites Reservoir. This could be the California Water Fix or other sources.

SGPWA Worst Case Scenario

Because of the uncertainty with respect to the reliability of the yield of Sites Reservoir, BCVWD took a very conservative approach to bracket the "lower end" or "Worst Case" scenario. This Worst Case scenario was based on the minimum yield from Sites Reservoir as shown in Table 1 with a 62% reliability factor applied. This assumed Sites Reservoir would be subject to the same reliability of the State Water Project as a whole. Figure 7 shows the SGPWA imported Water Supply and Demand forecast to year 2050. As can be seen from Figure 7, there is a continuous shortfall from year 2024 through year 2050 even with Sites reservoir. By the year 2050 the shortfall is about 7,000 AFY about 22%. Some or all of this deficiency will likely be made up by conservation and reduction demand.

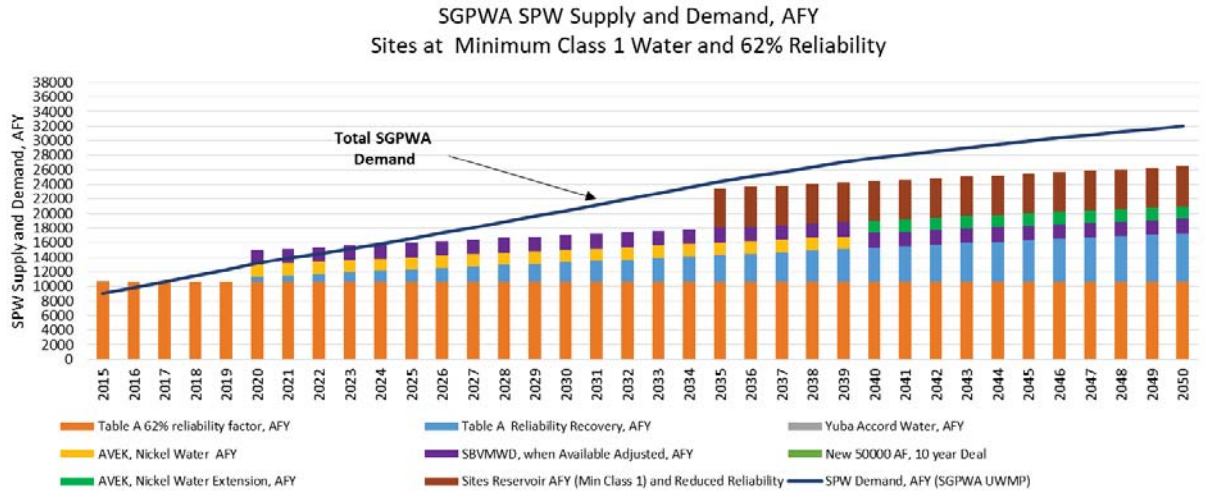


Figure 7
SGPWA Imported Water Supply and Demand – Worst Case

Before Sites Reservoir deliveries begin in 2035 the delivery capability and reliability will be known. This could be as early the middle to late 2020s which should provide sufficient time to secure other imported water sources; perhaps the California Water Fix may make up some of the deficiency.

Figure 8 shows the annual surplus/deficit in imported water supply and demand and the accumulated surplus/deficit in the imported water supply over time beginning in year 2015 under the Worst Case scenario. This assumes SGPWA and its member agencies, e.g., BCVWD, City of Banning, YVWD, will bank water during years when the imported water supply exceeds demands.

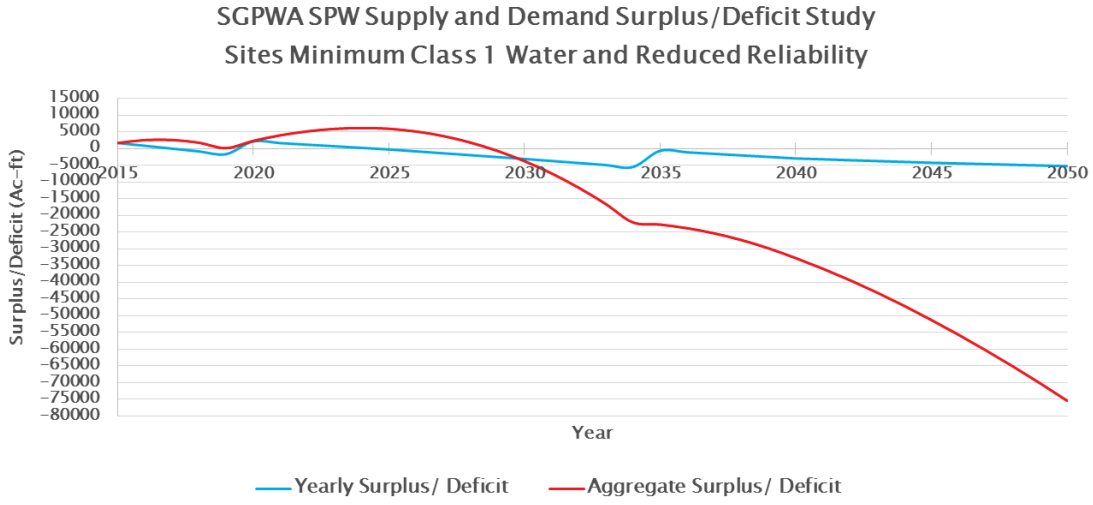


Figure 8
SGPWA Imported Water Supply Surplus/Deficit – Worst Case

The strategy of using the Beaumont Groundwater Basin to store surplus imported water is a good strategy until more is known about the yield and reliability of Sites Reservoir yield and the

status of California Water Fix. As shown in Figure 8, the accumulated deficiency by the time Sites Reservoir is on line (year 2035) is 22,000 AF, same as the "Best" and "Likely" scenarios. However even with Sites Reservoir, there will be significant accumulated deficiency by year 2050, (75,000 AF), which would be a concern if allowed to continue. But with some conservation and demand reduction the accumulated deficiency would be reduced. Based on the storage capacity in the Beaumont Basin, the drop in water storage from year 2035 to year 2050 is manageable.

Year-by-Year Analysis of BCVWD Imported Water Supply and Demand

A similar year-by-year analysis of BCVWD's imported water supply and demand was completed. The assumptions presented above for SGPWA were also applicable to BCVWD; but BCVWD has some additional constraints since they are only a portion of SGPWA's demand. Additional assumptions pertinent to BCVWD:

- BCVWD's share of SGPWA's "Table A", "Table A" reliability enhancement, Yuba Accord Water, AVEK Nickel Water, Sites Reservoir Water (separate from BCVWD's 28.571% as stated in White Paper No. 1), etc. is based on BCVWD's portion of the SGPWA's total demand. BCVWD's share of the demand can be extracted from the SGPWA 2015 UWMP and are 85.9% in 2020 declining to 64.5% by 2040 and projected, by BCVWD to be 60% by 2050. These percentages were applied to the above listed sources in making projections of imported water supply and demand in the following figures.
- BCVWD has committed to 28.571% of the final allocation to SGPWA from Sites Reservoir (2,785 to 3,393 AFY minimum and maximum Class 1 yield as shown in Table 1 above).

As with the SGPWA analyses presented above, the imported water sources and amounts are identical under all three scenarios up until Sites Reservoir comes on line.

BCVWD Best Case Scenario

Figure 9 shows BCVWD's long term imported water supply for the Best Case scenario; it assumes Sites Reservoir yield at its probable maximum yield per Table 1 above. There are three (3) demand lines plotted:

- Demand for imported water assuming local water resource projects (stormwater capture, etc.) and recycled water from YVWD and City of Beaumont are utilized. This was extracted from Table 6-26 in BCVWD's 2015 UWMP, projected to year 2050, and includes the purchased imported water for banking for wet year-dry year mitigation.
- Demand for imported water without recycled water.
- Demand for imported water assuming conservation. A 20% reduction in BCVWD total water demand was assumed by 2040 and 25% by 2050. The imported water supply is about 58% of BCVWD's total supply, so the reduction in imported water demand will only be 58% of the conservation reduction.

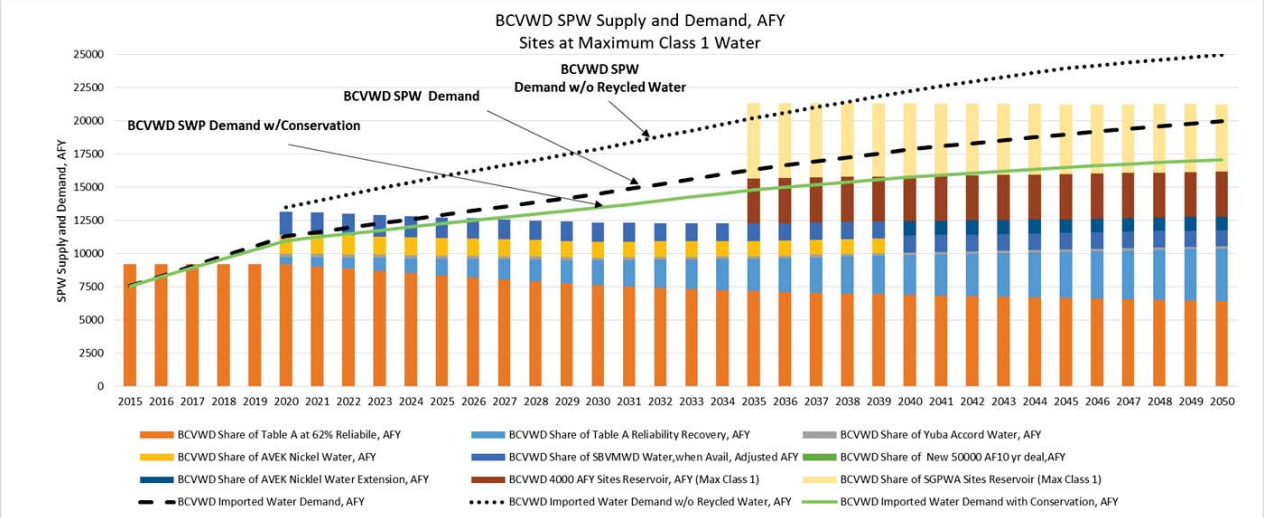


Figure 9
BCVWD Imported Water Supply and Demand – Best Case

Figure 9 clearly shows that BCVWD will be able to meet its year 2050 imported water demand assuming the recycled water amounts, presented in Table 2 above, are available and utilized. Without recycled water, BCVWD's demand for imported water in year 2050 will exceed the available supply by about 3,500 AFY. With conservation, BCVWD will be able to meet its year 2050 imported water demands easily and for many years beyond 2050.

Figure 9 shows a shortfall of supply from year 2017 to year 2020 and year 2025 to year 2035. Figure 10 shows the accumulated surplus/deficit for the entire period of study assuming the use of recycled water. The maximum accumulated deficit is only 13,600 AF which occurs in year 2035 just as Sites Reservoir is coming on line. This is easily accommodated as BCVWD is projected to have over 33,000 AF in storage at the end of 2017 even after an extended drought period. BCVWD's Beaumont Basin storage account can accommodate up to 80,000 AF.

BCVWD Most Likely Scenario

Figure 11 shows BCVWD's imported water supply and demand under the Most Likely scenario with Site's reservoir at the minimum amount of Class 1 water from the Sites Reservoir at 100% reliability as shown in Table 1. Even under this scenario BCVWD can easily meet its imported water requirement in year 2050 without conservation and demand reduction. With conservation, as described above for Best Case Scenario, BCVWD will be able to meet its imported water demands well beyond year 2050.

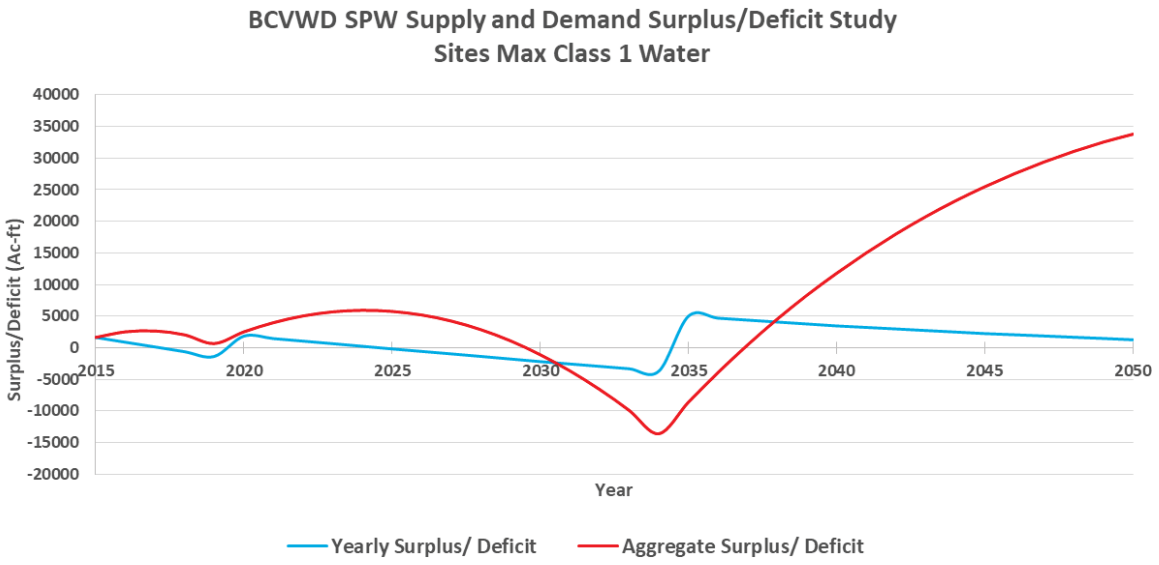


Figure 10
BCVWD Imported Water Supply Surplus/Deficit – Best Case

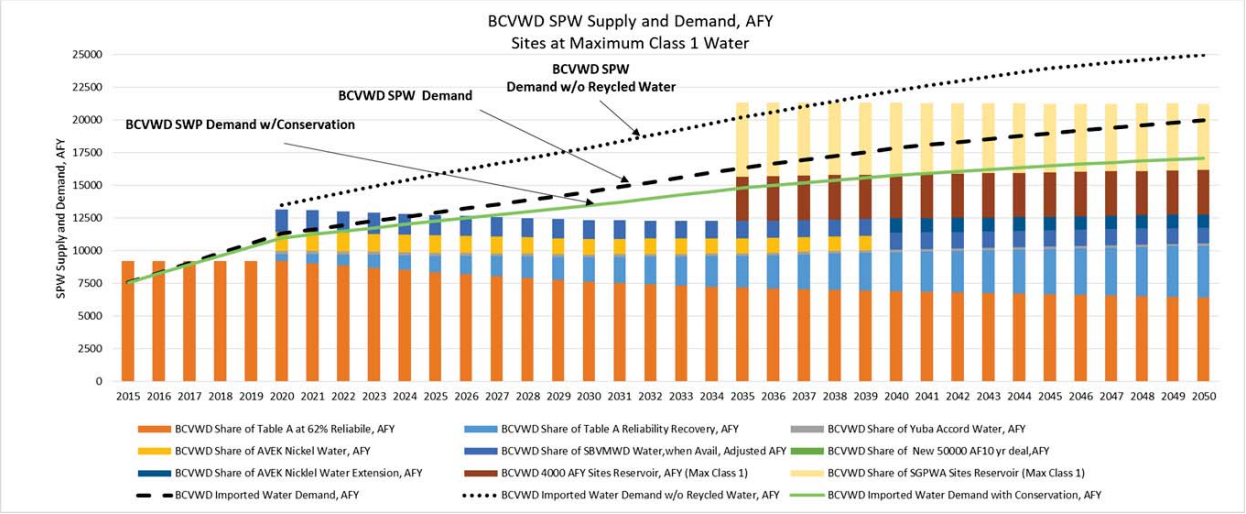


Figure 11
BCVWD Imported Water Supply and Demand – Most Likely Case

Figure 11 shows there is a deficit of supply from year 2025 to year 2035. Figure 12 shows the accumulated surplus/deficit for the period of study. The maximum deficit, 13,600 AF, occurs in 2035 just before Sites Reservoir comes on line. This can easily be met with groundwater from BCVWD's Beaumont Basin groundwater storage account which has capacity to 80,000 AF. As of the end of 2017, BCVWD's groundwater in storage is projected to be 33,000 AF. Figure 12 shows that there will be an aggregate surplus from 2017 to about year 2025. It is projected another 6,000 AF will be added to BCVWD's storage account by 2025 bringing BCVWD's groundwater storage account up to 39,000 AF. .It is possible that more groundwater will be in storage if hydrologic conditions are favorable.

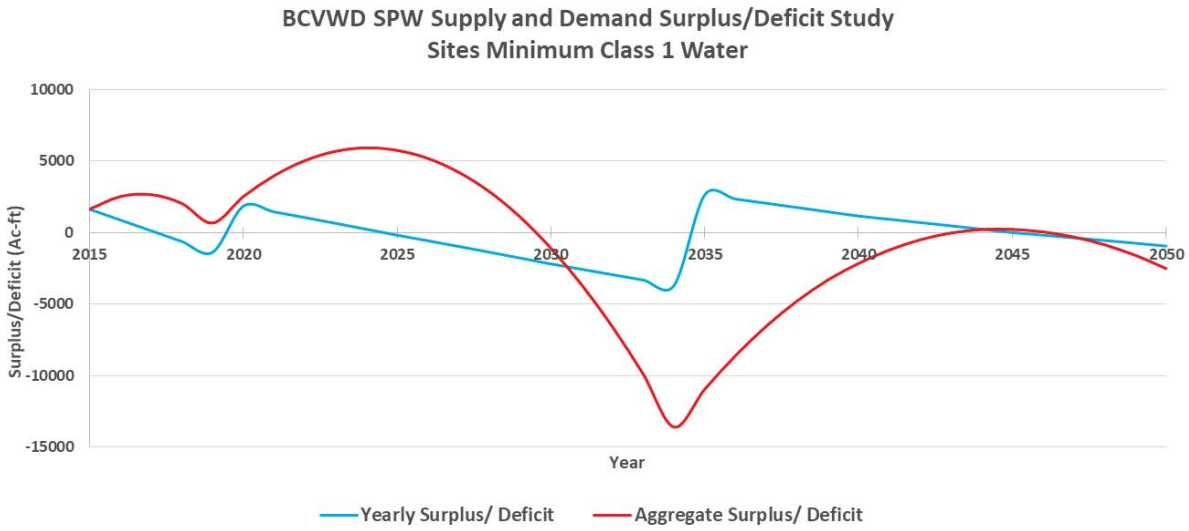


Figure 12
BCVWD Imported Water Supply Surplus/Deficit – Most Likely Case

The storage account will decline to year 2035 when Sites Reservoir comes on line as shown in Figure 12. BCVWD's storage account would still have 19,400 AF in storage at this time. Figure 12 shows that BCVWD's storage account would continue to increase from year 2035 on.

BCVWD Worst Case Scenario

Figure 13 shows BCVWD's imported water supply and demand under a Worst Case Scenario where the minimum amount of Class 1 water is secured from the Sites Reservoir but at 62% reliability. Under the Worst Case Scenario, BCVWD imported water supply will be about 2,300 AFY "short" in year 2050 assuming local water resources and recycled water is available and used. Figure 13 shows that with conservation as described previously for Best Case Scenario, the imported water demand in year 2050 will be met. The amount of water available from Sites Reservoir and whether it is subject to the SWP reliability reduction will be known before is constructed which will provide opportunity to secure water from other sources.

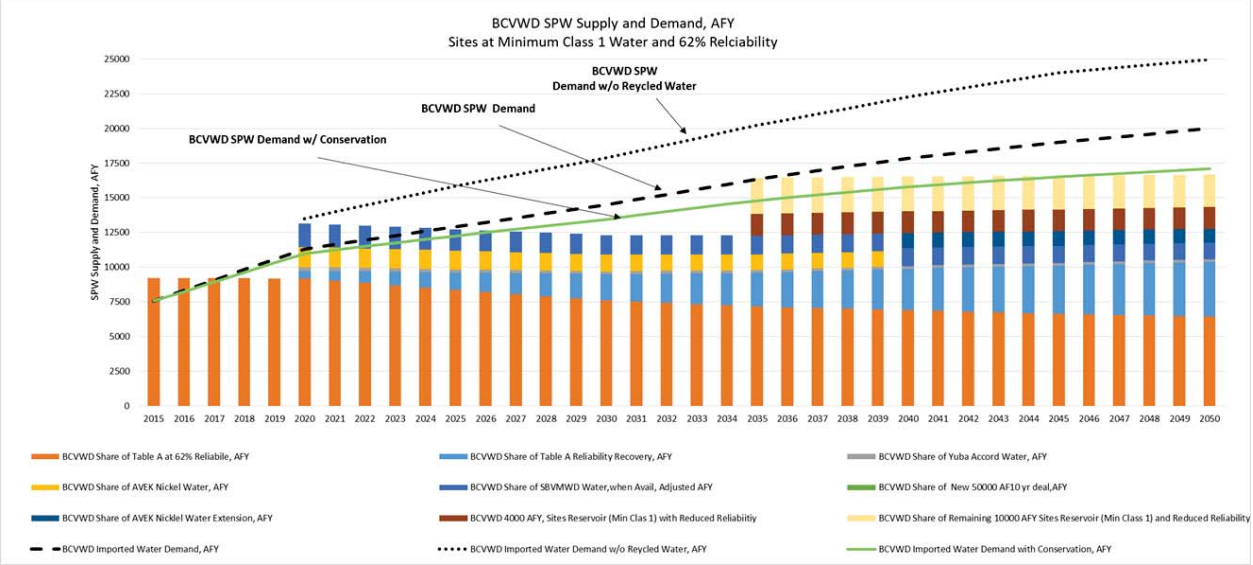


Figure 13
BCVWD Imported Water Supply and Demand – Worst Case

Figure 14 shows the surplus/deficit on both an annual basis and cumulative to year 2050. The cumulative deficiency reaches 13,600 AF just before Sites Reservoir is on line, but then due to the inadequacy of imported water supply, the cumulative deficiency increases each year, eventually reaching about 42,000 AF by year 2050.

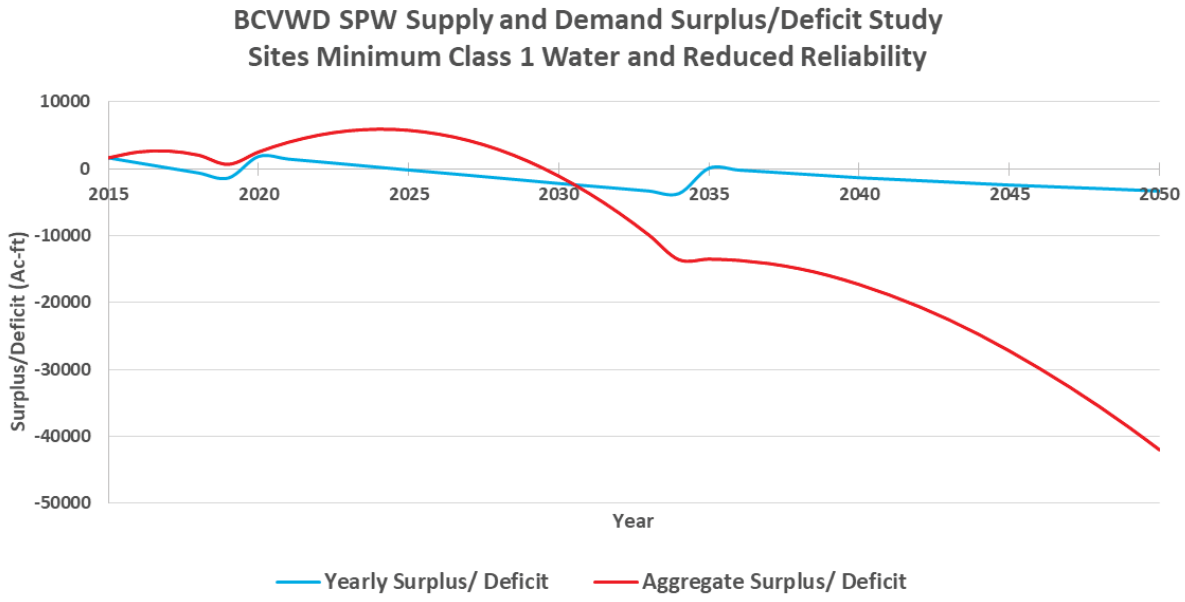


Figure 14
BCVWD Imported Water Supply Surplus/Deficit – Worst Case

As discussed above for the Most Likely Scenario, BCVWD's Beaumont Basin groundwater storage account would have 19,400 AF in storage just before Sites Reservoir comes on line. Banked groundwater in BCVWD's storage account could meet the demand for a few years after Sites Reservoir comes on line but not for an extended period under this Worst Case Scenario.

Figure 14 shows that under the Worst Case Scenario, BCVWD will have enough water in storage to meet the demands up until Sites Reservoir comes on line. Beyond then, additional imported water sources will need to be in place.

Conclusions

- **Sites Reservoir and/or California Water Fix is critical to meeting long term water demands.**
- Over the next decade, the feasibility, yield, reliability, costs, and construction schedule for Sites Reservoir and the California Water Fix will be better known.
- Because of the uncertainties of Sites Reservoir and the California Water Fix, SGPWA should secure projects like AVEK Nickel Water and other short and long term contracts as they become available and the demand in the service area continues to develop. This water can be banked to meet short-term demands during dry years and will provide water to make up for short term deficiencies while agreements are being developed and additional water sources, e.g. Sites Reservoir, are brought on line.
- Groundwater banking and subsequent extraction is critical to meeting deficiencies between imported water supply and demand until agreements can be executed and water supply projects come on line. As much imported water as is available should be banked.
- If Sites Reservoir and/or the California Water Fix are not implemented or delayed, SGPWA must move aggressively to replace these essential sources.
- Recycled water and maximization of local water resources is crucial to meeting long term water demands, minimizing BCVWD's and other SGPWA member agencies' dependence on imported water.
- Water conservation should be encouraged to minimize the need for imported water.
- Imported water demand and supply should be revisited periodically.
- A complete strategy for funding of the water portfolio should be prepared to set forth a comprehensive fund strategy for new water including the following minimum components:
    - Capacity fees
    - Rates
    - Tax based contributions
    - Others

Acknowledgments

This white paper supports a series of presentations made by BCVWD management to the Board of Directors and members of the public. Additional information is contained in those presentations.

Analyses and evaluations in support of the white paper and presentations were prepared by BCVWD staff, Joseph C. Reichenberger P.E., BCEE, Senior Engineer under the direction of and with input from Dan Jaggers P.E., General Manager. Extensive analyses were prepared by Kaden Johnsen, Engineering Assistant, with help from Ivan Garcia, Engineering Intern.

Beaumont Cherry Valley Water District
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Beaumont, CA 92223
951-845-9581 www.bcvwd.org

DATE: December 20, 2017

TO: Dan Jaggers, General Manager

FROM: Joe Reichenberger PE, Senior Engiineer

SUBJECT: Water Supply Portfolio Unit Costs– White Paper No. 3

This white paper summarizes a presentation to BCVWD's Board of Directors on November 8, 2017 continuing the discussion of San Gorgonio Pass Water Agency (SGPWA) and Beaumont Cherry Valley Water District's (BCVWD's) imported water needs to year 2050 – essentially build-out. This white paper focusses on imported water portfolio, the costs for the various water sources and some funding strategies.

Background:

White Paper No. 1 identified BCVWD and SGPWA imported water requirements over the next 30 years or so based on the respective agencies' 2015 Urban Water Management Plans (UWMPs). White Paper No. 1 also listed a number of sources of imported water ("water portfolio") and the timing of the leasing, purchasing, or construction of these sources. Since the water purchases and leases do not always exactly match the demands, White Paper No. 2 evaluated the feasibility of using groundwater storage and banking as a strategy to overcome temporary deficiencies between the demand for imported water and the supply.

SGPWA's water supply (current and planned) comes from the following sources:

- State Water Project (SWP) Current Table "A" Water
- Increased Table "A" Water Reliability Through California Water Fix
- Sites Reservoir Project
- Yuba Accord Water
- AVEK, Nickel Farms Water through the Antelope Valley East Kern Water Agency (AVEK-Nickel)
- San Bernardino Valley Municipal Water District (SBVMWD) Water

Current Table A Supply

The SWP provides approximately 4.2 million AFY in total Table "A" water supply (100% capacity) to the 29 state water contractors; San Gorgonio Pass Water Agency (SGPWA) is one of the state water contractors. The long-term water supply contracts to each of the 29 contractors sets forth a maximum amount of water a contractor may request each year for the SWP, and these water amounts are written in the contracts in a list format known as "Table A."

"Table A" or "Table A water" represents a portion or all of the annual Table A amount requested by the SWP water contractors and approved for delivery by the Department of Water Resources (DWR) based on hydrologic conditions, current reservoir storage, and the combined requests from the SWP contractors. Under certain water year conditions, DWR is not able to deliver the quantity of water requested by the SWP contractors. In those years, a proportional amount s allocated and delivered according to the contracts by prorating the amount in proportion to each SWP contractor's annual Table A amount. Table A amounts are also used to allocate other water supplies.

Of the 4.2 million AFY, SGPWA's Table "A," amount is 17,300 Acre-Feet (approximately 0.41% of the total 4.2 million AF supply). In 2017 the SGPWA will pay an estimated $23,060,018 (includes taxes and water rates) to the SWP for entitlement to 17,300 AF of the Table "A" water (from DWR Bulletin 132-17). The current SWP Table "A" water supply is assumed to be 60% to 64% reliable. Therefore, the SGPWA receives only approximately 10,400 AFY of Table "A" water from the SWP on an average annual basis.

The estimated $23 million above includes transportation and energy charges (DWR "pass through" costs). SGPWA currently charges $317/AF with includes the DWR pass through costs plus other costs. A summary of the costs included in the $317/AF, extracted from the SGPWA's recent rate study, is presented in Table 1.[1]

The DWR energy and transmission charges ("transportation costs) are estimated to be $260/AF.

With this annual supply, the water is forecast to be delivered at an approximate cost of $2,220 per AF based future projected payments (includes capital cost and $260/AF Transportation cost).

The California Water Fix

The SWP planning began in earnest in the mid-1950s and was authorized in the Burns-Porter Act, also known as the California Water Resources Development Bond Act, passed by vote of the people in November, 1960 (Proposition 1). Construction on most of the basic facilities of the SWP was completed by 1975. Due to cost considerations, and initial project water demands lower than design capacity, a number of planned facilities were scaled down or deferred. Many have not been constructed to date. One of those projects was the Cross-delta Facility known as

[1] SGPWA (2009). Final Draft – Water Rate Study, David Tausig Associates, Inc., February 2.

the Peripheral Canal. The SWP is not able to live up to its original design capacity due to many factors beyond the scaled down, deferred, or not constructed facilities.

Table 1
Costs in SGPWA's Water Rate

Cost Item	Cost, $/AF
Agency Operational Expenses	$10.00
Agency Administrative Cost	$3.50
SBVMWD Pass Through	$8.00
Yuba Water Purchases	$3.86
New Water Purchase	$22.00
Rate Stabilization	$11.00
Subtotal	$57.36
Rate Charged by SGPWA	$317.00
DWR Pass Through	$259.64 ($260)

The Sacramento-San Joaquin Delta levees are vulnerable to seismic shaking; the Delta ecosystem continues to decline; flooding and saline water intrusion into the Delta impacts the water quality delivered to municipal and agricultural users; climate change, whether short-term or extended long-term, will cause increased water levels in the Delta further stressing vulnerable levees. The SWP dams and reservoirs were designed about 50 years ago with the hydrology of the times. Climate change, whether short term (50 or 100 years) or long term 500 or more years, will impact the operation of the SWP. Precipitation, which used to fall as snow and be stored in snowpack, will be in the form of rain which the reservoirs were not designed to accommodate. More and water will be lost to the ocean in future years.

The California Water Fix (CWF), intended to address some of these issues, proposes a dual gravity tunnel conveyance system from north of the Delta extending south to the Clifton Court Forebay. At the southerly end of the tunnels a new Clifton Court Pumping Facility would lift water from the tunnels into Clifton Court Forebay. The water would be pumped from Clifton Court Forebay by the State and Federal Central Valley Project pumps as they now do. About 9,000 cfs would be diverted from the Sacramento River into the tunnels and around the Delta improving water supply reliability and export water quality TDS. The cost of the CWF is estimated to $ 16.7 billion (2017 costs) with an estimated $64.4 million in annual operation and maintenance costs.[2] It is possible that the dual tunnels may be scaled back or phased. The project from initiation of design through commissioning is projected to take eighteen years. So if it started in 2020, it would not be complete until 2038. During that time, the reliability of the SWP would gradually decline as described later in this section. The principal elements of the CWF are shown in Figure 1.

[2] Wheeler Ridge-Maricopa Water Storage District, California Water Fix Business Case Analysis Spreadsheet.

All State Water Contractors were requested to provide non-binding resolutions of support for the CWF. As of October 17, 2017, twelve Contractors, including SGPWA and many of large agencies, e.g., Metropolitan Water District of Southern California (Metropolitan), Kern County Water Agency, Santa Clara Valley Water District, voted to support the CWF. Many of those agencies that did not take a formal vote are anticipated to participate commensurate with their existing State Water Contracts. Although five of the 29 State Water Contractors ended their participation in the CWF; the remaining 24 contractors hold almost all of the original Table A (97.2%).

The estimated $16.7 billion cost for the CWF (2017 dollars) is anticipated to be shared 55% with State Water Contractors and 45% with federal Central Valley Project Contractors. Assuming the 55/45 split and the fact that SGPWA has 0.41% of the Total SPW Table A, SGPWA would be paying about $38 million for the CWF (based on 0.41%) or $39.4 million based on 0.43%. See discussion below. Financing for the CWF is proposed over a 40-year period at a possible interest rate of 4%. Annual capital cost payments by SGPWA would be about $2.0 million including bond issuance costs; annual O&M costs would be about $150,000 plus transportation costs, estimated to be about $260/AF currently.

The reliability of the SWP Table “A” water is projected to degrade over time to 48% without the California Water Fix (CWF) due to a variety of reasons. The CWF is projected to increase the future reliability of the SWP by 14% (DWR study) to 17.62% (Metropolitan Water District of Southern California [Metropolitan] study) resulting in an increase the overall reliability to 62% or, in the best case, 65.62%. This is about what the current reliability is. It should be noted that the reduction in reliability will occur gradually over time from the current 60 to 64% reliability to 48%.

Without CWF, SGPWA’s reliable Table A would be 8,304 AFY (based on 48% of 17,300 AFY). The reliable Table A supply for SGPWA would increase to 10,726 AFY at 62% reliability or possibly as much as 11,352 AFY based on Metropolitan’s study (65.62% reliability). Potentially then, the CWF would result in an increase from 2,422 AFY to 3,048 AFY reliable supply. With the firm withdrawal of five of the contractors mentioned above, SGPWA’s percentage of the CWF “yield” chould slightly more than 0.41%, perhaps maybe as high as 0.43% of the yield based on SGPWA’s share of the total Table A of the participating 24 contractors.

To put a price on Table “A” water going forward from now, the estimated future annual cost of $24.2 million estimated by DWR for SGPWA from Bulletin 132-17 will be used; it should be noted this cost includes transportation charges of about $260/AF. The SGPWA’s pre-CWF cost for 8,304 AFY is calculated as shown in Table 2

The cost of SGPWA water with CWF based on the original SWP contract at 48% reliability with the CWF at 14 % to 17.62% additional reliability is summarized in Table 3.

The additional annual amount of water due to increased reliability brought about by the CWF ranges between 2,422 and 3,048 AFY; the annual cost for this incremental amount of water is $2.2 million ($2.0 million + $0.15 million) as shown in Table 3; resulting in a unit cost of about $887/AFY to $705/AFY respectively for the increment, not including DWR pass-through transportation costs.

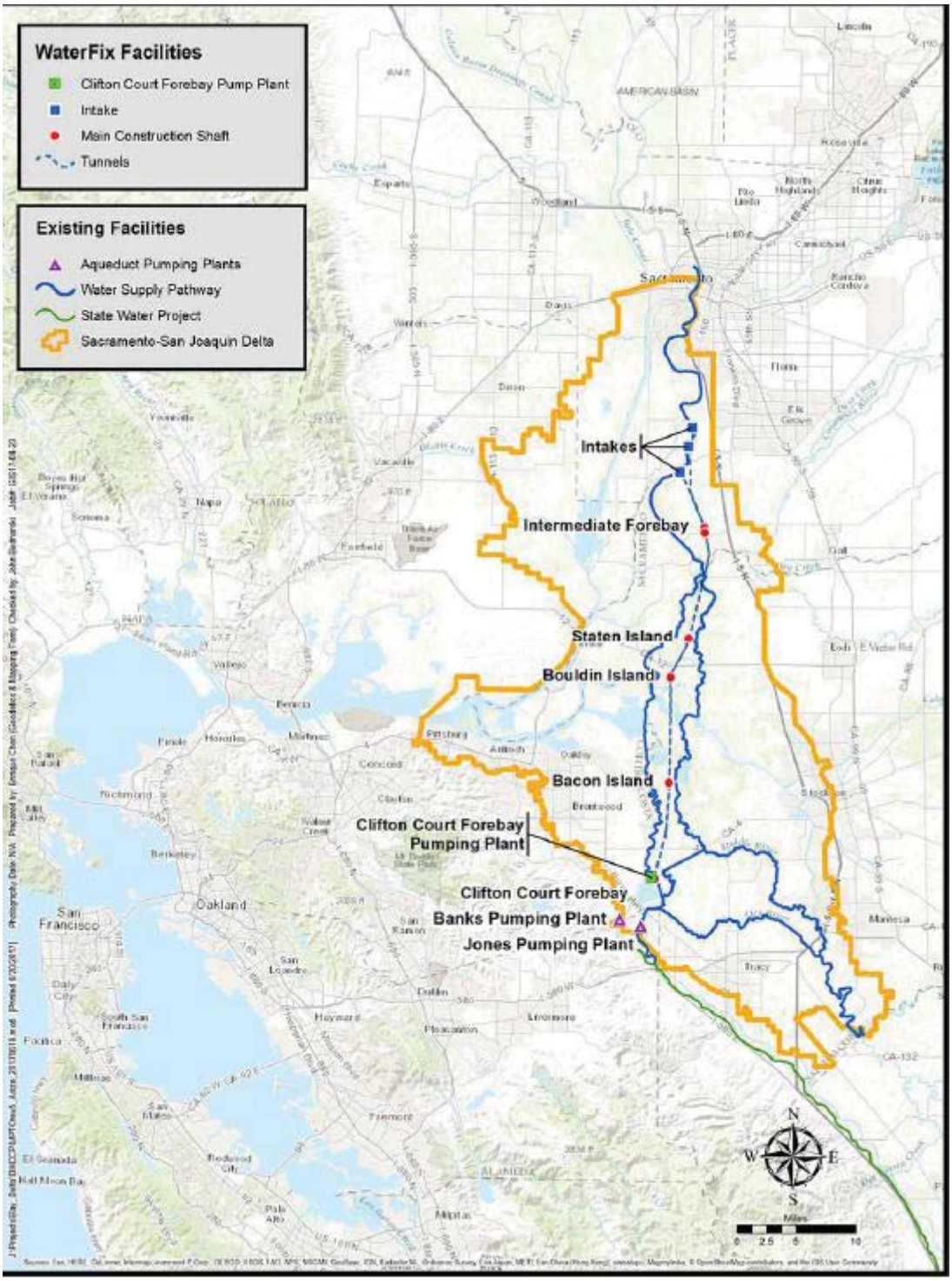

Figure 1
California Water Fix Facilities

Table 2
Estimated Cost for SGPWA Table A Water without CWF Going Forward
(based on 8,304 AFY)

Item	Cost
Total Annual Payment pre-CWF	$24.2 million
DWR Transportation Charges @ 8,304 AF $260/AF	$2.16 million
Annual Payment less DWR Transportation Charges	$22.04 million
Pre-CWR Cost per AF without DWR Transportation	$2,654/AF
DWR Transportation Charges @ $260/AF	$260/AF
Total SGPWA Pre-CWF Cost per AF incl. DWR Transportation Cost	$2,914/AF

Table 3
Estimated Cost of SGPWA Table A Water with CWF Going Forward

Item	SWP @ 62% Reliability (10,726 AFY)	SWP @ 65.62% Reliability (11,352 AFY
Total Annual Payment pre-CWF	$24.2 million	$24.2 million
DWR Transportation Charges @ $260/AF	$2.8 million	$3.0 million
Annual Payment less DWR Transportation Charges	$21.4 million	$21.2 million
Annual Capital Cost of CWF plus bond issuance costs	$2.0 million	$12.0 million
Annual O&M Costs for CWF	$0.15 million	$0.15 million
Total Annual Payment with CWF	$23.6 million	$23.4 million
Cost per AF with CWF but without DWR Transportation Costs	$2,200	$2,060
DWR Transportation Charges @ $260/AF	$260	$260
Total with CWF, Cost per AF incl. DWR Transportation Cost	$2,460	$2,320

These costs are based on the current assumptions that the contractors currently involved in the SWP and CVP remain unchanged. There may be an opportunity for the SGPWA to secure more Table “A” supply through purchase or long term leases from the CWF in the event that more contractors from the SWP or CVP withdraw their support and associated financing of the project. Costs presented previously are melded SWP and CWF costs. However, any additional supply available may result in a decreased overall melded cost (SWP component reduction).

Sites Reservoir Supply

Sites Reservoir is a proposed reservoir that would be located at the site of a cattle ranch in the eastern foothills of the Central Valley about 78 miles northwest of Sacramento. See Figure 2. Sites Reservoir is not on any major stream; all water must be pumped into the reservoir. Sites Reservoir was part of the original California Water Project, but was deferred. Because of dwindling water supplies, new interest has arisen in the reservoir. The reservoir would have a surface area of about 14,000 acres and store between 1.27 and 1.81 million acre-feet depending on final project. The estimated water yield would be between 470,000 to 640,000 acre-feet per year, depending on yearly rainfall and environmental regulations, according to DWR.

Flood flows in the Sacramento River, over and above that needed to meet the demands of existing water rights holders, would be captured and pumped into Sites Reservoir. During the drought year of 2014-15 Sites would have captured 410,000 AF; if Sites were operational in the 2015-16 season it would have captured over 1 million AF, which was lost to the ocean. On an average year Sites will add 500,000 AF to Delta flows; during critical dry years, Sites would add about 250,000 to 300,000 AF of water.

Figure 2
Sites Reservoir General Location

Water would be delivered to a forebay reservoir (Holthouse Reservoir expanded from the existing Funks Reservoir) through the existing Tehama-Colusa and Glenn-Colusa irrigation canals, and from a new pumping station on the Sacramento River. The water would then be boosted into Sites Reservoir. The water would then be released into the Sacramento River, augmenting natural flows and releases from other reservoirs. Electric power would be generated upon release of the water into the Sacramento River. Refer to Figure 3.

Sites Reservoir is projected to cost $4.7 billion, (October, 2015 Costs), with annual operating and monitoring costs of $26 million, according to DWR.[3]

The Sites Reservoir Project is projected to supply 14,000 AFY of Class 1 water (9,748 AFY) and Class 2 water (4,252 AFY) to the SGPWA with a reliability of 75% to 100%[4]. It is possible the amount of Sites Reservoir

[3] Sites (2017). Basis of Estimate for Sites Authority Project Alternative D, Working Draft, Subject to Change, prepared by AECOM, June, page E-5
[4] See White Paper No. 1, Table 3.

Class 1 water may increase from the 9,748 AFY to perhaps as much as 11,874 AFY depending on the resources agencies' participation in the project. It is possible that maybe even 14,000 AFY will be available, but that is very optimistic.

If the Sites Project is ultimately considered to be part of the SWP the reliability will most likely be 100%. If the project is ultimately not considered to be a part of the SWP there may be a loss of up to 25% as this portion of the supply may be lost through the Delta. Therefore, the Sites Reservoir Project could supply between 7,311 AFY, (75% of 9,748 AFY), and 11,874 AFY or maybe even more. Table 4 shows a possible allocation of Sites Reservoir project costs to SGPWA. It should be pointed out this is very preliminary and is based on SGPWA's Class 1 Water Amount to the Total Class 1 Water Amount (250,000 AFY).

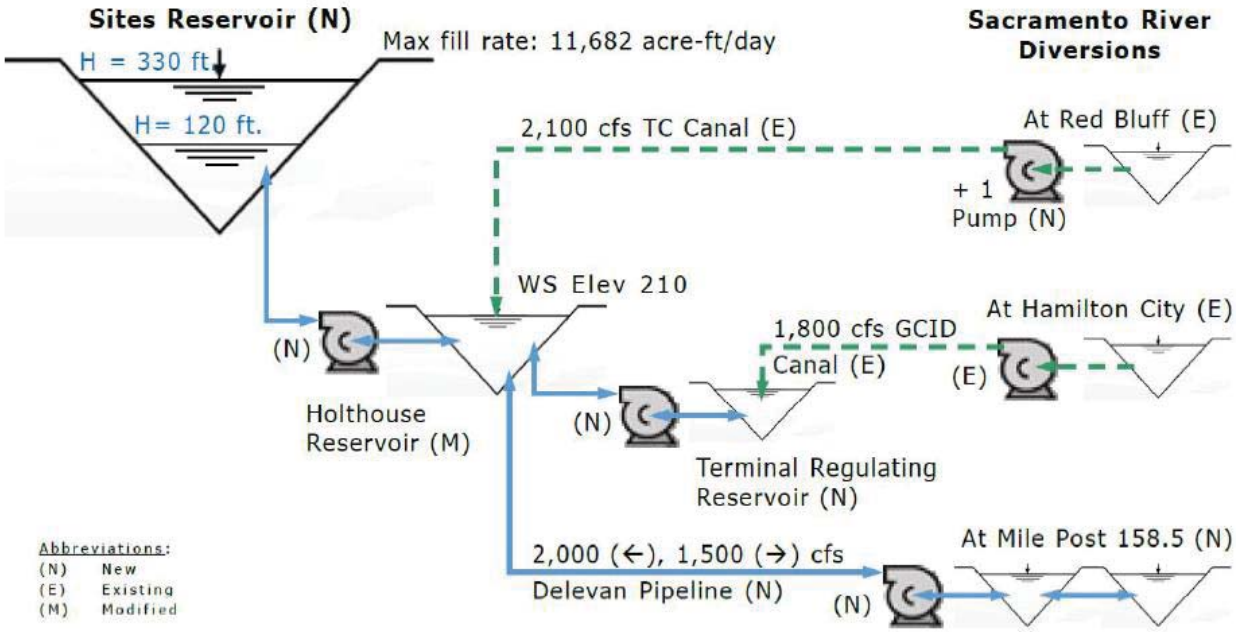

Figure 3
Sites Reservoir Project Operating Schematic

Table 4
Possible SGPWA Allocation of Sites Reservoir Project Costs
(All costs in thousands)

Item	Cost or %	Remark
Sites Reservoir Construction Cost	$4,700,000	2015 cost
Interest During Construction	$789,000	AECOM 2017 study
Total Costs, Oct 2015	$5,489,000	
Escalation to 2017	6.6%	per ENRCCI
2017 Capital Costs	$5,851,274	
Percent Water Supply Joint Powers Agency Funded	75%	AECOM 2017 Study estimated from 54% to 59%
Annual OM&R and Monitoring Cost	$26,000	2015 Costs
Escalation to 2017	6.6%	per ENRCCI
2017 OM&R and Monitoring Costs	$27,700	

Table 4 Continued
Sites Reservoir Project Cost Allocation
(All costs in thousands)

Item	Cost or %	Remark
2017 Capital Costs	$5,851,274	above
Sites Project Authority Share	60%	From AECOM Analysis
Cost Funded by Sites Project Authority	$3,510,800	
Interest Rate	4%	
Number of Years	40	
Capital Recovery Factor, 4%, 40 year	0.05052	
Annual Capital Cost,	$295,600	
SGPWA Requested Participation, AF	14,000	
SGPWA Allocated Class 1 Yield, AFY	9,748	
Total Sites Allocated Class 1 Yield, AFY	250,000	
SGPWA Share of Yield and Cost	0.039	Based on fraction of Class 1/Total Class 1
SGPWA Share of Annual Cost	$6,916	
SGPWA Share of OM&R and Monitoring Costs, not including DWR transportation pass through charges	$648	
SGPWA Total Annual Cost	$7,565	

Table 5 shows the unit cost, $/AF, for SGPWA for the range of possible yields from the Sites Reservoir Project under various scenarios, with and without the 25% loss and, with and without, the transportation charges. As can be seen in Table 5, under the likely scenario, Sites Reservoir Project Water will cost between $1,035 /AF and $776AF for the likely amount with and without loss. The unit cost could be lower if more water is made available.

Table 5
SGPWA Estimated Cost of Sites Reservoir Water

Cost per Acre-ft, No Transportation Cost				
Scenario	No Loss		25% Loss	
	Yield AFY	$/AF	Yield AFY	$/AF
Likely Amount, AFY	9,748	$776	7,311	$1,035
Probably Maximum, AFY	11,874	$637	8,906	$849
Maximum, AFY	14,000	$540	10,500	$720

Yuba Accord Water

Through Yuba Dry Year Transfer Program, the official name for Yuba Accord Water, SGPWA can purchase additional supplemental water from Yuba County Water District under an

agreement.[5] There are four categories of water in the agreement: Component 1, Component 2, Component 3 and Component 4, with each category having its own specific price per AF, varying from $25/AF to $125/AF depending on dry, normal, wet, or critical year water conditions and not including DWR pass through transportation costs. Going forward it is difficult to predict future hydrologic conditions, the amount to be purchased by SGPWA, or the price. It varies from year to year. The SGPWA estimates that about 300 AFY, on the average, of Yuba Accord Water can be obtained.[6] For purposes of this white paper a conservative cost of $125/AF will be used (not including DWR pass through transportation costs) or $385/AF with pass through transportation costs.

San Bernardino Valley Municipal Water District (SBVMWD Water)

The SGPWA is in the process of finalizing negotiations or has completed negotiations with SBVWD to purchase up to 5,000 AFY of SBVMWD's Table A water in years that SBVMWD's Board of Directors declares a surplus. The availability of SBVMWD surplus water depends on hydrologic and groundwater conditions within SBVMWD's service area per SBVMWD Ordinance 79. SGPWA has the right of first refusal on the first 5,000 AFY of surplus water. Assuming SGPWA exercises the right, it must first offered in equal shares to the two agencies that are in both SBVMWD and SGPWA, i.e., Yucaipa Valley WD and South Mesa Water Company. Any water "left over," SGPWA can be offered to other SGPWA retailers. The agreement is for a term of 15 years, but SGPWA intends to renegotiate the terms and extend to some point in the future.

SGPWA estimates, based on past hydrologic conditions this is likely to occur about two years out of every five, or 40% of the time. This is equivalent to 2,000 AFY in any one year. The term of this agreement will be at least 15 years from now or about 2032.[7]

SBVMWD has set rates for selling water to "outside" agencies based on the DWR's final Table A allocation as shown in Table 6[8].

The point of delivery to SGPWA is the Devil Canyon Afterbay. The cost of the water in Table 6 does not include DWR's pass through cost for energy or the cost SGPWA would pay to pump it from Devil Canyon to Cherry Valley. This cost was presented previously in Table 1. It is assumed the cost in Table 1 includes DWR's pass through costs for transportation to SBVMWD (Devil Canyon) plus the cost to pump from Devil Canyon to SGPWA, i.e., $260/AF.

[5] DWR (2008). Agreement for the Supply and Conveyance of Water by the Department of Water Resources for the state of California to the Participating State Water Contractors under the Dry Year Water Purchase Program, March 31.
[6] Refer to Table 3-1 of SGPWA 2015 UWMP
[7] SGPWA 2015 UWMP
[8] SGPWA Proposed Surplus Water Sale Agreement with San Bernardino Municipal Water District ("Valley District").

Table 6
Cost to Purchase Surplus Water from SBVMWD

Final SWP DWR Table A Allocation	Cost, $/AF
0 - 20%	$400
21 - 40%	$300
41 – 60%	$200
61 - 100%	$100

To develop and average cost for future water purchases, the last ten years of Table A allocations was used in conjunction with the rate associated with that allocation percentage presented in Table 6. The average cost for the ten-year period was determined to be $240/AF. not including DWR's pass through transportation charges ($260/AF). Total cost, including the pass through cost would be $500/AF.

AVEK-Nickel Water

In June 2017 SGPWA Board of Directors approved an agreement with the Antelope Valley-East Kern Water Agency (AVEK) for 1,700 AFY for 20 years with the right of first refusal to extend it for a second 20 years. The water rights on the Kern River originally belonged to the Nickel Family LLC that were sold to Kern County Water Agency (KCWA) and subsequently leased to other parties in various amounts. One portion (1,700 AFY) is under the control of AVEK, which offered the water to SGPWA. This water is not subject to the reliability issues of the SPW. Per the agreement SGPWA must take all of the 1,700 AF each year or pay for 1,700 AF if the SGPWA does not take all of it in any one year.

The cost of AVEK-Nickel water has three component charges plus the cost to pump to SGPWA[9]:

- Purchase of the water, currently $716.29/AF
- Replenishment charge, currently $300/AF
- Administrative charge, currently $5/AF

The total current 2017 cost is $1,021.29/AF at the Tupman Turnout west of Bakersfield, but does not include the cost to pump it from there to SGPWA. The SGPWA estimates the pumping cost at $247/AF, bringing the total cost to $1,268.29/AF, round to $1,270/AF. It is important to note that water purchase charge and the replenishment charges are subject to a 3% per year escalation or the Consumer Price Index (CPI) change for the Los Angeles, Orange and Riverside Counties, whichever is greater. For discussion purposes the SGPWA uses 3% per year. Over the initial 20-year period, the water will average $1,370/AF, not including the

[9] SGPWA (2017). Memorandum, Consideration and Possible Action to Enter into a Water Supply Agreement with Antelope Valley East Kern Water Agency, June 19.

pumping costs. Using an initial (2017) pumping cost of $247, the current cost, delivered to SGPWA would be $1,617/AF. It is likely the pumping costs will increase over time also.

SGPWA Water Portfolio Per AF Cost Summary

A summary of the range of cost for various SGPWA water sources are presented in Table 7. The transportation costs have not been increased over time. It is likely those costs will increase slightly over time.

Table 8 contains a summary of Unit Costs ($/AF) for various water sources for SGPWA under differing scenarios of reliability and water loss etc. Also included are the total amount of water beyond the SGPWA's current Table A with and without the CWF. Without the CWF the amount of additional water varies from 19,651 AFY to 26,340 AFY; with the CWF the amount of additional water ranges from 22,037 AFY to 29,352 AFY or about 2,500 to 3,000 AFY more. The difference with and without the CWF is due to the decrease in reliability over time from the current 62% to 48%. The weighted average cost for the water supply will range from $1525/AF to $2,067/AF.

Table 7
Summary of Unit Cost for SGPWA Portfolio Water Sources

	Capital Cost Range		Transportation Cost	Total Cost/AF	
Water Supply Portfolio	Lowest Cost/AF	Highest Cost/AF	Lowest Cost/AF	Lowest Cost/AF	Highest Cost/AF
Existing SGPWA Table "A"	$1,960	$1,960	$260	$2,220	$2,220
Future Table "A" w/o California Water Fix	$2,654	$2,654$	$260	$2,914	$2,914
Future Table "A" with California Water Fix [(a)]	$2,060	$2,200	$260	$2,320	$2,460
Sites Reservoir Project [(b)]	$600	$1,148	$260	$860	$1,408
Yuba Accord Water	$125	$125	$260	$385	$385
AVEK, Nickel Water [(c)]	$1,370	$1,370	$247	$1,617	$1,617
SBVMWD	$240	$240	$260	$500	$500

(a) Cost depends on reliability increase, see text discussion presented previously
(b) Depends on final yield and if 25% loss through Delta occurs
(c) Average cost over 20 years based on 3% per year escalation

Funding Alternatives

White Paper No. 4 will discuss possible funding strategies and funding alternatives to consider. Possibilities include:

- A single-component capacity fee for long-term water supplies.
- A two-component capacity fee that would pay for interim supplies as well as a permanent supply (if it can be found).
- The water rate charged to retail water customers.

- Withdrawals from reserves.
- General fund tax revenues.
- State Water Project tax (if new supplies are designated to be from the State Water Project)
- Creation of a standby charge for the entire service area or various Improvement Districts within the service area.
- Creation of new Improvement Districts, along with a water rate of standby charge, that would place the burden of funding new supplies on newly developed areas.

Table 8
Summary of Unit Cost and Additional Water Supply for SGPWA

Water Supply Source	Amount Without Reliability Factor (AFY)	Reliability Factor		Opportunity for Purchase with Reliability Factor		Probable Cost Range	
		Min	Max	Min AFY	Max AFY	Lowest Cost/AF	Highest Cost/AF
Existing SGPWA Table "A"	17,300	60%	60%	10,380	10,380	$2,220	$2,220
Future Table "A" w/o California Water Fix	17,300	48%	48%	8,304	8,304	$2,914	$2,914
Future Table "A" with California Water Fix	17,300	62%	65.62%	10,726	11,352	$2,320.	$2,460
Sites Reservoir Project	14,000	75%	100%	7,311	14,000	$860	$1,408
Yuba Accord Water	300	100%	100%	300	300	$385	$385
AVEK, Nickel Water	1,700	100%	100%	1,700	1,700	$1,617	$1,617
SBVMWD	2,000	100%	100%	2,000	2,000	$500.	$500
Water Supply w/o CWF, AFY				19,615	26,304		
Blended Cost w/o CWF						$1,525	$1,955
Water Supply with CWF, AFY				22,037	29,352		
Blended Cost with CWF						$1,606	$2,067

Conclusions

The SGPWA's water supply portfolio has many cost variables which will require a very robust approach to ensure that the anticipated cost associated with each water supply component is properly funded. BCVWD, along with the other water retail agencies and stakeholders in the region, must come to a high level understanding of the portfolio component costs and the funding tools being employed or potentially employed by the SGPWA to ensure the delivery of necessary water supplies to the region at the lowest melded cost. Through this understanding BCVWD will strive to ensure that the most efficient methods of funding are being employed

moving forward. BCVWD recommends that the SGPWA develop a funding strategy and identify specific fund vehicles for each component of the water portfolio.

Acknowledgments

This white paper supports a series of presentations made by BCVWD management to the Board of Directors and members of the public. Additional information is contained in those presentations.

Analyses and evaluations in support of the white paper and presentations were prepared by BCVWD staff, Joseph C. Reichenberger P.E., BCEE, Senior Engineer under the direction of and with input from Dan Jaggers P.E., General Manager. Extensive analyses were prepared by Kaden Johnsen, Engineering Assistant, with help from Ivan Garcia, Engineering Intern.

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DATE: December 20, 2017

TO: Dan Jaggers, General Manager

FROM: Joe Reichenberger PE, Senior Engineer

SUBJECT: Water Supply Portfolio Funding Requirements – White Paper No. 4

This white paper summarizes a presentation to BCVWD's Board of Directors on December 7, 2017 at an Engineering Workshop. This continues the discussion of San Gorgonio Pass Water Agency (SGPWA) and Beaumont Cherry Valley Water District's (BCVWD's) imported water needs to year 2050 – essentially build-out. This white paper focusses on imported water portfolio funding requirements. The next white paper will discuss funding alternatives and strategies.

Background:

White Paper No. 1 identified BCVWD and SGPWA imported water requirements over the next 30 years or so based on the respective agencies' 2015 Urban Water Management Plans (UWMPs). White Paper No. 1 also listed a number of sources of imported water ("water portfolio") and the timing of the leasing, purchasing, or construction of these sources. Since the water purchases and leases do not always exactly match the demands, White Paper No. 2 evaluated the feasibility of using groundwater storage and banking as a strategy to overcome temporary deficiencies between the demand for imported water and the supply. White Paper No. 3 identified the preliminary unit costs, ($/AF), for the various sources of water in the SGPWA portfolio, current and planned, including California Water Fix (CWF), Sites Reservoir (Sites), Yuba Accord Water, San Bernardino Valley Municipal Water District (SBVMWD Water), and AVEK-Nickel Water.

White Paper No. 3 showed that the future costs for water supply will range from as low as $385/AF to almost $3,000/AF depending on the source. On a blended (weighted) average, the cost ranges from $1,525/AF to $2,067/AF depending on assumptions related to the CWF. Possible funding alternative were identified in White Paper No. 3 but not discussed or analyzed.

White Paper No. 4 sets forth BCVWD staff's analysis of current and future funding requirements for the water portfolio identified in the previous white papers. A follow-on white paper discusses possible funding alternatives and strategies which might be used to secure the regional water supplies over the next several decades.

SGPWA's water supply, current and planned, comes from the following primary and supplementary sources:

Primary:

- State Water Project (SWP) Current Table "A" Water
- Increased Table "A" Water Reliability Through California Water Fix (CWF)
- Sites Reservoir Project (Sites)

Supplementary:

- Yuba Accord Water
- AVEK, Nickel Farms Water through the Antelope Valley East Kern Water Agency (AVEK-Nickel)
- San Bernardino Valley Municipal Water District (SBVMWD) Water
- Temporary Table A Supplies obtained through short term agreements
- Possible Transfer of Other State Water Project Rights/Supplies
- Article 21 Water and Turnback Pool Water when available

Primary Water Supply Costs

This White Paper assumes that the Department of Water Resources (DWR) will implement the CWF and Sites Reservoir and administer the financing similar to the method of financing and charging for the current SWP. If the SGPWA participates in CWF and Sites, there will be two types of annual costs associated with each source:

- Capital (construction and project costs) funded through Bond Debt Service
- Operation and Maintenance (O&M) Costs

Bond Debt Service

The original SWP has been funded through bonded indebtedness and very likely the follow-on CWF and Sites Reservoir projects would be similarly funded through bonds, though this is still uncertain. The capital or project costs associated with each project would be distributed proportionately to each of the State Water Contractors involved via some form of bonds either General Obligation and/or Revenue Bonds. This would be a State decision. General obligation bonds are voted on by the people of the State of California; the initial general obligation bond ($1.75 billion) for the SWP was approved through Proposition 1 in 1960. These bonds have various life terms (typically around 40 years) and are typically issued every year a project is in its construction phase. The bonds ultimately result in annual charges or debt payments that last for the life term of the Bond. Revenue bonds are funded from water sales and other similar revenues and do not require voter approval.

Project revenues from SWP contractor payments required under their long-term contracts are deposited into two accounts for accounting purposes:

- Central Valley Water Revenue Funds where all revenues pledged to revenue bonds are placed

- California Water Resources Development Bond Fund – Systems Revenue Account where all other SWP operating revenues area placed. Use of these funds is limited to paying operating costs and debt service.

Operations and Maintenance (O&M) Costs

Operations and maintenance costs are accumulated and paid on an annual basis. The costs cover operation, maintenance, and power costs plus a deposit to a replacement account (OMP&R). Power costs are the largest component of the OMP&R Costs. The replacement account has been used to fund replacement of SWP facilities over the years. In this series of White Papers O&M costs are synonymous with OMP&R costs and the terms are used interchangeably.

SGPWA Current Revenue (Payment) Requirements

SGPWA's Table A SWP amount assuming 100% reliability is 17,300 AFY or approximately 0.41% of the total SWP Table A (all contractors) of 4.1 million AFY. The costs to be paid by SGPWA to the DWR are the total of the following components:

- Delta Water Charge:
  - Capital Cost Component
  - Minimum OMP&R Component

  The Capital Cost Component of the Delta Water Charge is the cost applied to each acre-foot of SPW the contractor receives from the SWP to repay all of the outstanding reimbursable costs of the Project Conservation Facilities including appropriate interest to the end of the repayment period (2035). The Project Conservation Facilities include Oroville Dam, Lake Oroville, and the dams and lakes on streams above Lake Oroville; Oroville Power Facilities, a portion of the California Aqueduct from the Delta to the Dos Amigos Pumping Plant, San Luis Dam and Reservoir and Gianelli Pumping-Generating Plant.

  The Minimum OMP&R Component are those costs of operation, maintenance, power and replacement that are independent of the amount of water delivered, i.e., fixed operation and maintenance costs.

- Transportation Charge:
  - Capital Cost Component
  - Minimum OMP&R Component
  - Variable OMP&R Component

  The Capital Cost Component of the Transportation Charge is for the facilities to transport water to the vicinity of each contractor's turnout and the annual charge represents each contractor's proportionate share of the reimbursable capital costs of the Project Transportation Facilities. The Project Transportation Facilities include, among others, the North Bay and South Bay Aqueducts, the remainder of the California Aqueduct from the Delta to Dos Amigos Pumping Plant, all facilities south including the dams and lakes

in Southern California, and the Off-aqueduct Power Facilities costs (Reid Garner Unit 4, Bottlerock Powerplant, and South Geysers Powerplant)[1].

The Minimum OMP&R Component are those costs of operation, maintenance, power and replacement that are independent of the amount of water delivered, i.e., fixed operation and maintenance costs.

The Variable OMP&R Component includes those costs that depend on the amount of water delivered – typically power costs.

- Water System Revenue Bond (WSRB) Surcharge

  This is the revenue bond surcharge to the Delta Water Charge and the transportation capital cost component to each contractor to cover financing costs of the WSRB in accordance with an amendment to all of the water supply contracts signed by all of the contractors.

The Bulletin 132 series "Management of the California State Water Project," issued annually, provides a detailed summary of water deliveries for the given year as well as an accounting of all of the charges to each contractor up to the given year. DWR provides a projection of charges from the given year to year 2035, the end of the current bond payments. SGPWA will pay an estimated $23,594,607 in 2018 which includes the Delta Water Charge, Transportation Charge and WSRB Surcharge. Table 1 presents a summary of SGPWA's projected 2018 SWP charges. It is important to note these are projections and subject to change from year to year.

SGPWA Historical SWP Payments to DWR

Figure 1 shows a timelines of the SWP Construction from 1957 to 2010. The timeline is a bit out of date and shows East Branch Extension Phase II as "future." It is essentially complete as of 2017.

Figure 2 shows SGPWA historical payments for capital financing and total OMP&R for the SWP from inception through 2015. SGPWA's contract with DWR is dated November 16, 1962 with a term of 75 years extending to 2037. The SGPWA began making payments in 1964 with payments minimal until the start of EBX Phase I in 1998; other increases occurred with the construction of EBX I improvements and EBX Phase 2. These payments include DWR's Pass-through transportation charges.

After 2015, the amounts are projected and contained in DWR's Bulletin 132. The projected payments for OMP&R are based on 10,380 AFY. The projected payments level off at about $17 million for capital and $7 million for OMP&R from 2018 to 2035, at total of just over $24 million/year. Again these could change depending on the amount of water actually delivered to SGPWA.

[1] DWR invested in several power plant projects which have on-going liabilities. Reid Gardner in Moapa, NV (coal fired) which has shut down; Bottle Rock (geothermal) in Napa, CA, operated for a few years then ran out of steam; and South Geysers in Napa, CA which was constructed, but never operated due to lack of steam.

DWR does not currently anticipate financing SWP capital costs beyond 2035 or when the contracts expire. This has caused DWR to issue bonds with shorter life terms in order for them to be fully paid off by 2035 which has resulted in a dramatic increase in the size of bond debt payments as bond issue dates get closer to 2035. For purposes of this analysis, it is assumed that SGPWA's capital financing will be complete by 2035, the last projection in the Bulletin 132 series, "Management of the State Water Project."

Table 1
SGPWA's Projected 2018 SWP Charges

Cost Item	Amount	Bulletin 132-17 Source
Transportation Facilities Capital	$16,270,264	Table B-15
Transportation Facilities Minimum OMP&R	$ 3,302,187	Table B-16A
Transportation Facilities Minimum OMP&R for Off-aqueduct Power	$ 10,165	Table B-16B
Transportation Facilities Variable OMP&R	$ 2,377,151	Table B-18
Subtotal Transportation Facilities Total OMP&R	$ 5,689,503	
Subtotal Transportation Charge	$21,959,767	
Delta Water Charge	$ 1,201,839	Table B-21
WSRB Surcharge	$ 433,001	Table B-22
Total Transportation, Delta Water Charge and WSRB Surcharge	$23,594,607	Table B-23
Projected Delivery based on 60% Reliability, AFY	10,380[(a)]	Table B-5B
Total Cost $/AF	$2,270	
Estimated DWR Pass Through Transportation Charges	$260	
Estimated Capital Cost Component $/AF	$2,010	

[(a)] This will decrease to about 48% of Table A or 8,304 AFY over time without CWF

A number of contractors, including SGPWA, have requested an extension of the long-term contracts beyond 2035. In May 2013, DWR and the SWP Contractors initiated negotiations to develop contract amendments to extend the term and change certain financial provisions on the long-term water supply contracts. In June 2014, the parties reached a general agreement on principles for an amendment. Under the Agreement in Principal, contracts would extend to December 31, 2085. Payment provisions for capital cost and other costs would be amended from an amortization basis to an annual "pay as you go" basis, with sufficient revenue to allow DWR to operate the SWP in a fiscally sound manner including the collection of annual debt service to cover all of the bonds. The Agreement in Principle provides for an increase in DWR operating reserves, establishment of accounts to fund certain water resources development system expenses chargeable to the SWP Contractors, and the establishment of a finance

committee consisting of DWR and contractor representatives to serve as a forum for discussions on DWR financial policies.

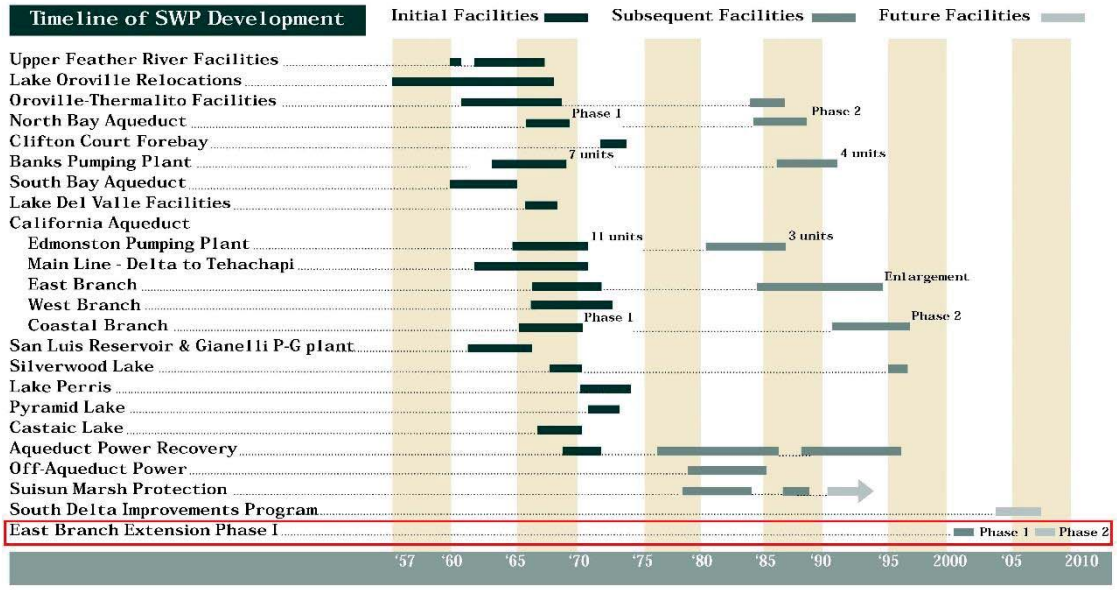


Figure 1
Timeline of SWP Construction

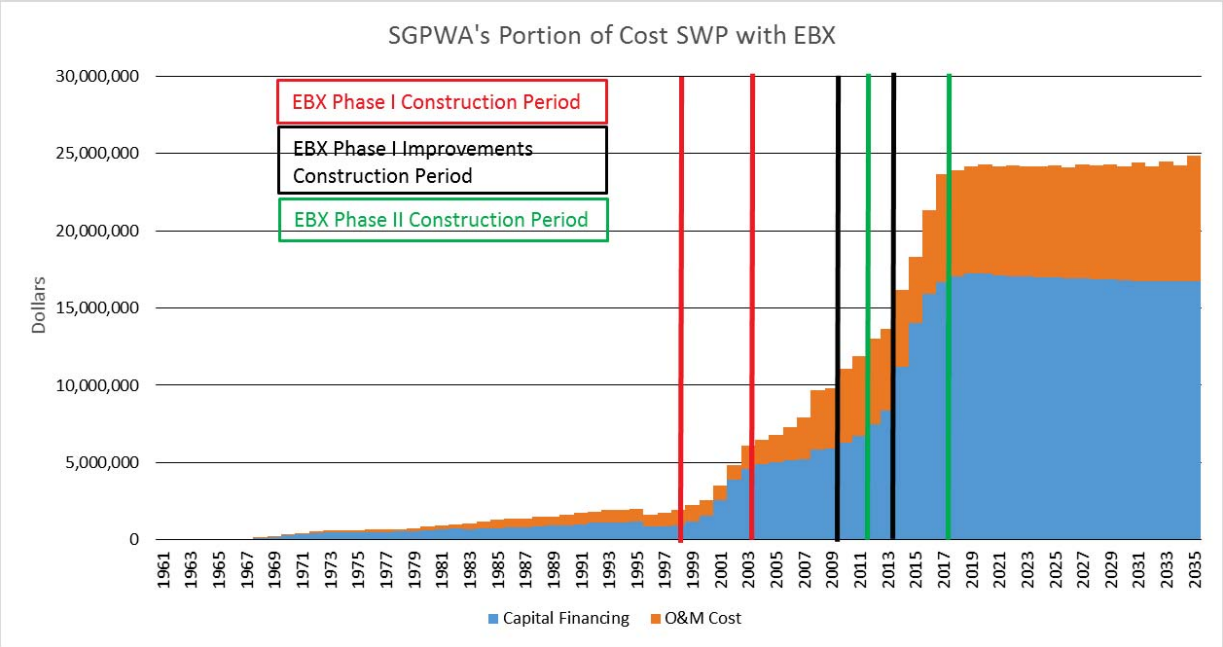


Figure 2
SGPWA Historical and Projected Capital and OMP&R Costs for SWP to 2035

But before any long-term contract amendment is adopted, DWR must complete a CEQA review and deliver a presentation to the California Legislature in an informal hearing. In 2015, DWR has started preparing a draft Environmental Impact Report for the contract amendment. For

purposes of this white paper, a conservative approach will be taken and no contract extension refinancing is assumed.

Figure 3 shows SGPWA projected payments for the SWP after 2035. Under current conditions, capital cost bond debt payments will theoretically end in 2035. After 2035 the capital cost, i.e., debt service for the SWP including EBX Phases I and II, will be completely paid off, and the only cost which SGPWA will pay is for the fixed and variable OMP&R which are estimated to be $8.14 million per year, the same as projected by DWR in Bulletin 132 for year 2035. It is based on 10,380 AFY annual delivery and it is assumed this cost would continue on indefinitely. Again this can vary from year to year depending on the amount of water delivered to SGPWA as well any changes in power and other costs over time.

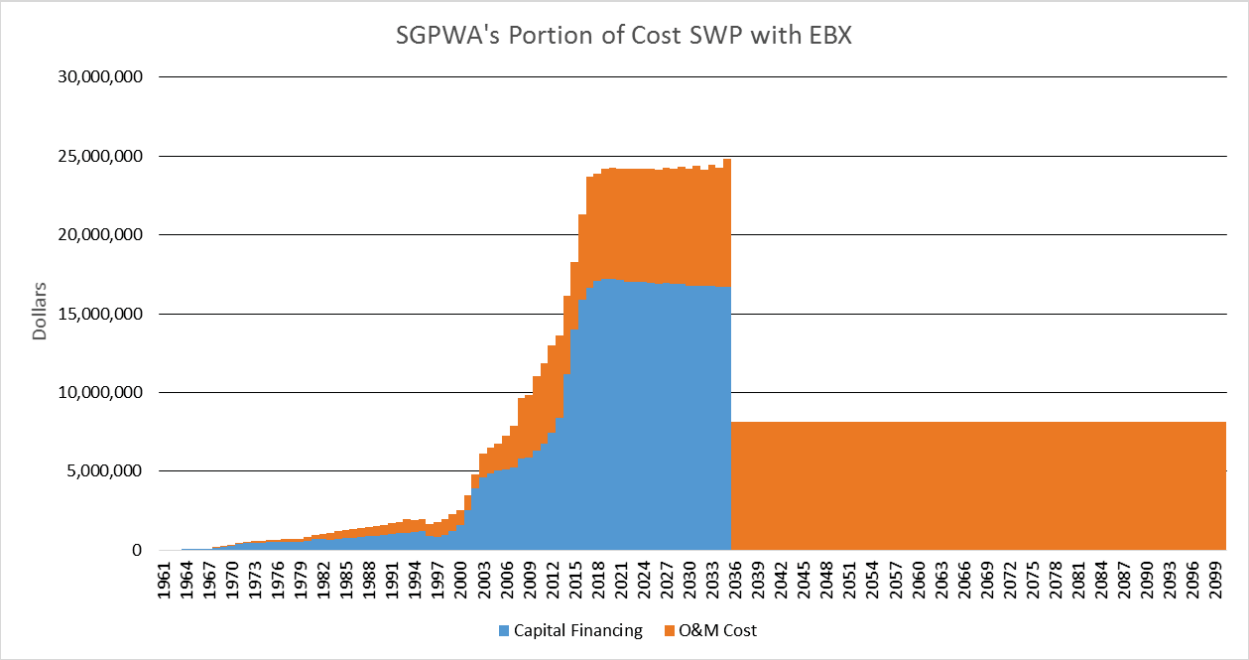


Figure 3
SGPWA Historical and Projected Capital and OMP&R Costs for SWP to 2099

The California Water Fix (CWF)

The California Water Fix (CWF) is described in detail in White Paper No. 3 and involves construction of dual water tunnels under the Delta to convey Sacramento River water to the south side of the Delta to Clifton Court Forebay and the Banks Pumping Plant. Without the CWF the reliability of the SWP Table "A" water is projected to degrade to 48% over time resulting is only 8,304 AFY on the average for SGPWA. The CWF is projected to increase the future reliability of the SWP by 14% (DWR study) to 17.62% (MWD study) which would increase the overall reliability to 62% or in the best case 65.62% -- about what the reliability currently is.[2]

[2] Due to some opposition in the scope and cost of the dual tunnel project, there has been some discussion to reduce the scope and cost by constructing only one tunnel. The impact on the reliability increase due to CWF "reduced" is not known but will be assumed to be no change from 14% to 17.62%.

White Paper No. 3 summarized the cost of the SGPWA Table A water going forward with and without the CWF. These costs are summarized below.

Table 2
Summary of Unit Costs with and without CWF

Item	Without CWF at 48% Reliability	With CWF at 62% Reliability	With CWF at 65.62% Reliability
Water Available to SGPWA, AFY	8,304	10,726	11,352
Pre-CWF, Cost, $/AF without DWR Pass Through Transportation Charge	$2,654	--	--
With CWF, Cost, $/AF without DWR Pass Through Transportation Charge	--	$2,200	$2,060
DWR Pass Through Transportation Charge, $/AF	$260	$260	$260
Total Cost, $/AF	$2,914	$2,460	$2,320

The reliability percentage recovered, in terms of incremental AFY, resulting from the CWF would come at a component cost of $705/AF to $887/AF based on incremental increases of 3,048 AFY and 2,422 AFY respectively. These costs, as well as the costs in Table 2, are based on the assumption that the contractors currently involved in the SWP and Central Valley Project (CVP) will remain unchanged. There may be an opportunity for the SGPWA to secure more Table “A” supply through a potential transfer of State Water Project rights/supplies among State Water Project Contractors in the event that more contractors from the SWP or CVP withdraw or reduce their support and associated financing of the project.

The capital cost of the CWF was identified in White Paper No. 3 to be $16.7 billion (2017 dollars) and annual operating costs estimated at $64.4 million, with the participating SWP contractors responsible for 55% of the cost and the CVP contractors the remaining 45%. . The SGPWA share of the total SWP Table A is 0.41%. But not all of the SWP contractors are participating and it is likely that SGPWA’s share would increase to 0.43%. For purposes of this preliminary analysis, 0.43% will be the assumed SGPWA share of CWF costs.

The Metropolitan Water District of Southern California (Metropolitan) did an extensive financial review of the CWF to determine the impact of the costs on their rate payers. This analysis provided the basis for the analysis of the impact of CWF on the SGPWA. Table 3 presents a summary of the costs. SGPWA’s share of the capital and O&M costs is $2.15 million.

Table 3
Summary of CWF Costs and Bonds

Cost Item	Total Project	SWP Contractor Share	SGPWA Share
Project Cost Share	100%	55%	0.43% of SWP Contractor Share
Capital Cost (2017)	$16.7 billion	$9.15 billion	$39.4 million
O & M Cost (2017)	$64.4 million	$35.4 million	$150,000
Interest Rate	4%		
Bond Term	40 years		
Bond Issuance Cost, (added to capital cost)	$500,000/issue		
Annual Bond Payment		$463 million	$2 million
Total Payment Including O&M		$498.4 million	$2.15 million
Start of Project	2019		
Project Fully Operational	2033		
Escalation of Costs	None – all 2017 dollars		
Bonds Issued	Start in 2019 and step gradually to 2033 to cover design and construction		
Last Bond Payment	2073		

Figure 4 shows SGPWA's funding requirements for the CWF. These costs would be in addition to the funding requirements shown in Figure 3 above. In as much as the CWF brings the reliability back to about current levels, it is assumed that DWR's projected "pass through" transportation costs to convey the water to SGPWA are included in the annual payment, (approximately $8 million), shown in Figure 3 beyond year 2035. Figure 4 shows that the costs for CWF would be paid until year 2073 or so.

Sites Reservoir Project

The Sites Reservoir Project is described in detail in White Paper No. 3. The project consists of a 1.27 to 1.81 million AF reservoir in foothills northwest of Sacramento. The purpose of the reservoir is to capture and store high flows in the Sacramento River. These high flows would otherwise flow out to the ocean. In addition to the dam construction, there are some pipelines to convey the water to Sites Reservoir and back to the Sacramento River where it can flow to the SPW Contractors who participated in the project. Pumping-generating stations would be constructed to pump water into Sites Reservoir and recover electrical power when the water is released back to the Sacramento River.

White Paper No. 3 contained a breakdown of the Sites Reservoir cost. Table 4 below presents an updated summary to bring 2015 Sites Reservoir costs to 2017, the base for the other cost estimates in this white paper. In addition a consultant, AECOM, completed a study in 2017 that estimated the interest during construction to be $789,000, bringing the total 2015 construction

cost to $5.489 billion. Escalation from 2015 to 2017, about 6.6% per Engineering News Record Construction Cost Index (ENRCCI), brings the cost in 2017 dollars to $5.851 billion. The 2015 dollar estimate of the annual OMP&R for the Sites Reservoir was $26.0 million or $27.7 million in 2017 dollars using the ENRCCI as above. This is summarized in Table 4.

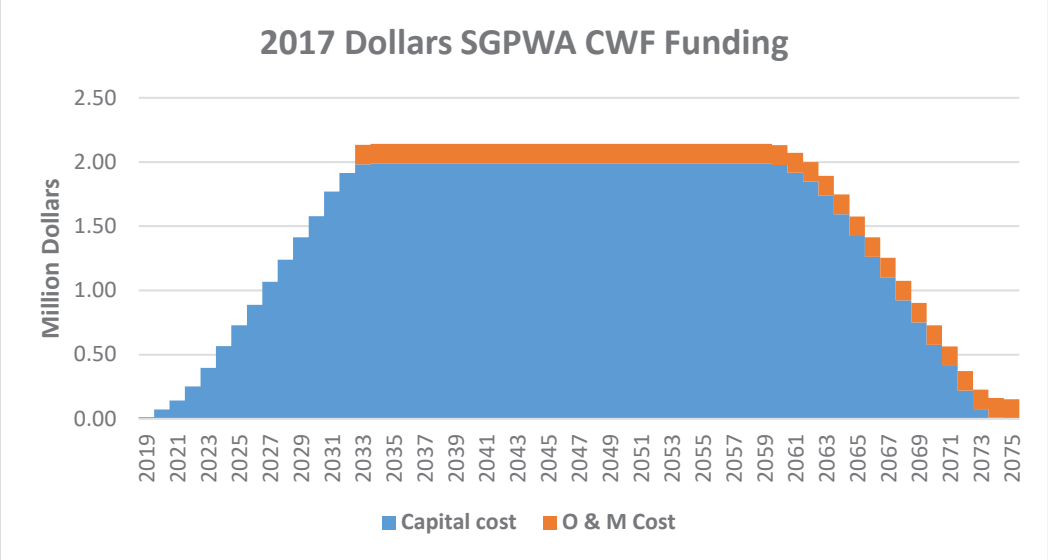


Figure 4
SGPWA Funding Requirements for CWF

For purposes of this White Paper, and to be conservative due to the uncertainty of funding etc., the Sites Project Authority contribution is assumed to be 75%, (in lieu of the 59% shown in Table 4), of both the capital and the annual OMP&R costs to keep it simplified.

Table 4
Sites Reservoir Cost Summary
(All Costs are in thousands)

Item	Cost or %	Remark
Sites Reservoir Construction Cost	$4,700,000	2015 cost
Interest During Construction	$789,000	AECOM 2017 study
Total Costs, Oct 2015	$5,489,000	
Escalation to 2017	6.6%	per ENRCCI
2017 Capital Costs	$5,851,274	
Percent Water Supply Joint Powers Agency Funded	75%	AECOM 2017 Study estimated from 54% to 59%
Annual OM&R and Monitoring Cost	$26,000	2015 Costs
Escalation to 2017	6.6%	per ENRCCI
2017 OM&R and Monitoring Costs	$27,700	

The total cost for Sites Reservoir in Table 4 will be shared with other project beneficiaries: Water Storage Improvement Program (WSIP), federal funding, and Non-Prop.1 Eligible Benefits (Sites Project Authority). Federal funding is projected to be about for ecosystem improvement and flood control benefits. WSIP funding request was to cover other public purposes. If granted, the WSIP funding would provide sufficient matching funds to fully cover the capital cost

for all the project's public benefit categories and 100% funding for other elements such as Oroville cold water pool, Yolo Bypass., and recreation. WSIP funding would also provide the remaining funding needed after the federal contribution above.

AECOM prepared an allocation analysis in 2017 evaluating several methodologies: present value of capital and OM&R Costs, present value of capital costs only, and total annual costs. The range of participation for federal funding was 13%-14%, WSIP funding 28%-32% and Sites Joint Powers Authority 54-59%. A summary is shown in Table 5. For purposes of estimating the Sites Project Costs to be funded by the Sites Joint Powers Authority, 60% will be used.

Table 5
AECOM's Sites Reservoir Project Cost Allocation

Funding Source	Percent of Present Value of Total Capital Cost [a]	Percent of Total Capital and OMP&R [b]	Total Annual Costs [c]
Federal non-reimbursable	14%	13%	13%
WSIP	32%	28%	28%
Sites Project Authority	54%	59%	59%

[a] Based on AECOM Report Table A10-3
[b] Based on AECOM Report Table A10-4
[c] Based on AECOM Report Table A10-2

The Sites Reservoir Project costs shown in Table 4 above are allocated to the Sites Project Authority and the SGPWA in Table 6. The annual costs for the SGPWA do not include the DWR Pass-through transportation costs, currently $260/AF, as this cost is assumed to be included in the water rate charged by SGPWA. Figure 5 shows the projected capital cost bond debt and O&M costs for SGPWA. These costs would be over and above the costs shown in Figures 3 and 4 for the years 2035 to 2075.

Table 6
Sites Reservoir Project Cost Allocation
(All costs in thousands)

Item	Cost or %	Remark
2017 Capital Costs	$5,851,274	Table 4
Sites Project Authority Share	60%	From AECOM Analysis
Cost Funded by Sites Project Authority	$3,510,800	
Interest Rate	4%	
Number of Years	40	
Capital Recovery Factor, 4%, 40 year	0.05052	
Annual Capital Cost,	$295,600	
SGPWA Requested Participation, AF	14,000	
SGPWA Allocated Class 1 Yield, AFY	9,748	
Total Sites Allocated Class 1 Yield, AFY	250,000	
SGPWA Share of Yield and Cost	0.039	Based on fraction of Class 1/Total Class 1
SGPWA Share of Annual Cost	$6,916	
SGPWA Share of OM&R and Monitoring Costs, not including DWR transportation pass through charges	$648	
SGPWA Total Annual Cost	$7,565	

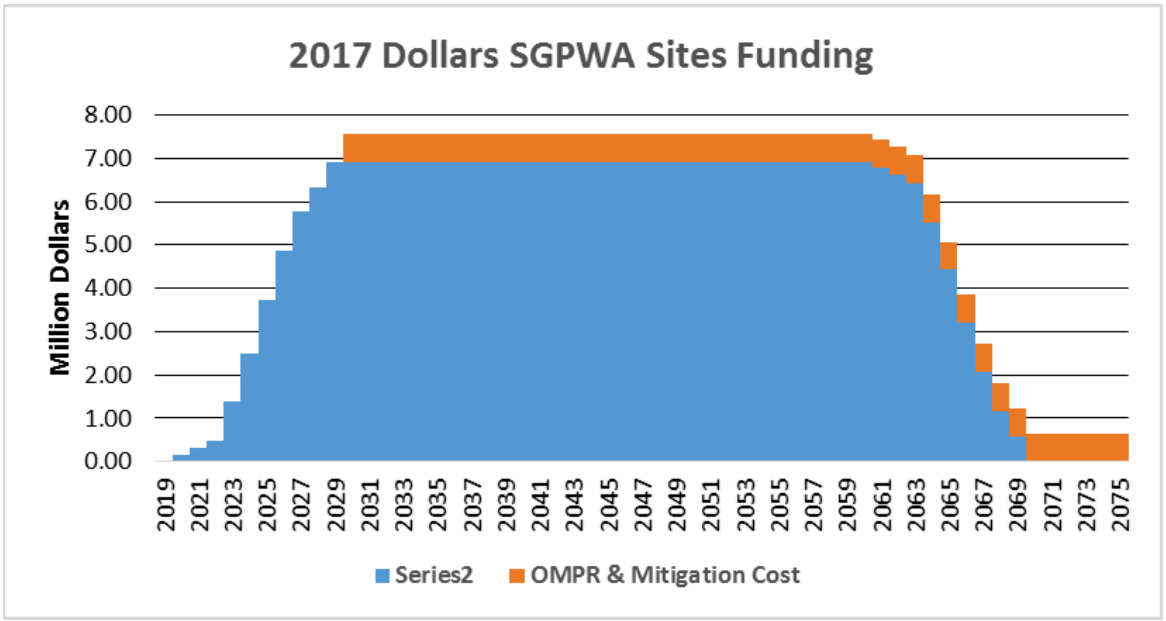


Figure 5
SGPWA Funding Requirements for Sites Reservoir

Summary of SGPWA Future Funding Requirements

Figure 6 shows the accumulated funding requirements for total annualized bond debt and OM&R for the existing SWP and EBX plus the California Water Fix and Sites Reservoir based on the cost presented above. The SGPWA will need another $10 million in annual revenue between 2020 and 2035 to cover the costs for the CWF and Sites Reservoir. After 2035, the revenue requirements drop off dramatically to a relatively constant $18 million, then eventually dropping to below $10 million as the bonds for CWF and Sites Reservoir are paid off.

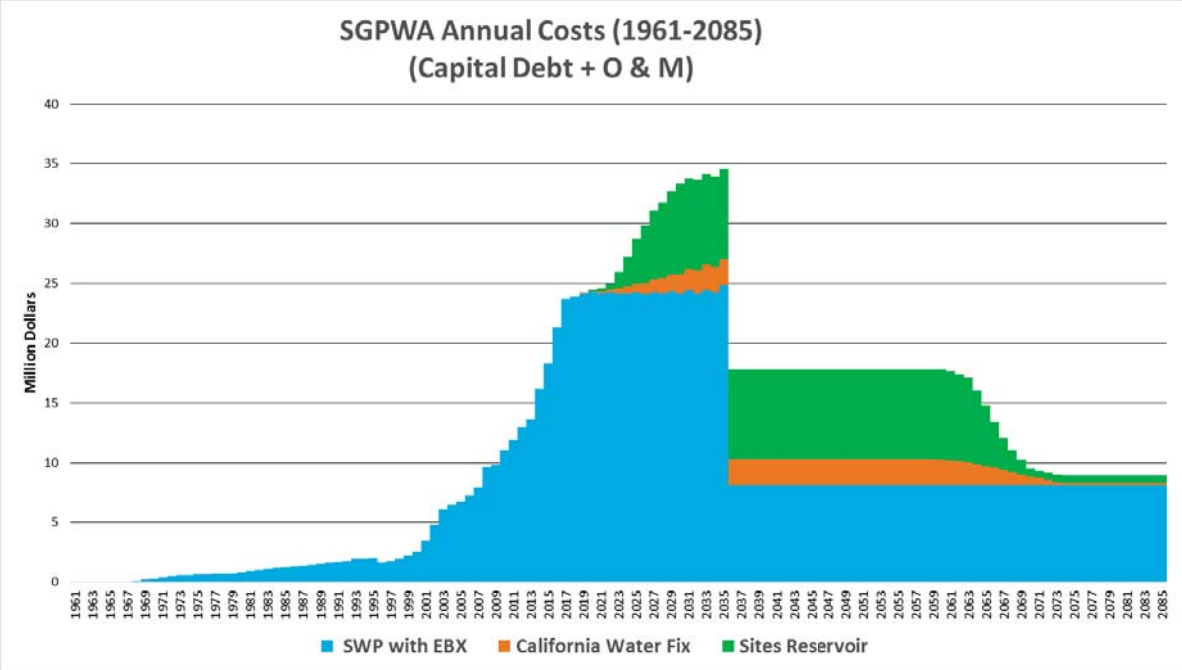


Figure 6
SGPWA Funding Historic and Projected Funding Requirements
including Existing SWP with EBX, California Water Fix and Sites Reservoir

The costs for the SGPWA three primary water sources maybe be able to be funded with debt service property tax revenues. Sites Reservoir was a part of the original SWP that was deferred and the CWF is only improving the reliability of the original SWP yield which has been eroded over the years by factors not known at the time the SWP was originally voted on would appear to be justification for using property tax revenues. However this will need to be evaluated by the SGPWA's legal counsel.

These projects have the opportunity to provide a significant portion of the SGPWA's future water supply requirement and a comprehensive strategy needs to be developed to fund these critical projects.

Acknowledgments

This white paper supports a series of presentations made by BCVWD management to the Board of Directors and members of the public. Additional information is contained in those presentations.

Analyses and evaluations in support of the white paper and presentations were prepared by BCVWD staff, Joseph C. Reichenberger P.E., BCEE, Senior Engineer under the direction of and with input from Dan Jaggers P.E., General Manager. Extensive analyses were prepared by Kaden Johnsen, Engineering Assistant, with help from Ivan Garcia, Engineering Intern.

Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223
951-845-9581 www.bcvwd.org

DATE: January 2, 2018

TO: Dan Jaggers, General Manager

FROM: Joe Reichenberger PE, Senior Engineer

SUBJECT: Funding Strategies – White Paper No. 5

White Paper No. 4 provided information on the capital and OMP&R costs for the original EBX Phases I and II, the California Water Fix (CWF), and Sites Reservoir. Figure 1 shows the annual costs that SGPWA would be paying to DWR for these three components over time. The peak payment amount is about $35 million annually for a short period of time from 2028 to about 2035 when the original SWP Bonds are paid off. After 2035 the annual payments are about $18 million eventually dropping to about $13 million.

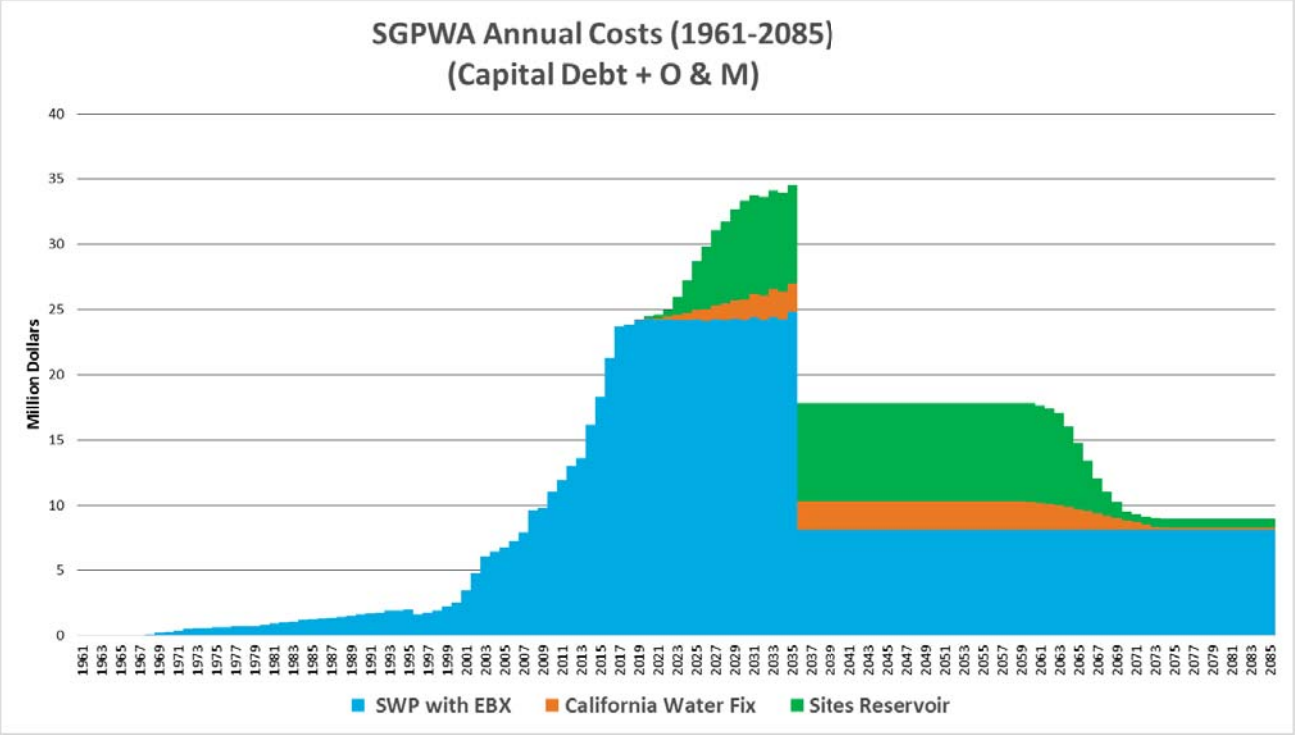


Figure 1

SGPWA Annual Payments to DWR for SWP w/EBX, CWF and Sites Reservoir

Sources of Funding

SGPWA has a number of alternatives to fund the amounts in Figure 1.

- Property Tax Revenue
- SGPWA Rate/AF ("water rates")
- SGPWA's Share of Riverside County's 1% property tax which with shared with other agencies
- Capacity fees charged to new developers
- Bonds
    - Assessment District Bonds covering new development areas only
    - Revenue Bonds repaid with pledged water rates over time
    - General Obligation Bonds
    - Community Facilities District Bonds (Mello-Roos)
- Combinations of the above

Property Tax Revenue

Property tax revenue is based on the SGPWA Tax Rate, currently $0.1825/$100 assessed valuation (AV), and the total Assessed Valuation in the SGPWA service area. The 2016 AV in SGPWA service area based on data from Riverside County is $8.377 billion. BCVWD's portion of that is $4.519 billion, or 53.9% of the total. In 2002, before much of the development took place the AVs were $2.436 and $0.841 billion (34.5%) respectively. At the current tax rate and the 2016 AV, the annual property tax revenue is $15.234 million. See Figure 1.

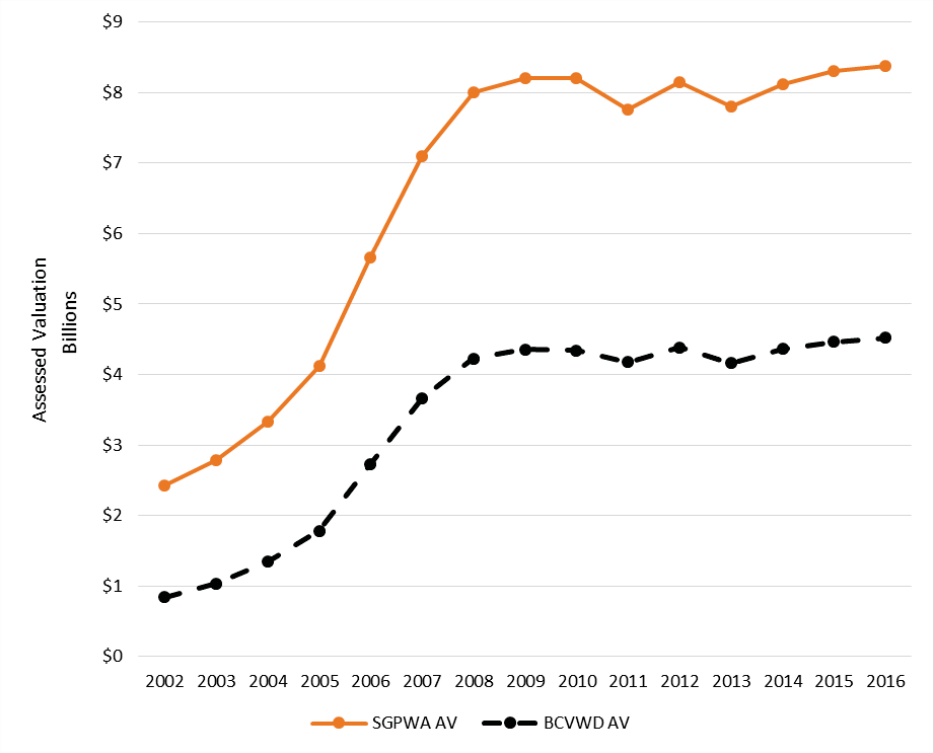


Figure 1
SGPWA and BCVWD Assessed Valuation Over time

The total property tax revenue collected by the SGPWA from 2002 through 2016 was $174.3 million of which BCVWD's residents contributed $89.5 million or 53% of the total taxes paid to SGPWA. In fact since 2000, BCVWD, YVWD and the City of Banning contributed over 90% of the SGPWA's total property tax revenue. Figure 2 shows the property tax revenue paid to SGPWA over the years by each retailer.

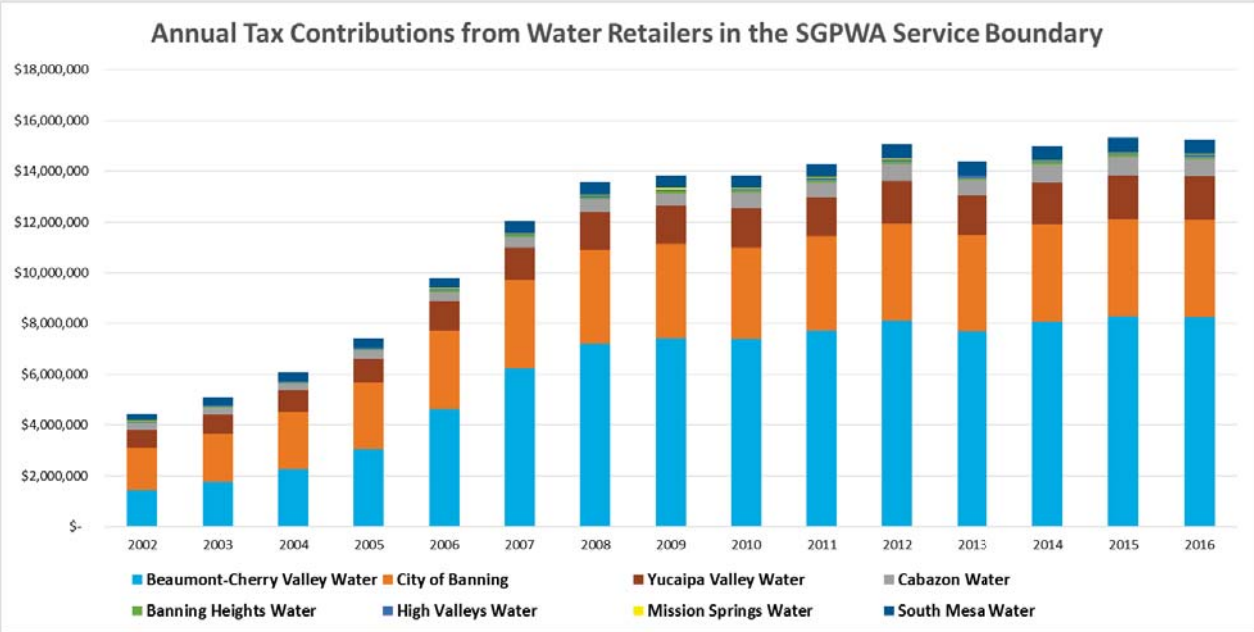


Figure 2
Annual Property Tax Contributions to SGPWA by Retailers

To project the future property tax revenue, the following assumptions were made:

- Raw Land Value (2017) = $50,000/acre
- 4 new homes/acre
- 650 new houses/year (the City of Beaumont alone from 2002 through 2016 averaged 772/year. From 2013 through 2016, average was 449/year.)
- Home value (2017) = $350,000
- New home inflation rate 2%/year (very conservative, 2017 increase was 7.7%, The Riverside County Assessor forecasts 5.0% for 2018 and 2019 and 3.0% for 2020, 2021, and 2022)
- Land value escalation rate 2%/year
- Home assessed value annual increase 2%/year, maximum per Proposition 13
- Once a new home is built and sold, the selling price becomes the initial assessed valuation. Per Proposition 13, the assessed valuation cannot increase by more than 2%/year.
- Real estate turnover was not assumed in the analysis although it is reported to be 8.7% in Riverside County as a whole. This means that 8.7% of all residential homes are

resold and the assessed valuation would be the new, increased sales price. As a result the projected tax revenues are conservatively low.

- Base year was 2016 with total property tax revenue paid to SGPWA = $15,288,758.
- Tax rate = $0.1825/$100 AV, the current tax rate; no increase was projected.

A spreadsheet was developed to project the total tax revenue which could be used to fund the capital cost of SPW with EBX Phases I and II, CWF, and Sites Reservoir. CWF and Sites Reservoir area assumed to be funded by DWR and SGPWA property tax revenue can be used to fund these projects. A plot of the tax revenue based on the assumptions above and the total annual costs for SWP with EBX I and II, CWF, and Sites Reservoir are shown in Figure 3.

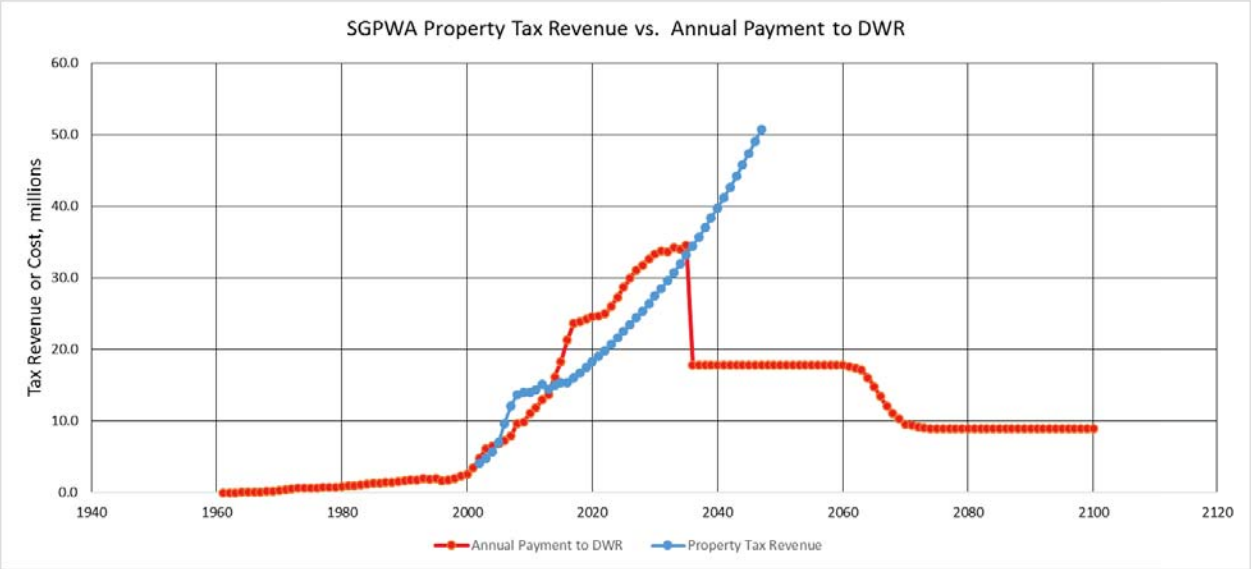


Figure 3
Annual Property Tax Revenue and Annual SGPWA Cost
for SWP, EBX I & II, CWF, and Sites Reservoir

In Figure 3 there is a leveling off of the property tax revenue from 2005 or so to 2016. This due to a reported reassessment of homes by the County that lost value during the recession. House values have risen since then and the assessed valuations are expected to grow. Once the assessed valuation reaches the 2% per year straight line projection from the time of reassessment, and assuming the homes are not sold in the interim, the assessed valuation will again be increasing at the 2% per year maximum Proposition 13 rate. Resell or turnover has not been included in the projections.

Figure 3 indicates that from 2017 through 2035, there is a shortfall of revenue to pay the annual costs for the water projects. Table 1 shows a sensitivity analysis of the cumulative shortfall based on different housing escalation rate assumptions. Table 1 and Figure 3 do not include the beneficial impact of the turnover rate which is about 8.7% currently (a home resells every 11.5 years). As can be seen, the cumulative annual shortfall is very dependent on the housing escalation rate.

The new home price escalation rate would have an impact on the financing strategy. At 4% or 5% escalation rate, it may be possible to fund the shortfall from reserves. This is discussed later.

Table 1
Sensitivity of Home Price Escalation Rate on Tax Revenue
(based on current SGPWA Tax Rate $0.1825/$100 AV)

New Home Price Escalation Percentage/year	Maximum Annual Shortfall, millions	Cumulative Annual Shortfall, millions
2%	$7.7	$63.3
4%	$7.4	$23.4
5%	$7.2	$16.3

Other Sources of Supplementary Funding

Water Rates

SGPWA currently has a water rate charge of $317/AF delivered. This charge was described in detail in White Paper No. 3 and includes Agency operational and administrative expenses, a rate stabilization component, SBVMWD pass through charge, a component for Yuba Accord water and a component for new water purchases. The largest component is DWR's pass through of $260/AF for energy and transport to SGPWA.

This rate can be increased, however it is subject to the requirements of Proposition 218.

Water rate increases encourages water conservation which may be beneficial in the long run, but does decrease revenue over time. Agencies with significant "fixed" operating costs will be adversely impacted by revenue reductions due to conservation.

SGPWA's Share of Riverside County's 1% Property Tax

The largest tax item on the property tax is the 1% tax, i.e., $1/$100 AV or "General Tax Levy," which stays with Riverside County. A portion of this is re-allocated to agencies within Riverside County according to a not-well understood formula. SGPWA gets a share of this 1% General Tax Levy. This amounted to about $2.3 million on June 30, 2017. This tax revenue is unrestricted and can be used for any purpose. Many agencies use all or a portion of this to cover general operating expenses.

Capacity Fee

The SGPWA has been discussing a capacity fee for a number of years. One of the most recent was a study prepared by David Taussig and Associates, draft 2015. The study envisioned two components: a Facility Fee for new infrastructure and a Water Capacity Fee for new water rights. Capacity fees are restricted funds and must be used only for the purpose intended.

The Facility Fee portion was to be applied to new residential (different rates for single family and multi-family) and new commercial (based on meter size). Also included was a Water Capacity Fee applied to new residential and commercial based on water consumption and a $/AF cost ($6,231/AF). Single family water use was based on 0.546 AF/yr/single family unit. The fees were never implemented.

A Capacity Fee could be implemented; it will require a new nexus study to ensure the fees are consistent with the costs. Capacity fees are not subject to Proposition 218 requirements.

It is commonly held that new development or new growth should pay for the supporting infrastructure and one way of ensuring this is to assess a capacity fee paid for by the developer of the property. Many agencies assess capacity fees but the developers ultimately pass this on to the sales price of the home which is ultimately paid for by the purchaser. Of course there is a market limit to the amount of fees that can be attached to the sale price before the home becomes unsellable at the particular price. Attaching the capacity fee to the house increases the purchase price and down payment and makes homes unaffordable.

Bonds

The SGPWA Act ("Enabling Legislation") specifically identified the authority of the SGPWA to issue bonds. Specifically listed were: General Obligation Bonds, Revenue Bonds per 1941 Law, and 1911 Act Improvement Bonds. On the surface, without legal counsel opinion it appears these vehicles could be used by the SGPWA to fund the future projects or fund the shortfall shown in Figure 3.

General Obligation Bonds

General obligation (GO) bonds are secured by a pledge of the full faith and credit of the issuer and/or by a promise to levy taxes in an unlimited amount as needed to pay the debt services. The State of California's GO bonds are full faith and credit funded from the general fund pledge rather than from any revenue source. Local agencies are not generally authorized to issue full faith and credit bonds and are only payable from ad valorem property taxes. GO bonds are typically the least expensive debt available to government agencies. They do require voter approval, typically 2/3 vote, and there may be debt limits imposed on the issuer. Securing approval of GO bonds by local agencies is very difficult.

Revenue Bonds

Revenue bonds are paid back from a dedicated revenue source such as water rates or other financial source. Revenue bonds do not require voter approval. Interest rates are higher than GO bonds.

Improvement (Assessment District) Bonds (1911 Act)

Assessment bonds are authorized under the Improvement Act of 1911 and are repaid from taxes collected from those who benefit from the project. An assessment is a levy or charge placed on real property by a local agency for a special benefit conferred on the real project from

a public improvement. The assessments are paid from scheduled installments collected by direct billing to the property owner or through the tax rolls, or through proceeds from prepayment of assessments by the owners to discharge the unpaid tax lien.

The SGPWA would be the sponsoring agency; a petition signed by the owners of the parcels interested in the particular improvement. A benefit assessment district would have to be set up and an Engineer's Report prepared to identify the benefits to each parcel. Once the report is completed and disseminated, a ballot is prepared for the parcels to vote. A public hearing is held, typically called a "protest hearing," and the ballots collected and tabulated. The assessment district is approved if there are more "yes" votes than "no" votes.

It is not easy to fund an assessment district, particularly if it covers a large area.

Historic SGPWA SWP and EBX I and II Funding

Since inception of the Agency in the early 1960s, the SGPWA has funded its SWP obligations from property taxes collected within the Agency. The first property tax rate was set at $0.10/$100 AV in July 1962. The rates changed over time since then. See Figure 4.

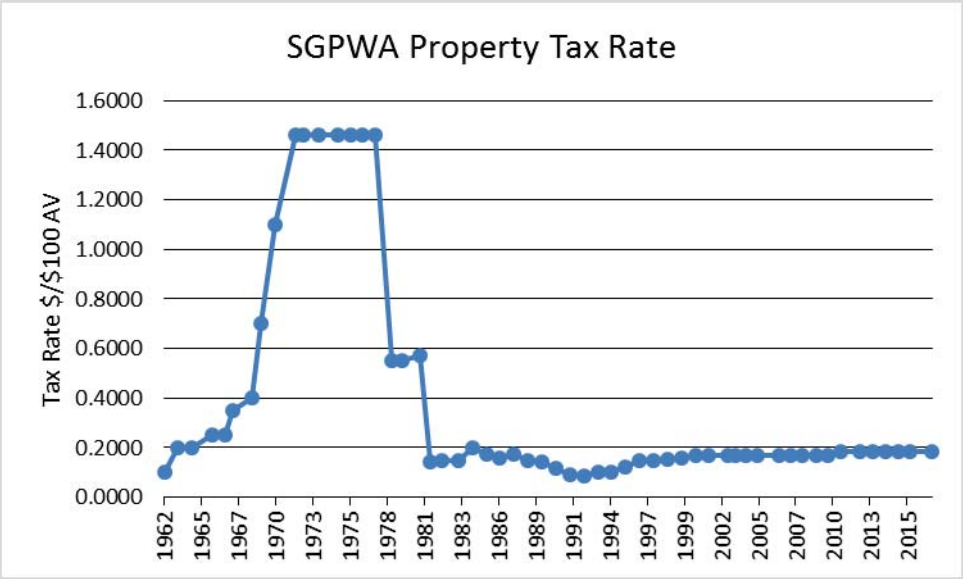


Figure 4
SGPWA Property Tax Rate Over Time

When water deliveries started to BCVWD, the first retailer to purchase water, in 2006.SGPWA established a water rate, $/AF delivered. The rate was $277/AF in 2008. It was increased in 2009 to the current $317/AF. This covers the various pass through charges identified in White Paper No. 3 and provides funding for rate stabilization and new water purchases.

Tax Contributions to SGPWA Older vs. Newer Homes

An analysis was performed on twenty homes within BCVWD which were purchased prior to 1992 and from 1992 through 2016 to determine how much property tax was paid by each home from 1976 through 2017. The homes were categorized by number of bedrooms. House

descriptions, sales year, sales price, etc. were obtained from Riverside County Assessor's Office. Refer to Figure 5. It is interesting to note that the 3-bedroom property purchased in 1976 when the tax rate was $1.46/$100 AV actually paid less cumulative property tax to the SGPWA than homes purchased as late as 2008. From Figure 5 it can be concluded that the owners of newer homes pay more in taxes to the SGPWA than some much older homes. Much of this has to do with the effects of Proposition 13.

This analysis was extended to the 2035 assuming the properties were not sold or reassessed. The results are shown in Figure 6. The results are similar. The newer homes pay a large portion of SGPWA's property tax revenue and confirms that new development does pay. Agencies that have taxing power may want to consider using property tax to fund infrastructure rather than capacity fees. It is not subject to the ups and downs of the market and provides a more stable form of revenue.

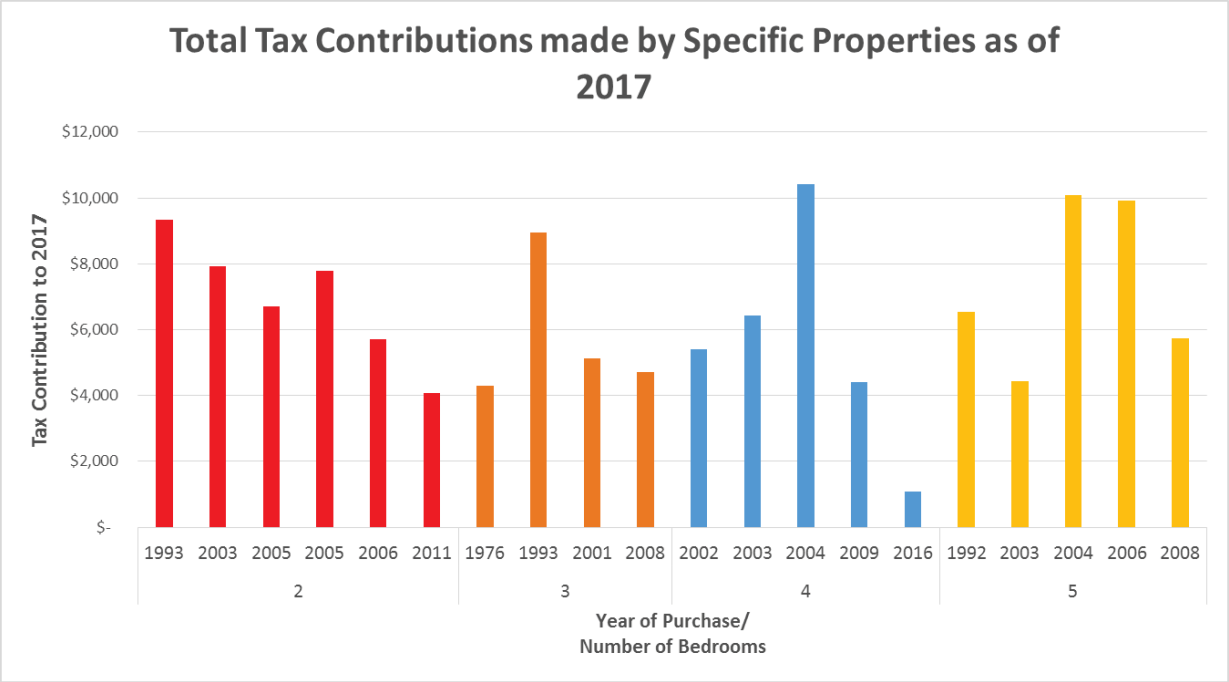


Figure 5
SGPWA Property Tax Rate Contributions by Specific Properties through 2017

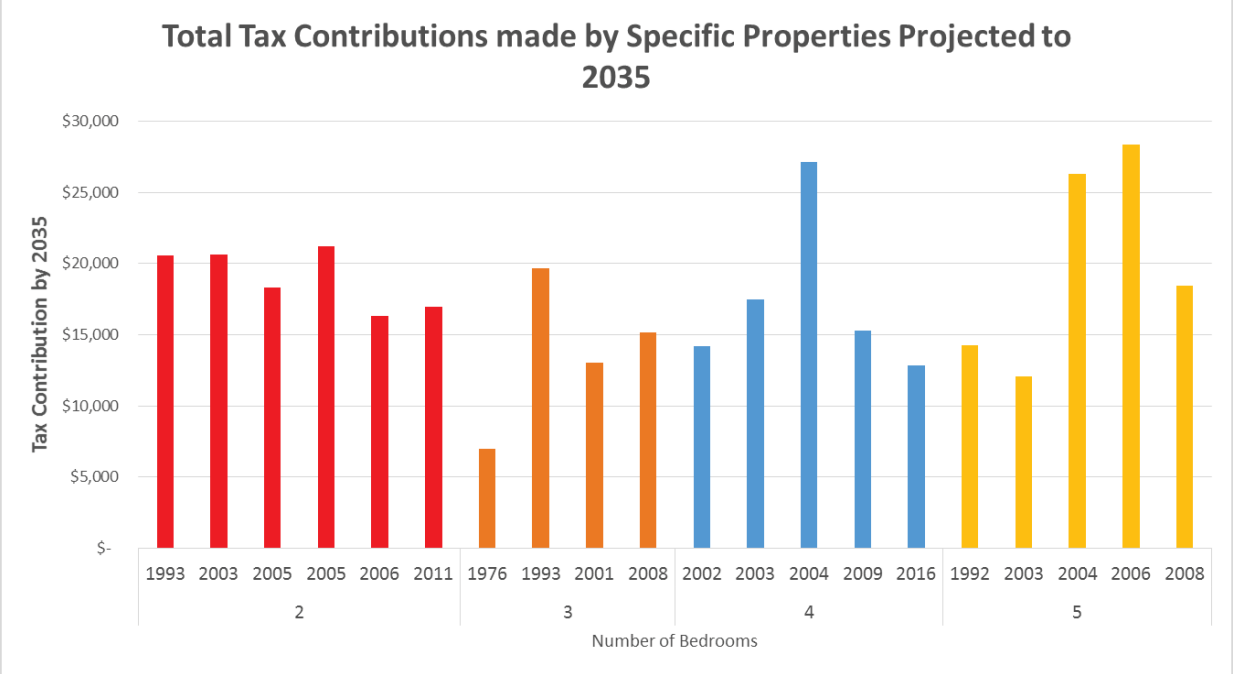


Figure 6
SGPWA Property Tax Rate Contributions by Specific Properties through 2035

Anticipated Future Development in the SGPWA Service Area

There are a number of projects which have been approved by the Cities of Calimesa, Beaumont, and Banning over the last few years. Table 2 presents a summary of the known residential projects in the area. There may be developments in other areas of the SGPWA, e.g., Cabazon and Mission Springs. Some of the projects in Table 2 are under construction; the total units shown are and estimate of those yet to be constructed.

Table 2
Ongoing and Planned Developments in SGPWA Service Area

Development Name	Total Units
City of Calimesa	
Mesa Verde	3,650
Summerwind Ranch	3,841
Subtotal Calimesa	7,491
City of Banning	
Rancho San Gorgonio	3,385
Butterfield	4,862
Diversified Pacific	98
St. Boniface	171
Subtotal Banning	8,516

City of Beaumont/BCVWD	
Tournament Hills	300 estimated
Sundance	1,000 estimated
Fairway Canyon	1,500 estimated
Heartland	922
Four Seasons	500 estimated
Kirkwood Ranch	403
Potrero Creek Estates	700
Noble Creek Meadows	648
Hidden Canyon	411
Sunny Cal Egg Ranch	560
Jack Rabbit Trail	2,000
The Preserve/Legacy Highlands	3,412
Subtotal Beaumont/BCVWD	12,356
Total	28,363

Funding Strategy for the Future

Figure 3 showed a shortfall between the projected revenues using the current tax rate ($0.1825/$100 AV) and the required annual payment to DWR for the original SWP, EBX I and II, not to mention the CWF and Sites Reservoir. Just to cover the cost for the SWP and EBX I and II, a little of $24 million of revenue will be needed through year 2035. Current property tax revenues are about $16 million, leaving a shortfall of about $8 million. The funding requirement will peak about 2035 when Sites Reservoir Project comes on line. Projected tax revenues will increase so the annual shortfall will not change much. Refer to Table 1.

There are several options for SGPWA to cover this shortfall based on the funding options described above and shown in Figure 3 and Table 1:

- Increase the property tax rate during this period
- Withdraw money from reserves. SGPWA has a reported reserve of $36.8 million as of June 2016 projected to be $42.0 million by June 2017.
- Increase the water rate
- Issue a Revenue Bond
- Take out a “bridge loan”
- Some combination of all of these

Increasing the property tax rate may require about doubling the current rate to about $0.37/$100 AV. For a new house this would be about $650 more on property taxes. For comparison, from 1971 through 1977 the property tax rate was as high as $1.46/$100 AV.

Withdrawing this the much money on an annual basis for an extended period of time would not be recommended. But a portion could be taken from reserves with the plan to increase the property tax rate sufficient to cover the remaining portion.

The water rate could be increased. Assuming about 11,000 AF/yr is imported the water rate would need to be $455/AF more than it is now ($317). This surcharge would be a hardship on the current customers. It is possible a portion of the shortfall could be covered by the water rate since a large portion (CWF) is improving the reliability of the water supply Table A. Then when no longer needed, past year 2035, this "surcharge" could be eliminated.

A revenue bond is a possibility as it would extend the payment term.

A bridge loan is possible to cover a portion of the difference also, and might be an option if interest rates are not too high.

The funding strategy could be a combination of all of these.

Whatever funding strategy, or combination, is chosen, it must be flexible. Changes in the development rate, housing prices, and housing turnover will have a major impact on the revenue generated from property tax. Another consideration, and a very important one, is the impact of overall water conservation and the new, low water using "water smart" homes will have on the water demand. SGPWA must take this in small steps, evaluating the strategy on a regular basis – perhaps every 2 to 3 years at most.

Funding for Other Sources of Water

Short term contracts e.g. AVEK-Nickel Water, one-time purchases, e.g. South Mesa Water Company, multiple year purchases, SBVMWD and Yuba Accord water would likely need to be funded from sources other than property tax for debt service. Possible alternatives include:

- Funding through water rates
- Funding through temporary surcharges or water rates
- Use of SGPWA's Share of Riverside County's 1% property tax which with shared with other agencies
- A combination of the above methods

Water Supply Requirements for SGPWA till 2040

White Paper No. 1 identified the SGPWA imported water demands to the year 2050 as about 28,000 AFY. This is an extremely conservative projection and does not take into account:

- Recycled water use in the service area by BCVWD and perhaps the City of Banning
- Reduction in demand due to the new landscape ordinance and probable tightening of even the new landscape irrigation regulations over time
- Construction of more water-smart homes which are quite effective in reducing water demand inside and outside the home. BCVWD has observed a noticeable reduction in demand in these homes which has shown the demand dropping from about 0.64 AFY/home (historical) to about 0.5 AFY/home – a 22% reduction

- A water conservation ethic that has been promoted at the state and local levels
- Reduction in demand due to the cost of water

Attached hereafter in Appendix A are nine scenarios which represent a snapshot in time as to how SGPWA demands might be met between now and 2040 using recycled water, Yuba Accord, SBVMWD, and AVEK-Nickel water until the CWF is in place and Sites Reservoir project is fully operational. As can be seen by the attached information, the planning of future supplies is complex and has a significant number of variables that should be vetted by the regional water system managers and their respective Boards and Councils.

Description of Appendix A Scenarios are as follows

Scenario I (Pages A-1, A-2, and A-3) presents a "Best Case" supply scenario which includes the following conditions.

Scenario 1A The California Water Fix and maximum supplies from Sites Reservoir, no conservation, and no decrease to water storage requirements for future dwelling unit drought proofing by BCVWD.

Scenario 1B The California Water Fix and maximum supplies from Sites Reservoir, conservation, and no decrease to water storage requirements for future dwelling unit drought proofing by BCVWD.

Scenario 1C The California Water Fix and maximum supplies from Sites Reservoir, conservation, and decrease to water storage requirements for future dwelling unit drought proofing by BCVWD.

Scenario 2 (Pages A-4, A-5, and A-6) presents a "Worst Case" supply scenario which includes the following conditions.

Scenario 2A The California Water Fix and minimum supplies from Sites Reservoir, no conservation, and no decrease to water storage requirements for future dwelling unit drought proofing by BCVWD.

Scenario 2B The California Water Fix and minimum supplies from Sites Reservoir, conservation, and no decrease to water storage requirements for future dwelling unit drought proofing by BCVWD.

Scenario 2C The California Water Fix and minimum supplies from Sites Reservoir, conservation, and decrease to water storage requirements for future dwelling unit drought proofing by BCVWD.

Scenario 3 (Pages A-7, A-8, and A-9) presents a “Worst Case” supply scenario with supplemental water supplies which includes the following conditions.

Scenario 3A The California Water Fix and minimum supplies from Sites Reservoir, Supplemental Water Supplies including long term leases, no conservation, and no decrease to water storage requirements for future dwelling unit drought proofing by BCVWD.

Scenario 3B The California Water Fix and minimum supplies from Sites Reservoir, Supplemental Water Supplies including long term leases, conservation, and no decrease to water storage requirements for future dwelling unit drought proofing by BCVWD.

Scenario 3C The California Water Fix and minimum supplies from Sites Reservoir, Supplemental Water Supplies including long term leases, conservation, and decrease to water storage requirements for future dwelling unit drought proofing by BCVWD.

Appendix A

San Gorgonio Pass Water Agency

Analysis of Supply and Demand Scenarios

Scenarios 1, 2, and 3

Appendix A
BEAUMONT-CHERRY VALLEY WATER DISTRICT

Scenario:	1A	BASELINE - CURRENTLY PLANNED SUPPLY

Water Supplies

Variable Table A Water Supply	Start Year Annual Amount		Ultimate Annual Amount		Start Year Table A Reliablity	Ultimate Table A Reliablity	Start Year	End of Degradation Year	
SGPWA SWP Table A @ 60 %	10,380	AFY	8,304	AFY	60%	48%	2018	2033	Could Degrade to 48% (8,304)

Non-Variable Water Supplies	Annual Amount		Start Year	End Year	Table A Recovered Reliablity	
California WaterFix	2,422	AFY	2033	2040	14%	(Could Improve Reliability 14% to 17.62%)
YUBA Water AFY	300	AFY	2017	2040		
Nickle Water AFY	1,700	AFY	2017	2037		
SBVMWD AFY	2,000	AFY	2020	2040		
Subtotal	16,802	AFY				

Potential Water Supplies	Annual Amount		Start Year	End Year
Long Term Lease 1	500	AFY	2018	2035
City of Ventura Lease	-	AFY	2020	2030
Table A Increment	-	AFY	2035	2040
Subtotal	500	AFY		

Total Supply and Lease	17,302	AFY

			Trans Delta Loss	
Long Term Water Supplies			No Loss	Loss @ 25%
Sites Reservoir Yield (after 2035)	14,000	AFY	14,000	10,500

SGPWA UWMP TABLE 2-4

Agency Name	2018 (1)	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands	11,150	13,169	16,544	20,393	24,414	27,696

(1) Ordered Water for 2018

Adjustment Factors for Landscape and Conservation by Agency (AFY per EDU)	Original Value	Adjusted Value	Adjustment Factor	Old Homes Conservation Factor
BCVWD	0.6459	0.6459	1.0000	0%
City of Banning	1.0000	1.0000	1.0000	0%
YVWD	1.0000	1.0000	1.0000	0%
Other	1.0000	1.0000	1.0000	0%

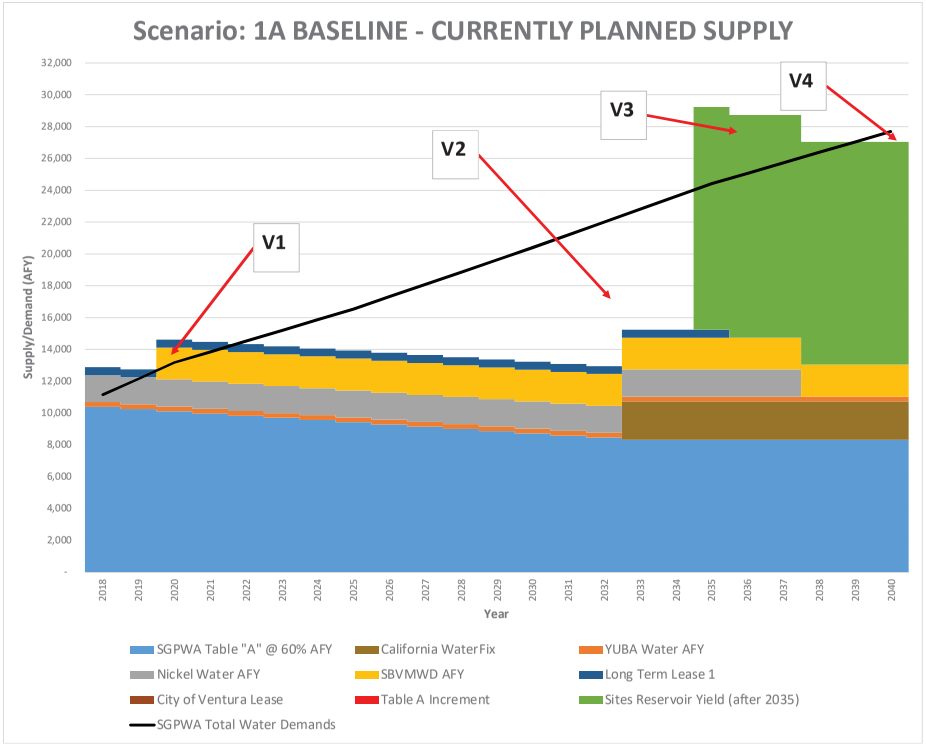
SGPWA UWMP TABLE 2- ADJUSTED FOR CONSERVATION

Agency Name	2018	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands Adj. for Conservation	11,150	13,169	16,544	20,393	24,414	27,696

UWMP WATER TO STORAGE COMPONENT (BCVWD TABLE 6-26, pg 6-62)

Agency Name	2018 (1)	2020	2025	2030	2035	2040	Adjustment Factor
BCVWD	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	0
City of Banning	-	-	-	-	-	-	0
YVWD	-	-	-	-	-	-	0
Other	-	-	-	-	-	-	0
Water Demand Adjustment for Storage Component	-	-	-	-	-	-	

	2018	2020	2025	2030	2035	2040
Total Water Demand (Adjusted for Conservation and Storage Component	11,150	13,169	16,544	20,393	24,414	27,696



Surplus/Deficit Water Volumes	
V1 =	4,367
V2 =	65,577
V3 =	12,110
V4 =	684
V1 - V2 =	(61,210)
V1 - V2 + V3 - V4 =	(49,784)

In this scenario, the imported water supplies do not provide enough surplus water to make it through the deficit years until the Sites Project begins providing water. When the Sites Project comes online some water is regained but the supply still has major deficits that would need to be overcome with other or improved water supply sources.

Scenario:	1B	BASELINE - CURRENTLY PLANNED SUPPLY W/ CONSERVATION

Water Supplies

Variable Table A Water Supply	Start Year Annual Amount	Ultimate Annual Amount	Start Year Table A Reliablity	Ultimate Table A Reliablity	Start Year	End of Degradation Year	
SGPWA SWP Table A @ 60 %	10,380 AFY	8,304 AFY	60%	48%	2018	2033	Could Degrade to 48% (8,304)

Non-Variable Water Supplies	Annual Amount	Start Year	End Year	Table A Recovered Reliablity	
California WaterFix	2,422 AFY	2033	2040	14%	(Could Improve Reliability 14% to 17.62%)
YUBA Water AFY	300 AFY	2017	2040		
Nickle Water AFY	1,700 AFY	2017	2037		
SBVMWD AFY	2,000 AFY	2020	2040		
Subtotal	16,802 AFY				

Potential Water Supplies	Annual Amount	Start Year	End Year
Long Term Lease 1	500 AFY	2018	2035
City of Ventura Lease	- AFY	2020	2030
Table A Increment	- AFY	2035	2040
Subtotal	500 AFY		

Total Supply and Lease	17,302 AFY

		Trans Delta Loss	
		No Loss	Loss @ 25%
Long Term Water Supplies			
Sites Reservoir Yield (after 2035)	14,000 AFY	14,000	10,500

SGPWA UWMP TABLE 2-4

Agency Name	2018 (1)	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands	11,150	13,169	16,544	20,393	24,414	27,696

(1) Ordered Water for 2018

Adjustment Factors for Landscape and Conservation by Agency (AFY per EDU)	Original Value	Adjusted Value	Adjustment Factor	Old Homes Conservation Factor
BCVWD	0.6459	0.5460	0.8453	5%
City of Banning	1.0000	1.0000	1.0000	5%
YVWD	1.0000	1.0000	1.0000	5%
Other	1.0000	1.0000	1.0000	5%

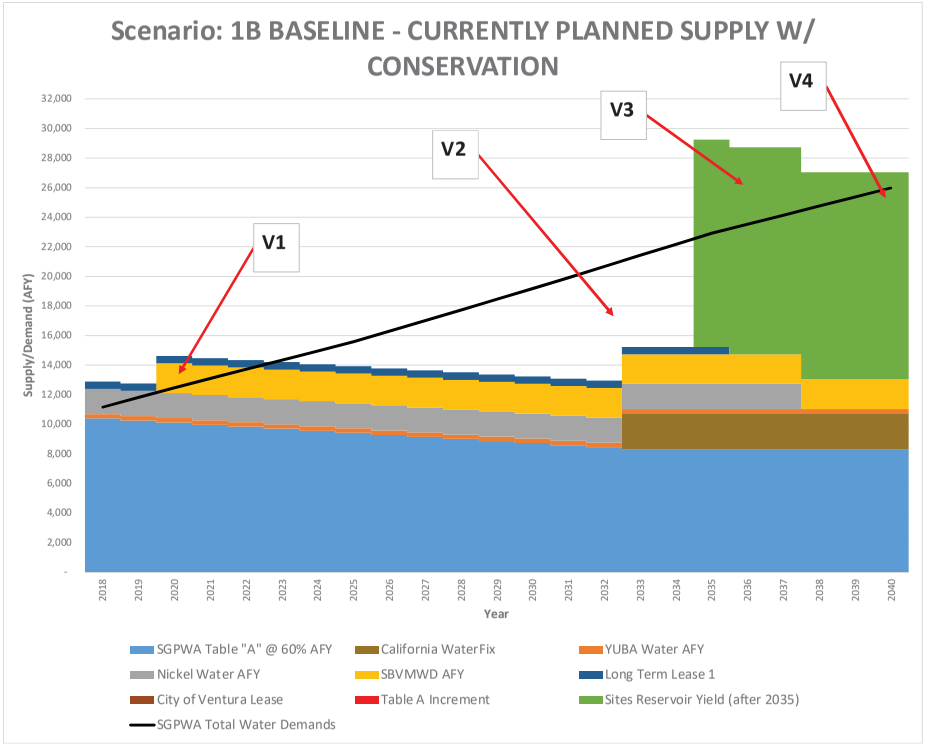
SGPWA UWMP TABLE 2- ADJUSTED FOR CONSERVATION

Agency Name	2018	2020	2025	2030	2035	2040
BCVWD	9,800	10,206	11,572	12,934	14,455	15,679
City of Banning	500	-	476	1,319	2,212	2,693
YVWD	850	1,767	1,925	2,120	2,349	2,602
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands Adj. for Conservation	11,150	12,473	15,573	19,172	22,915	25,973

UWMP WATER TO STORAGE COMPONENT (BCVWD TABLE 6-26, pg 6-62)

Agency Name	2018 (1)	2020	2025	2030	2035	2040	Adjustment Factor
BCVWD	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	0
City of Banning	-	-	-	-	-	-	0
YVWD	-	-	-	-	-	-	0
Other	-	-	-	-	-	-	0
Water Demand Adjustment for Storage Component	-	-	-	-	-	-	

	2018	2020	2025	2030	2035	2040
Total Water Demand (Adjusted for Conservation and Storage Component	11,150	12,473	15,573	19,172	22,915	25,973



Surplus/Deficit Water Volumes	
V1 =	6,777
V2 =	51,592
V3 =	21,091
V4 =	-
V1 - V2 =	(44,815)
V1 - V2 + V3 - V4 =	(23,724)

In this scenario, with conservation, the imported water supplies accumulate enough surplus water to make it through the deficit years until the Sites Project begins providing water. When the Sites Project comes online, more water is added to the surplus.

Appendix A
BEAUMONT-CHERRY VALLEY WATER DISTRICT

Scenario:	1C	BASELINE - CURRENTLY PLANNED SUPPLY W/ CONSERVATION NO STORAGE

Water Supplies

Variable Table A Water Supply	Start Year Annual Amount		Ultimate Annual Amount		Start Year Table A Reliablity	Ultimate Table A Reliablity	Start Year	End of Degradation Year	
SGPWA SWP Table A @ 60 %	10,380	AFY	8,304	AFY	60%	48%	2018	2033	Could Degrade to 48% (8,304)

Non-Variable Water Supplies	Annual Amount		Start Year	End Year	Table A Recovered Reliablity	
California WaterFix	2,422	AFY	2033	2040	14%	(Could Improve Reliability 14% to 17.62%)
YUBA Water AFY	300	AFY	2017	2040		
Nickle Water AFY	1,700	AFY	2017	2037		
SBVMWD AFY	2,000	AFY	2020	2040		
Subtotal	16,802	AFY				

Potential Water Supplies	Annual Amount		Start Year	End Year
Long Term Lease 1	500	AFY	2018	2035
City of Ventura Lease	-	AFY	2020	2030
Table A Increment	-	AFY	2035	2040
Subtotal	500	AFY		

Total Supply and Lease	17,302	AFY

			Trans Delta Loss	
			No Loss	Loss @ 25%
Long Term Water Supplies				
Sites Reservoir Yield (after 2035)	14,000	AFY	14,000	10,500

SGPWA UWMP TABLE 2-4

Agency Name	2018 (1)	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands	11,150	13,169	16,544	20,393	24,414	27,696

(1) Ordered Water for 2018

Adjustment Factors for Landscape and Conservation by Agency (AFY per EDU)	Original Value	Adjusted Value	Adjustment Factor	Old Homes Conservation Factor
BCVWD	0.6459	0.5000	0.7741	5%
City of Banning	1.0000	1.0000	1.0000	5%
YVWD	1.0000	1.0000	1.0000	5%
Other	1.0000	1.0000	1.0000	5%

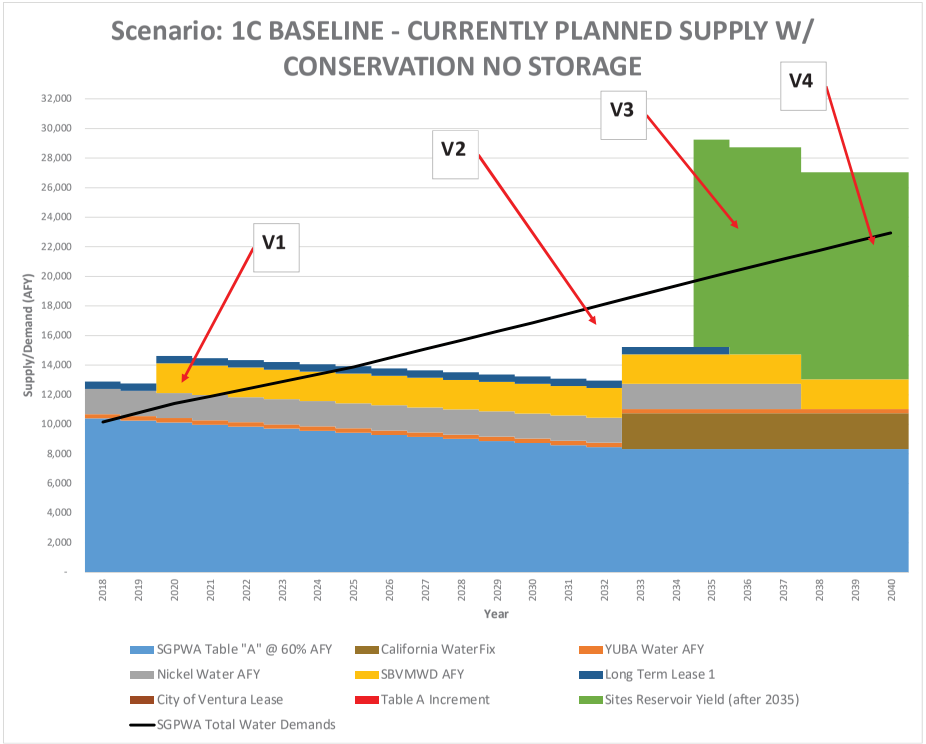
SGPWA UWMP TABLE 2- ADJUSTED FOR CONSERVATION

Agency Name	2018	2020	2025	2030	2035	2040
BCVWD	9,800	10,131	11,382	12,629	14,021	15,142
City of Banning	500	-	476	1,319	2,212	2,693
YVWD	850	1,767	1,925	2,120	2,349	2,602
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands Adj. for Conservation	11,150	12,397	15,382	18,867	22,482	25,437

UWMP WATER TO STORAGE COMPONENT (BCVWD TABLE 6-26, pg 6-62)

Agency Name	2018 (1)	2020	2025	2030	2035	2040	Adjustment Factor
BCVWD	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	1
City of Banning	-	-	-	-	-	-	1
YVWD	-	-	-	-	-	-	1
Other	-	-	-	-	-	-	1
Water Demand Adjustment for Storage Component	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	

	2018	2020	2025	2030	2035	2040
Total Water Demand (Adjusted for Conservation and Storage Component	10,150	11,397	13,882	16,867	19,982	22,937



Surplus/Deficit Water Volumes	
V1 =	14,404
V2 =	28,108
V3 =	39,001
V4 =	-
V1 - V2 =	(13,704)
V1 - V2 + V3 - V4 =	25,297

In this scenario, with conservation and no storage, the imported water supplies accumulate an excessive amount of surplus water to make it through the deficit years until the Sites Project begins providing water. When the Sites Project comes online, more water is added to the surplus.

Scenario:	2A	BASELINE - MINIMUM PLANNED SUPPLY

Water Supplies

Variable Table A Water Supply	Start Year Annual Amount		Ultimate Annual Amount		Start Year Table A Reliablity	Ultimate Table A Reliablity	Start Year	End of Degradation Year	
SGPWA SWP Table A @ 60 %	10,380	AFY	8,304	AFY	60%	48%	2018	2033	Could Degrade to 48% (8,304)

Non-Variable Water Supplies	Annual Amount		Start Year	End Year	Table A Recovered Reliablity	
California WaterFix	2,422	AFY	2033	2040	14%	(Could Improve Reliability 14% to 17.62%)
YUBA Water AFY	300	AFY	2017	2040		
Nickle Water AFY	1,700	AFY	2017	2037		
SBVMWD AFY	2,000	AFY	2020	2040		
Subtotal	16,802	AFY				

Potential Water Supplies	Annual Amount		Start Year	End Year
Long Term Lease 1	500	AFY	2018	2035
City of Ventura Lease	-	AFY	2020	2030
Table A Increment	-	AFY	2035	2040
Subtotal	500	AFY		

Total Supply and Lease	17,302	AFY

			Trans Delta Loss	
			No Loss	Loss @ 25%
Long Term Water Supplies				
Sites Reservoir Yield (after 2035)	7,338	AFY	9,784	7,338

SGPWA UWMP TABLE 2-4

Agency Name	2018 (1)	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands	11,150	13,169	16,544	20,393	24,414	27,696

(1) Ordered Water for 2018

Adjustment Factors for Landscape and Conservation by Agency (AFY per EDU)	Original Value	Adjusted Value	Adjustment Factor	Old Homes Conservation Factor
BCVWD	0.6459	0.6459	1.0000	0%
City of Banning	1.0000	1.0000	1.0000	0%
YVWD	1.0000	1.0000	1.0000	0%
Other	1.0000	1.0000	1.0000	0%

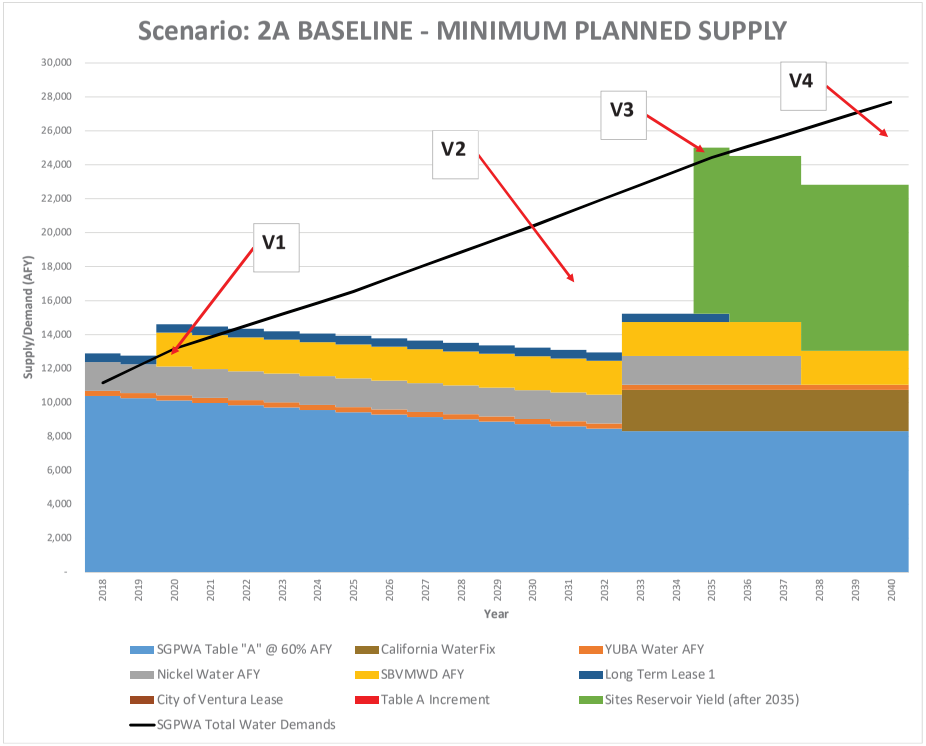
SGPWA UWMP TABLE 2- ADJUSTED FOR CONSERVATION

Agency Name	2018	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands Adj. for Conservation	11,150	13,169	16,544	20,393	24,414	27,696

UWMP WATER TO STORAGE COMPONENT (BCVWD TABLE 6-26, pg 6-62)

Agency Name	2018 (1)	2020	2025	2030	2035	2040	Adjustment Factor
BCVWD	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	0
City of Banning	-	-	-	-	-	-	0
YVWD	-	-	-	-	-	-	0
Other	-	-	-	-	-	-	0
Water Demand Adjustment for Storage Component	-	-	-	-	-	-	

	2018	2020	2025	2030	2035	2040
Total Water Demand (Adjusted for Conservation and Storage Component	11,150	13,169	16,544	20,393	24,414	27,696



Surplus/Deficit Water Volumes	
V1 =	4,367
V2 =	65,577
V3 =	596
V4 =	14,466
V1 - V2 =	(61,210)
V1 - V2 + V3 - V4 =	(75,080)

In this scenario recieving the minimum of the primary planned supplies the imported water supplies do not provide enough surplus water to make it through the deficit years until the Sites Project begins providing water. When the Sites Project comes online some water is regained initially but the supply still has major deficits that would need to be overcome with other or improved water supply sources.

Scenario:	2B	BASELINE - MINIMUM PLANNED SUPPLY W/ CONSERVATION

Water Supplies

Variable Table A Water Supply	Start Year Annual Amount	Ultimate Annual Amount	Start Year Table A Reliablity	Ultimate Table A Reliablity	Start Year	End of Degradation Year	
SGPWA SWP Table A @ 60 %	10,380 AFY	8,304 AFY	60%	48%	2018	2033	Could Degrade to 48% (8,304)

Non-Variable Water Supplies	Annual Amount	Start Year	End Year	Table A Recovered Reliablity	
California WaterFix	2,422 AFY	2033	2040	14%	(Could Improve Reliability 14% to 17.62%)
YUBA Water AFY	300 AFY	2017	2040		
Nickle Water AFY	1,700 AFY	2017	2037		
SBVMWD AFY	2,000 AFY	2020	2040		
Subtotal	16,802 AFY				

Potential Water Supplies	Annual Amount	Start Year	End Year
Long Term Lease 1	500 AFY	2018	2035
City of Ventura Lease	- AFY	2020	2030
Table A Increment	- AFY	2035	2040
Subtotal	500 AFY		

Total Supply and Lease	17,302 AFY

		Trans Delta Loss	
		No Loss	Loss @ 25%
Long Term Water Supplies			
Sites Reservoir Yield (after 2035)	7,338 AFY	9,784	7,338

SGPWA UWMP TABLE 2-4

Agency Name	2018 (1)	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands	11,150	13,169	16,544	20,393	24,414	27,696

(1) Ordered Water for 2018

Adjustment Factors for Landscape and Conservation by Agency (AFY per EDU)	Original Value	Adjusted Value	Adjustment Factor	Old Homes Conservation Factor
BCVWD	0.6459	0.5460	0.8453	5%
City of Banning	1.0000	1.0000	1.0000	5%
YVWD	1.0000	1.0000	1.0000	5%
Other	1.0000	1.0000	1.0000	5%

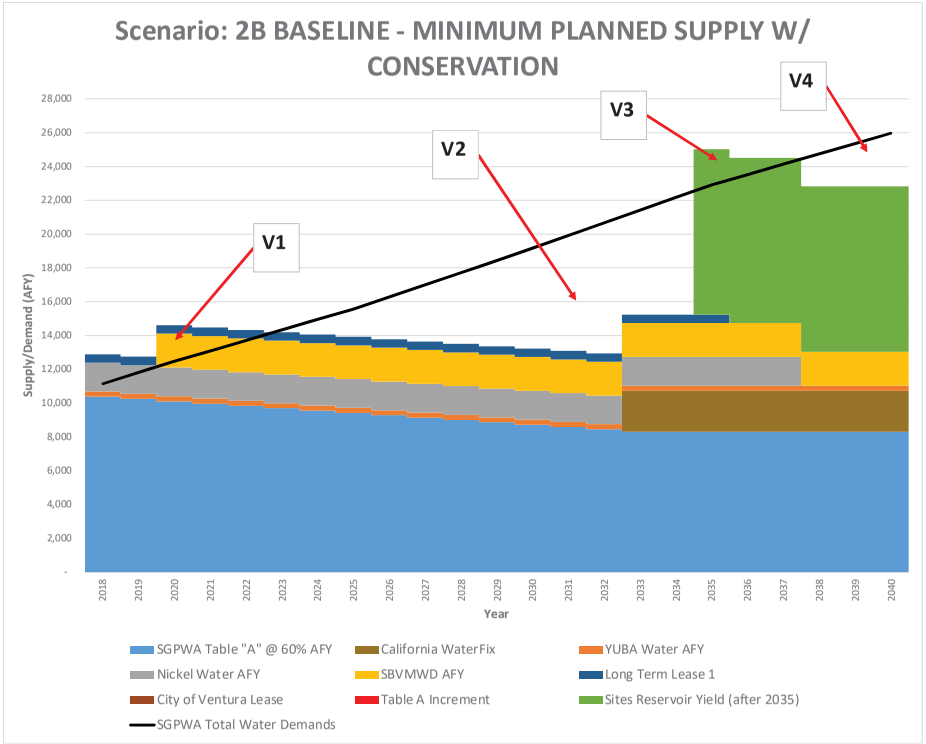
SGPWA UWMP TABLE 2- ADJUSTED FOR CONSERVATION

Agency Name	2018	2020	2025	2030	2035	2040
BCVWD	9,800	10,206	11,572	12,934	14,455	15,679
City of Banning	500	-	476	1,319	2,212	2,693
YVWD	850	1,767	1,925	2,120	2,349	2,602
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands Adj. for Conservation	11,150	12,473	15,573	19,172	22,915	25,973

UWMP WATER TO STORAGE COMPONENT (BCVWD TABLE 6-26, pg 6-62)

Agency Name	2018 (1)	2020	2025	2030	2035	2040	Adjustment Factor
BCVWD	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	0
City of Banning	-	-	-	-	-	-	0
YVWD	-	-	-	-	-	-	0
Other	-	-	-	-	-	-	0
Water Demand Adjustment for Storage Component	-	-	-	-	-	-	

	2018	2020	2025	2030	2035	2040
Total Water Demand (Adjusted for Conservation and Storage Component	11,150	12,473	15,573	19,172	22,915	25,973



Surplus/Deficit Water Volumes	
V1 =	6,777
V2 =	51,592
V3 =	3,450
V4 =	7,655
V1 - V2 =	(44,815)
V1 - V2 + V3 - V4 =	(49,020)

In this scenario recieving the minimum of the primary planned supplies, with conservation, the imported water supplies do not provide enough surplus water to make it through the deficit years until the Sites Project begins providing water. When the Sites Project comes online some water is regained initially but the supply still has major deficits that would need to be overcome with other or improved water supply sources.

Scenario:	2C	BASELINE - MINIMUM PLANNED SUPPLY W/ CONSERVATION NO STORAGE

Water Supplies

Variable Table A Water Supply	Start Year Annual Amount		Ultimate Annual Amount		Start Year Table A Reliablity	Ultimate Table A Reliablity	Start Year	End of Degradation Year	
SGPWA SWP Table A @ 60 %	10,380	AFY	8,304	AFY	60%	48%	2018	2033	Could Degrade to 48% (8,304)

Non-Variable Water Supplies	Annual Amount		Start Year	End Year	Table A Recovered Reliablity	
California WaterFix	2,422	AFY	2033	2040	14%	(Could Improve Reliability 14% to 17.62%)
YUBA Water AFY	300	AFY	2017	2040		
Nickle Water AFY	1,700	AFY	2017	2037		
SBVMWD AFY	2,000	AFY	2020	2040		
Subtotal	16,802	AFY				

Potential Water Supplies	Annual Amount		Start Year	End Year
Long Term Lease 1	500	AFY	2018	2035
City of Ventura Lease	-	AFY	2020	2030
Table A Increment	-	AFY	2035	2040
Subtotal	500	AFY		

Total Supply and Lease	17,302	AFY

		Trans Delta Loss	
		No Loss	Loss @ 25%
Long Term Water Supplies			
Sites Reservoir Yield (after 2035)	7,338	AFY	9,784	7,338

SGPWA UWMP TABLE 2-4						
Agency Name	2018 (1)	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands	11,150	13,169	16,544	20,393	24,414	27,696

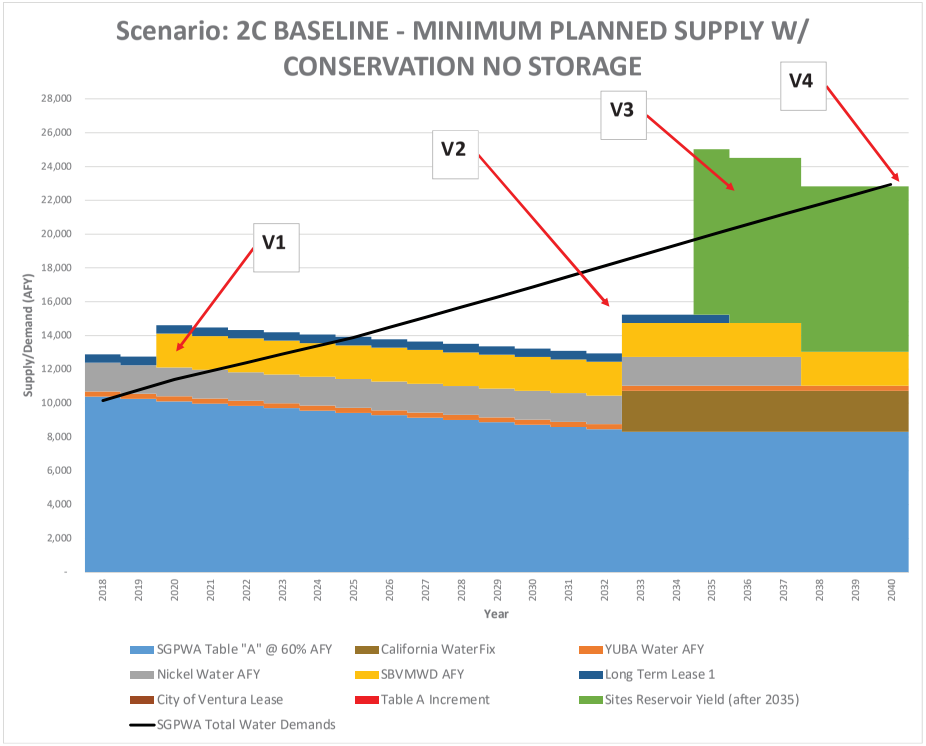
(1) Ordered Water for 2018

Adjustment Factors for Landscape and Conservation by Agency (AFY per EDU)	Original Value	Adjusted Value	Adjustment Factor	Old Homes Conservation Factor
BCVWD	0.6459	0.5000	0.7741	5%
City of Banning	1.0000	1.0000	1.0000	5%
YVWD	1.0000	1.0000	1.0000	5%
Other	1.0000	1.0000	1.0000	5%

SGPWA UWMP TABLE 2- ADJUSTED FOR CONSERVATION						
Agency Name	2018	2020	2025	2030	2035	2040
BCVWD	9,800	10,131	11,382	12,629	14,021	15,142
City of Banning	500	-	476	1,319	2,212	2,693
YVWD	850	1,767	1,925	2,120	2,349	2,602
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands Adj. for Conservation	11,150	12,397	15,382	18,867	22,482	25,437

UWMP WATER TO STORAGE COMPONENT (BCVWD TABLE 6-26, pg 6-62)							Adjustment Factor
Agency Name	2018 (1)	2020	2025	2030	2035	2040	
BCVWD	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	1
City of Banning	-	-	-	-	-	-	1
YVWD	-	-	-	-	-	-	1
Other	-	-	-	-	-	-	1
Water Demand Adjustment for Storage Component	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	

	2018	2020	2025	2030	2035	2040
Total Water Demand (Adjusted for Conservation and Storage Component	10,150	11,397	13,882	16,867	19,982	22,937



Surplus/Deficit Water Volumes	
V1 =	14,404
V2 =	28,108
V3 =	13,831
V4 =	127
V1 - V2 =	(13,704)
V1 - V2 + V3 - V4 =	1

In this scenario recieving the minimum of the primary planned supplies, with conservation and no storage, the imported water supplies do not provide enough surplus water to make it through the deficit years until the Sites Project begins providing water. When the Sites Project comes online some water is regained initially but the supply still has major deficits that would need to be overcome with other or improved water supply sources.

Scenario:	3A	BASELINE - MINIMUM PLANNED SUPPLY W/ SUPPLEMENTARY SUPPLIES

Water Supplies

Variable Table A Water Supply	Start Year Annual Amount	Ultimate Annual Amount	Start Year Table A Reliablity	Ultimate Table A Reliablity	Start Year	End of Degradation Year	
SGPWA SWP Table A @ 60 %	10,380 AFY	8,304 AFY	60%	48%	2018	2033	Could Degrade to 48% (8,304)

Non-Variable Water Supplies	Annual Amount	Start Year	End Year	Table A Recovered Reliablity	
California WaterFix	2,422 AFY	2033	2040	14%	(Could Improve Reliability 14% to 17.62%)
YUBA Water AFY	300 AFY	2017	2040		
Nickle Water AFY	1,700 AFY	2017	2037		
SBVMWD AFY	2,000 AFY	2020	2040		
Subtotal	16,802 AFY				

Potential Water Supplies	Annual Amount	Start Year	End Year
Long Term Lease 1	500 AFY	2018	2035
City of Ventura Lease	6,500 AFY	2020	2030
Table A Increment	3,500 AFY	2035	2040
Subtotal	10,500 AFY		

Total Supply and Lease	27,302 AFY

		Trans Delta Loss	
Long Term Water Supplies		No Loss	Loss @ 25%
Sites Reservoir Yield (after 2035)	7,338 AFY	9,784	7,338

SGPWA UWMP TABLE 2-4

Agency Name	2018 (1)	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands	11,150	13,169	16,544	20,393	24,414	27,696

(1) Ordered Water for 2018

Adjustment Factors for Landscape and Conservation by Agency (AFY per EDU)	Original Value	Adjusted Value	Adjustment Factor	Old Homes Conservation Factor
BCVWD	0.6459	0.6459	1.0000	0%
City of Banning	1.0000	1.0000	1.0000	0%
YVWD	1.0000	1.0000	1.0000	0%
Other	1.0000	1.0000	1.0000	0%

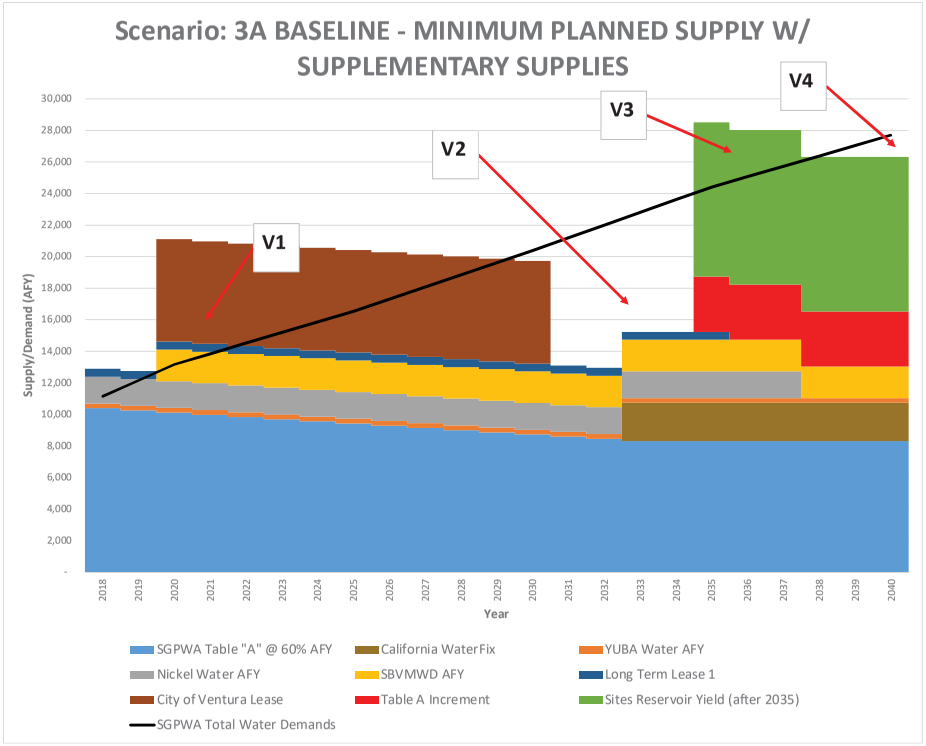
SGPWA UWMP TABLE 2- ADJUSTED FOR CONSERVATION

Agency Name	2018	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands Adj. for Conservation	11,150	13,169	16,544	20,393	24,414	27,696

UWMP WATER TO STORAGE COMPONENT (BCVWD TABLE 6-26, pg 6-62)

Agency Name	2018 (1)	2020	2025	2030	2035	2040	Adjustment Factor
BCVWD	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	0
City of Banning	-	-	-	-	-	-	0
YVWD	-	-	-	-	-	-	0
Other	-	-	-	-	-	-	0
Water Demand Adjustment for Storage Component	-	-	-	-	-	-	

	2018	2020	2025	2030	2035	2040
Total Water Demand (Adjusted for Conservation and Storage Component	11,150	13,169	16,544	20,393	24,414	27,696



Surplus/Deficit Water Volumes	
V1 =	44,103
V2 =	33,813
V3 =	9,319
V4 =	2,189
V1 - V2 =	10,291
V1 - V2 + V3 - V4 =	17,421

In this scenario, recieving the minimum of the primary planned supplies, with the securing of supplementary water supplies, the imported water supplies accumulate an surplus water which brings the region through the deficit years until the Sites Project begins providing water. When the Sites Project comes online, even more water is added to the surplus for a few years. However, in this scenario, the imported water goes back into deficit years around 2039, thus more supplies would have to be secured past that point.

Scenario:	3B	BASELINE - MINIMUM PLANNED SUPPLY W/ CONSERVATION W/ SUPPLEMENTARY SUPPLIES

Water Supplies

Variable Table A Water Supply	Start Year Annual Amount	Ultimate Annual Amount	Start Year Table A Reliablity	Ultimate Table A Reliablity	Start Year	End of Degradation Year	
SGPWA SWP Table A @ 60 %	10,380 AFY	8,304 AFY	60%	48%	2018	2033	Could Degrade to 48% (8,304)

Non-Variable Water Supplies	Annual Amount	Start Year	End Year	Table A Recovered Reliablity	
California WaterFix	2,422 AFY	2033	2040	14%	(Could Improve Reliability 14% to 17.62%)
YUBA Water AFY	300 AFY	2017	2040		
Nickle Water AFY	1,700 AFY	2017	2037		
SBVMWD AFY	2,000 AFY	2020	2040		
Subtotal	16,802 AFY				

Potential Water Supplies	Annual Amount	Start Year	End Year
Long Term Lease 1	500 AFY	2018	2035
City of Ventura Lease	6,500 AFY	2020	2030
Table A Increment	3,500 AFY	2035	2040
Subtotal	10,500 AFY		

Total Supply and Lease	27,302 AFY

		Trans Delta Loss	
Long Term Water Supplies		No Loss	Loss @ 25%
Sites Reservoir Yield (after 2035)	7,338 AFY	9,784	7,338

SGPWA UWMP TABLE 2-4

Agency Name	2018 (1)	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands	11,150	13,169	16,544	20,393	24,414	27,696

(1) Ordered Water for 2018

Adjustment Factors for Landscape and Conservation by Agency (AFY per EDU)	Original Value	Adjusted Value	Adjustment Factor	Old Homes Conservation Factor
BCVWD	0.6459	0.5460	0.8453	5%
City of Banning	1.0000	1.0000	1.0000	5%
YVWD	1.0000	1.0000	1.0000	5%
Other	1.0000	1.0000	1.0000	5%

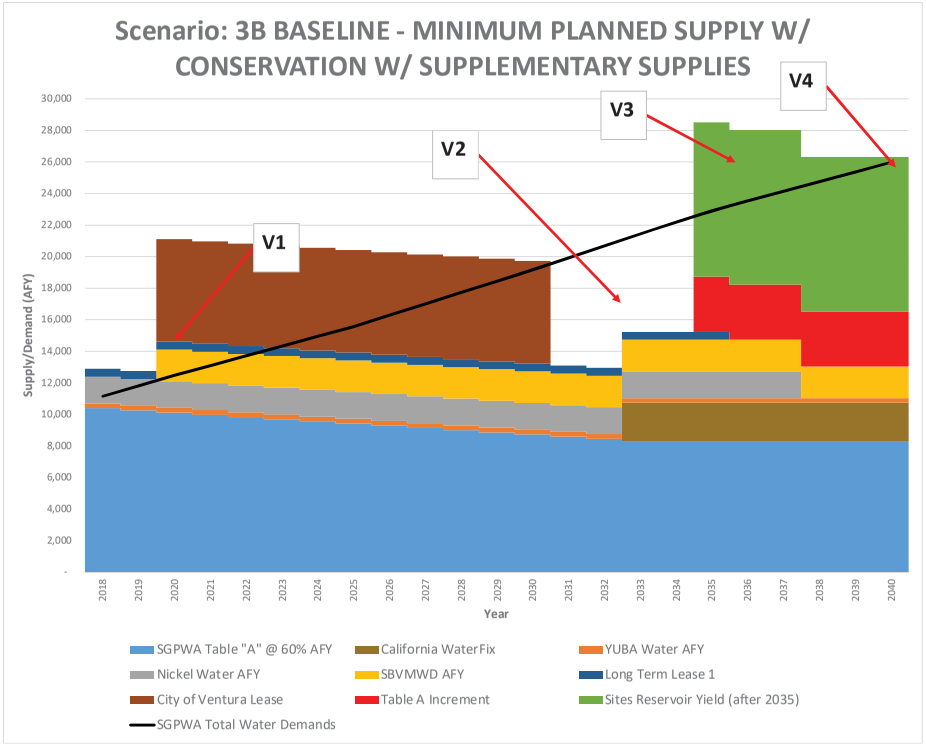
SGPWA UWMP TABLE 2- ADJUSTED FOR CONSERVATION

Agency Name	2018	2020	2025	2030	2035	2040
BCVWD	9,800	10,206	11,572	12,934	14,455	15,679
City of Banning	500	-	476	1,319	2,212	2,693
YVWD	850	1,767	1,925	2,120	2,349	2,602
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands Adj. for Conservation	11,150	12,473	15,573	19,172	22,915	25,973

UWMP WATER TO STORAGE COMPONENT (BCVWD TABLE 6-26, pg 6-62)

Agency Name	2018 (1)	2020	2025	2030	2035	2040	Adjustment Factor
BCVWD	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	0
City of Banning	-	-	-	-	-	-	0
YVWD	-	-	-	-	-	-	0
Other	-	-	-	-	-	-	0
Water Demand Adjustment for Storage Component	-	-	-	-	-	-	

	2018	2020	2025	2030	2035	2040
Total Water Demand (Adjusted for Conservation and Storage Component	11,150	12,473	15,573	19,172	22,915	25,973



Surplus/Deficit Water Volumes	
V1 =	54,386
V2 =	27,700
V3 =	16,795
V4 =	-
V1 - V2 =	26,685
V1 - V2 + V3 - V4 =	43,480

In this scenario, recieving the minimum of the primary planned supplies , with conservation and the securing of supplementary water supplies, the imported water supplies accumulate an large amount of surplus water which easily brings the region through the deficit years until the Sites Project begins providing water. When the Sites Project comes online, even more water is added to the surplus.

Scenario:	3C	BASELINE - MINIMUM PLANNED SUPPLY W/ CONSERVATION NO STORAGE W/ SUPPLEMENTARY SUPPLIES

Water Supplies

Variable Table A Water Supply	Start Year Annual Amount	Ultimate Annual Amount	Start Year Table A Reliablity	Ultimate Table A Reliablity	Start Year	End of Degradation Year	
SGPWA SWP Table A @ 60 %	10,380 AFY	8,304 AFY	60%	48%	2018	2033	Could Degrade to 48% (8,304)

Non-Variable Water Supplies	Annual Amount	Start Year	End Year	Table A Recovered Reliablity	
California WaterFix	2,422 AFY	2033	2040	14%	(Could Improve Reliability 14% to 17.62%)
YUBA Water AFY	300 AFY	2017	2040		
Nickle Water AFY	1,700 AFY	2017	2037		
SBVMWD AFY	2,000 AFY	2020	2040		
Subtotal	16,802 AFY				

Potential Water Supplies	Annual Amount	Start Year	End Year
Long Term Lease 1	500 AFY	2018	2035
City of Ventura Lease	6,500 AFY	2020	2030
Table A Increment	3,500 AFY	2035	2040
Subtotal	10,500 AFY		

Total Supply and Lease	27,302 AFY

		Trans Delta Loss	
Long Term Water Supplies		No Loss	Loss @ 25%
Sites Reservoir Yield (after 2035)	7,338 AFY	9,784	7,338

SGPWA UWMP TABLE 2-4

Agency Name	2018 (1)	2020	2025	2030	2035	2040
BCVWD	9,800	10,860	12,476	14,087	15,886	17,334
City of Banning	500	-	501	1,344	2,237	2,718
YVWD	850	1,809	1,967	2,162	2,391	2,644
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands	11,150	13,169	16,544	20,393	24,414	27,696

(1) Ordered Water for 2018

Adjustment Factors for Landscape and Conservation by Agency (AFY per EDU)	Original Value	Adjusted Value	Adjustment Factor	Old Homes Conservation Factor
BCVWD	0.6459	0.5000	0.7741	5%
City of Banning	1.0000	1.0000	1.0000	5%
YVWD	1.0000	1.0000	1.0000	5%
Other	1.0000	1.0000	1.0000	5%

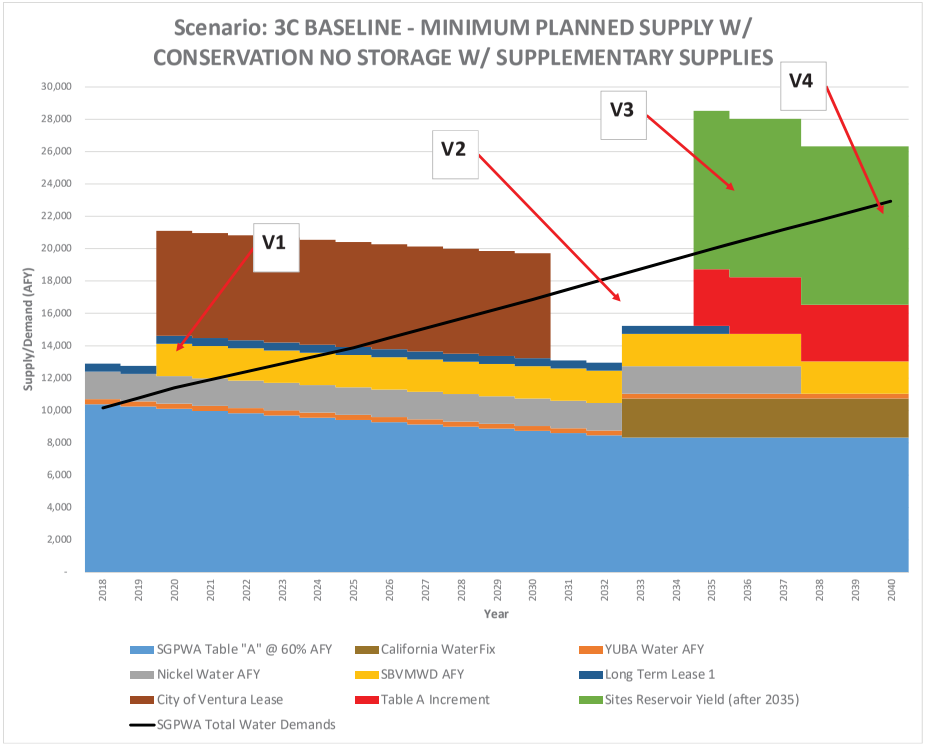
SGPWA UWMP TABLE 2- ADJUSTED FOR CONSERVATION

Agency Name	2018	2020	2025	2030	2035	2040
BCVWD	9,800	10,131	11,382	12,629	14,021	15,142
City of Banning	500	-	476	1,319	2,212	2,693
YVWD	850	1,767	1,925	2,120	2,349	2,602
Other	-	500	1,600	2,800	3,900	5,000
Total Water Demands Adj. for Conservation	11,150	12,397	15,382	18,867	22,482	25,437

UWMP WATER TO STORAGE COMPONENT (BCVWD TABLE 6-26, pg 6-62)

Agency Name	2018 (1)	2020	2025	2030	2035	2040	Adjustment Factor
BCVWD	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	1
City of Banning	-	-	-	-	-	-	1
YVWD	-	-	-	-	-	-	1
Other	-	-	-	-	-	-	1
Water Demand Adjustment for Storage Component	(1,000)	(1,000)	(1,500)	(2,000)	(2,500)	(2,500)	

	2018	2020	2025	2030	2035	2040
Total Water Demand (Adjusted for Conservation and Storage Component	10,150	11,397	13,882	16,867	19,982	22,937



Surplus/Deficit Water Volumes	
V1 =	75,019
V2 =	17,223
V3 =	34,705
V4 =	-
V1 - V2 =	57,796
V1 - V2 + V3 - V4 =	92,501

In this scenario, recieving the minimum of the primary planned supplies, with conservation, no storage, and the securing of supplementary water supplies, the imported water supplies accumulate an excessive amount of surplus water which easily brings the region through the deficit years until the Sites Project begins providing water. When the Sites Project comes online, even more water is added to the surplus.

Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223
951-845-9581 www.bcvwd.org

DATE: May 16, 2018

TO: Dan Jaggers, General Manager

FROM: Joe Reichenberger PE, Senior Engineer

SUBJECT: Updated San Gorgonio Pass Regional Water Supply Planning Spreadsheet – White Paper No. 6, Rev. 4

Since the development of a series of White Papers (1 through 5) by BCVWD discussing imported water supply needs in the San Gorgonio Pass Area, in late 2017 and early 2018, the San Gorgonio Pass Water Agency (SGPWA) has initiated a study to identify a potential rate structure to secure imported water supply for the entire Pass Area. The previous White Papers provided the SGPWA, interested area water suppliers, and other parties in the Pass Area with a preliminary overview of imported water supply needs out to approximately year 2050 or so. These White Papers were based on BCVWD's planning efforts[1] and SGPWA's 2015 Urban Water Management Plan (UWMP). BCVWD believes that the next step for BCVWD is to refine the White Papers by developing a series of spreadsheets that any water supplier in the SGPWA area could input their own development rates, on a year by year basis, considering their own water supply planning needs, Water Supply Assessments (WSAs), projected demands, banking requirements, and evaluate the impact of their strategies on their own Beaumont Basin Storage Accounts over time. BCVWD has developed a set of spreadsheets, which currently include YVWD, City of Banning, and BCVWD, with some input from the listed water retailer in the SGPWA service area. These spreadsheets are described in this White Paper No. 6.

The spreadsheets provide assistance to the SGPWA and the major water retailers as they develop strategies for the purchase and banking of imported water and the operation of their Beaumont Basin Storage Accounts over the next 20 years or so until the California Water Fix (CWF) and the Sites Reservoir Project (Sites Reservoir) become reality. There is currently some uncertainty with implementation of these two projects. But over the next few years, the status of these two essential projects will become more certain, and during that time the SGPWA's and local retailers' long-term water supply strategies can be developed either with or without CWF and Sites Reservoir.

[1] BCVWD's 2013 Potable Water Master Plan and 2015 Urban Water Management Plan and others

Significant Events Since the Original White Papers

Since the preparation of the earlier White Papers, the San Gorgonio Integrated Regional Water Management Plan (SGIRWMP), Draft March 2018, was prepared by Woodard Curran for a group of stakeholders in the eastern half of the SGPWA service area (i.e., generally east of Highland Springs Ave.). The stakeholders included the City of Banning, Banning Heights Mutual Water Company, Cabazon Water District, High Valleys Water District and the SGPWA. The SGIRWMP contained the region's most up-to-date imported water supply requirements to supplement the local water sources to meet the region's water demands.

The CWF took a major step forward, when, on April 10, 2018, the Board of Directors of the Metropolitan Water District of Southern California (Metropolitan), voted to fund not only their share of the CWF Phase 1, but also to provide the additional funding necessary to allow for the construction of the full CWF, including Phase 2 (the second tunnel). Metropolitan voted to fund Phase 2, the Central Valley Project (CVP) contractors' portion in anticipation that the CVP contractors would eventually need the water and purchase some or a portion of the Phase 2 water from Metropolitan. It is also possible that other SWP contractors may want to purchase a portion of the Phase 2 water. Although there is an agreement to fund the full project, and the risk of not constructing CWF is greatly reduced, however, there are always risks with the full implementation of any major water resource project.

On May 8, 2018, the Santa Clara Valley Water District (Santa Clara) voted to approve their share of the CWF, but also, possibly up to 200 cubic feet per second (cfs) of the 3,000 cfs capacity in the second tunnel held by Metropolitan for possible purchase by CVP contractors.

Following this, on May 14, 2018, Metropolitan, Santa Clara, and Alameda County Flood Control and Water Conservation District – Zone 7 (Zone 7 Water Agency) formed the Delta Conveyance Design and Construction Joint Powers Agency (DCA), the public agency that will be charged with the design and construction of the CWF. In parallel, the California Department of Water Resources (DWR) formed the Delta Conveyance Office (DCO) which will oversee the DCA. Metropolitan is the largest State Water Project contractor; Santa Clara and Zone 7 Water Agency are the two largest Bay Area State Water Project contractors. This joint agreement lends significant credibility to implementation of the CWF. Construction of the CWF is expected to start once DCA has secured all of the permits which is expected to be later in 2018.

On February 5, 2018, the Sites Reservoir Project Authority (Sites Project Authority) received a preliminary evaluation from the California Water Commission (CWC) on the public benefit of the Sites Project, i.e., wildlife refuge improvements, flood control, and recreation. The initial valuation provided a Public Benefit Ratio (PBR) of 0.40. Proposition 1 allows the State to invest in the public benefits associated with water storage projects. To receive Proposition 1 Bond funding a project must have a public benefit of greater than 50% of the project's funding request, (PBR = 0.50 minimum). The CWC staff requested more information before recommending a final public benefit score. On February 23, 2018, Sites Project Authority submitted an appeal of the PBR along with the requested information. On April 20, 2018, the

CWC issued a revised Public Benefit of $933 million for Sites Reservoir which resulted in a PBR of 0.67, greater than the minimum 0.50 required for Proposition 1 funding. The Commission will meet May 1-3, 2018 and issue a final determination. At the May meetings the Commission voted to increase the funding to $1 billion.

The public benefits are only one part of the overall scoring process, albeit a large part (one-third). There are three other components that need to be scored before a total score can be established which will become the basis for the CWC to make a conditional funding award. Final public benefit scores are not expected to be finalized until summer 2018. Since the final PBR has not been officially determined, there is still some risk that Proposition 1 funding may not be approved. However, there may be other water suppliers willing to increase their share of participation and possibly purchase more of the project's yield. This will become more certain over the next few years.

In the meantime, the water supply agencies in the Pass Area could implement a strategy to use their banked water plus bank additional water which may be available and use their Beaumont Basin Groundwater Storage Account as a "reservoir" to meet demands during the next ten to twenty years until the risks of CWF and Sites Reservoir implementation are reduced and future water supply uncertainty eliminated. In simple terms, the Pass Area water supply agencies can use their Groundwater Storage to "buy time" and minimize costs associated with additional water supply purchases until the uncertainties are reduced and long term supplies are better identified.

The Beaumont Basin Watermaster's 2017 Consolidated Annual Report and Engineering Report (Draft) in February 2018, (2017 Watermaster Report), updated the storage accounts of each water supplier and the overlier pumping rights allocated to each appropriator (BCVWD, City of Banning, YVWD and others). The report provides the agencies with a more current starting base from which to analyze their storage account balance over time, and take action to adjust the amount of water banked as uncertainties with the CWF and Sites Reservoir are reduced.

Updated San Gorgonio Pass Area Imported Water Supply Planning Spreadsheet

A new spreadsheet has been developed by BCVWD for imported water supply planning in the San Gorgonio Pass Area which updates the assumptions in spreadsheets developed previously to support BCVWD White Papers 1 through 5. The basic conclusions presented in White Papers 1 through 5 remain essentially the same, though the new, updated spreadsheet, and the conclusions developed from it, provides refinements and allow the water supply agencies to adjust anticipated housing startups, build-out years for large developments, and the amount of in-fill development and commercial/institution development; adjust unit water demands for new and existing housing, and account for any anticipated conservation for new and existing demands, among other items.

The spreadsheet allows for imported water banking, adjustments to imported water use throughout the study period, and provides a graph of the agency's annual groundwater storage account balance which is automatically updated with any input change. The purpose is to allow

the agencies to model, on a year by year basis, various imported water purchase and banking strategies *vis-à-vis* available imported water from SGPWA until such time as the CWF and Sites Reservoir are operational (2035 or so). Adjustments can be made to water demands using conservation factors on new and existing (older) housing units; water supply sources can include groundwater, recharged recycled water (indirect potable reuse), and captured storm water. Beaumont Basin Watermaster's redistribution of unused overlier rights and forbearance water are included in the model.

Separate spreadsheet models have been developed for:

- BCVWD
- City of Banning, Banning Heights Mutual Water Company, High Valleys Water District
- YVWD (Summerwind Ranch and Mesa Verde Area)
- All combined

SGPWA Available Imported Water

At the present time (2018) the "firm" supplies of imported water available to SGPWA, (or in the final stages of being finalized), between now (2018) and CWF/Sites Reservoir operation (2035) are:

- Table A
- Yuba Accord Water
- SBVMWD (agreement is in final stages of development)
- AVEK (Nickel Water)

CWF and Sites Reservoir are anticipated to be "on line" about 2035 or potentially a few years before. As discussed above, although these two projects have taken major steps forward, there is still some degree of uncertainty with the projects' implementation. This White Paper No. 6, and associated spreadsheet, focusses on the period between now and when CWF and Sites Reservoir come on line. The water supply agencies in the SGPWA that rely on imported water should develop importation and banking strategies taking into account their local water resource supply, their Beaumont Basin Storage Account and available imported water supply to meet demands until CWF and Sites become reality.

Table A

SGPWA's contract with the Department of Water Resources (DWR) states a Table A amount of 17,300 acre-ft/year (AFY). Table A is the maximum amount of water the SGPWA can convey through the State Water Project (SWP) facilities. This amount of water is not available consistently every year. In fall of each year, DWR provides an initial delivery allocation as a percent of Table A depending on amount of water in reservoir storage and anticipated hydrologic conditions. The allocation can be increased or decreased depending on the precipitation during the winter; a final allocation is usually issued in spring and sets the amount of water available, as a percentage of Table A, from the SWP. Since 1992, the allocation has

averaged about 65%. DWR has prepared a reliability study[2] which indicated the SWP can deliver only about 62% of Table A (10,726 AF to SGPWA) in any one year. Table B-5B in DWR's Bulletin 132-17 forecasts the amount of SPW delivered to SGPWA at 10,380 AFY. For consistency purposes in this White Paper No. 6 and the spreadsheet, 10,380 AFY is the amount which SGPWA can rely on at the present time.

In the discussions over the CWF, experts believe the current SWP reliability of about 62% will decrease over time to 48% or possible even lower due to anticipated additional regulatory constraints to protect threatened and endangered fish within the Delta. The length of time over which this decline in reliability will occur is not certain, but to be conservative in this White Paper No. 6, it is assumed that by 2035 the SWP reliability is assumed to decrease to 48%. Implementation of CWF will restore reliability and possibly even increase it above the current 62%.

With Metropolitan funding their share plus second phase of the CWF, i.e., the Central Valley Project share, as described above, and the possibility that other State Water Contractors may not need the increased supply from the CWF, should make additional water available for long term acquisition by others, including SGPWA. This would add to the imported water considered in this White Paper.

For San Gorgonio Pass Area planning purposes, the SWP delivery reliability is assumed to decline, (in the spreadsheets), at rate of 0.8% per year (linear) from 2018 to 2035. So by the year 2035, the reliability will be 48% and, from a conservative planning perspective, the SGPWA can expect only about 8,300 AFY.

Yuba Accord Water

Through the Yuba Dry Year Transfer Program, the official name for Yuba Accord Water, SGPWA can purchase additional supplemental water from Yuba County Water District under an agreement.[3] The amount of water available from the Yuba Accord varies year to year depending on hydrologic conditions. The SGPWA estimates that about 300 AFY, on the average, of Yuba Accord Water can be obtained.[4] For purposes of White Paper No. 6, it is assumed that Yuba Accord Water available to the SGPWA will be 300 AFY.

San Bernardino Valley Municipal Water District (SBVMWD Water)

The SGPWA is in the process of finalizing an agreement with SBVMWD to purchase up to 5,000 AFY of SBVMWD's Table A water in years that SBVMWD's Board of Directors declares a surplus. The availability of SBVMWD surplus water depends on hydrologic and groundwater

[2] DWR (2012). State Water Project Delivery Reliability Report 2011. State of California Dept. of Water Resources, June.
[3] DWR (2008). Agreement for the Supply and Conveyance of Water by the Department of Water Resources for the state of California to the Participating State Water Contractors under the Dry Year Water Purchase Program, March 31.
[4] Refer to Table 3-1 of SGPWA 2015 UWMP

conditions within SBVMWD's service area per SBVMWD Ordinance 79. SGPWA has the right of first refusal on the first 5,000 AFY of surplus water. Assuming SGPWA exercises the right, the agreement states that SBVMWD must first offer 50% of the available supply to one or both agencies that are in both SBVMWD and SGPWA, i.e., Yucaipa Valley WD and South Mesa Water Company. Fifty percent of the water and any additional water "left over," can be offered to other SGPWA retailers. The agreement is for a term of 15 years from the date of execution, but SGPWA intends to renegotiate the terms and extend to some point in the future. Execution of the agreement is anticipated soon.

SGPWA estimates, based on past hydrologic conditions this is likely to occur about two years out of every five, or 40% of the time. This is equivalent to 2,000 AFY in any one year. The term of this agreement will be at least 15 years from now or until about 2032.[5] For purposes of White Paper No. 6, the amount of water available from SBVMWD is 2,000 AFY.

AVEK-Nickel Water

In June 2017 SGPWA Board of Directors approved an agreement with the Antelope Valley-East Kern Water Agency (AVEK) for 1,700 AFY for 20 years (to 2037) with the right of first refusal to extend it for a second 20 years. The water rights on the Kern River originally belonged to the Nickel Family LLC that were sold to Kern County Water Agency (KCWA) and subsequently leased to other parties in various amounts. One portion (1,700 AFY) is under the control of AVEK, which offered the water to SGPWA. This water is not subject to the reliability issues of the SWP. Per the agreement SGPWA must take all of the 1,700 AF each year or pay for 1,700 AF if the SGPWA does not take all of it in any one year.

Other Sources of Imported Water

There are other sources of water available through the SWP which include:

- Turn-back Pool Water (Water that other State Water Contractors have ordered from DWR, but decided they did not need the water that particular year and sold it back to DWR. DWR in-turn offers it for purchase by other State Water Contractors.)
- Article 21 Water (Water that is offered for purchase by DWR resulting from reservoir releases needed to accommodate impending storm or snowmelt runoff. This water is available only on short notice and must be taken immediately. Article 21 Water is over and above a State Water Contractor's Table A amount.)
- Short-term or Long-term Water Transfers or Exchanges (Water that can be obtained through exchanges and transfers from other State Water Contractors who do not need all of their Table A water in a given year or years.)

There is considerable competition for the Turn-back Pool and Article 21 Water and its availability is uncertain from year to year. SGPWA should take advantage of this water whenever it is available, but for purposes of this White Paper, no water will be assumed

[5] SGPWA 2015 UWMP

available from any of these sources due to the unpredictability and consequently have not been included in the spreadsheets.

- *City of Ventura and Casitas Municipal Water District (Ventura Water)*

  The Ventura County Watershed Protection District is one of 29 State Water Contractors, but the agency lacks the infrastructure at present to be able to take its 20,000 AFY of Table A water. The County's Table A is allocated to three entities: City of Ventura (10,000 AFY), United Water Conservation District (5,000 AFY), and Casitas Municipal Water District (5,000 AFY). Up until last year, these agencies sold their Table A water back to the "Turn-back Pool" (discussed above). This year the City of Ventura (Ventura) and Casitas Municipal Water District (Casitas MWD) are looking to exchanging water with other SWP agencies, like SGPWA.

  The SGPWA staff has been in negotiations for a water exchange with Ventura and Casitas MWD for their Table A, totally 15,000 AFY. The SGPWA is looking at a short term, (one year), exchange now, but may want to extend it to a more long-term arrangement. A draft agreement was presented to the SGPWA Board on May 7, 2018.

  Under the terms of the agreement SGPWA would receive all of Ventura's and Casitas MWD's Table A water allocation for 2018, or 4,500 AFY considering the Department of Water Resources' current 30 percent allocation. SGPWA would pay all of the Transportation Capital, Transportation Minimum, Conservation Capital and Conservation minimum charges, estimated to be about $2,230,000. Each party to the agreement would be responsible for paying the variable costs for pumping the water to their respective service areas. Based on receiving 4,500 AF of water in 2018, the cost would be about $495/AF, plus variable pumping costs.

  The SGPWA is obligated to return 40 percent of the Table A water taken from Ventura and Casitas MWD within a 10-year period. This would be from SGPWA's future Table A.

  Until the agreement is executed, Ventura and Casitas MWD water will not be considered as a firm supply in this White Paper.

- *Sale of State Water Project Contractors Incremental CWF Reliability Benefits*

  All south of the Delta SWP Contractors pay their proportionate share of the CWF costs. With the implementation of the CWF, there will be an increase in SWP reliability.

  Several SWP Contractors have indicated that, even with the reduction in SWP reliability (as discussed above), they believe they will have sufficient water to meet their long term needs. Their incremental yield would be available for purchase or lease to other SWP Contractors like SGPWA. With these "side deals," the Seller receives 85% – 90% of the CWF cost from a Buyer and the Buyer receives the Seller's Table A incremental reliability. The Seller retains the right to purchase Article 21 Water, retains aqueduct conveyance capacity for non-project transfers, among other benefits.

For discussion purposes, using a transfer of 50,000 AFY of Table A, the SGPWA has estimated that anywhere between 100 AFY and 13,000 AFY may be available in any given year depending on the SWP allocation. Based on a long term average DWR allocation of 60%, 3,500 AFY should be available to SGPWA under such a program.

But, for purposes of this White Paper, this will not be considered at firm, long term supply at this point in time.

- *Purchase or Leasing of Metropolitan's CWF Phase 2 Water*

  As discussed above, Metropolitan is going to fund Phase 2 of the CWF and as such will have additional SPW for purchase or short or long term leases from other CVP or SWP Contractors. SGPWA may be able to take advantage of this water if needed. Again, for purposes of this White Paper, this will not be considered as firm supply at this time.

Preliminary Development of Water Supply Spreadsheet Models

City of Banning

The Regional Water Management Group of the San Gorgonio Integrated Regional Water Management Region prepared the San Gorgonio Integrated Regional Water Management Plan (SGIRWMP) March 2018 (DRAFT).[6] The SGIRWMP covered the SGPWA service area generally east of Highland Springs Avenue. The SGIRWMP integrated three separate studies:

- Water Supply Reliability Study
- San Gorgonio Region Recycled Water Study
- San Gorgonio Integrated Watershed and Groundwater Model Technical Memorandum

In addition, the City of Banning's 2015 Urban Water Management Plan (2015 UWMP) was analyzed. Table 5-4 extracted from the 2015 UWMP shows the quantity of groundwater available to the City of Banning. The quantity shown for the Beaumont Storage Unit is based on the reallocation of unused overlier pumping rights as part of the Adjudication. The City of Banning is entitled to 31.43% of the unused overlier pumping rights. The 2017 Annual Watermaster Report (Draft) indicates that Banning's reallocated unused overlier pumping amount for 2020 is 1,450 AFY, slightly more than the 1,266 AFY shown. It should be noted that this amount varies from year to year depending on hydrologic conditions and other factors and are evaluated by Watermaster yearly.

[6] With assistance from Woodard and Curran, consultants to the "Group"

TABLE 5-4 QUANTITIES OF AVAILABLE WATER SUPPLIES (AF/YR)					
Basin Name	**2020**	**2025**	**2030**	**2035**	**2040**
Beaumont Storage Unit[1]	1,266	1,145	1,029	925	925
Beaumont Storage Unit Recharge (SWP Water)[2]	2,718	2,718	2,718	2,718	2,718
Banning Storage Unit	1,130	1,130	1,130	1,130	1,130
Banning Bench Storage Unit	1,960	1,960	1,960	1,960	1,960
Cabazon Storage Unit	2,515	2,515	2,515	2,515	2,515
Banning Canyon Storage Unit	4,070	4,070	4,070	4,070	4,070
San Gorgonio Pass Subbasin Total	**13,659**	**13,538**	**13,422**	**13,318**	**13,318**

(1) Quantities of water available from the Beaumont Storage Unit are based on the estimated quantities of water that would be available to the City based on its appropriative rights after extractions by overlying producers, as set forth in Table 4-4 of *City of Banning 2010 Urban Water Management Plan*, dated

Source: City of Banning 2015 UWMP

The 2017 Watermaster Annual Report showed the total unused overlier pumping rights at 6,565 AF, declining to 4,614 AF in 2020. Watermaster developed estimates for years 2018 through 2022 and are included in the spreadsheet. As some of the overlying parties develop their properties, the overlier rights will be used by the water and recycled water supplying agency and will no longer be available for reallocation. As a result the total amount subject to reallocation will decrease over time. BCVWD made an estimate of the unused overlier pumping rights under a "developed" or "build-out" condition and determined the total unused overlier amount would be 1,800 AFY under full buildout. The City of Banning's share (31.43%) would be 560 AFY (rounded) at buildout. The spreadsheet allows for the gradual reduction of the unused overlier pumping rights over time.

The City of Banning, in their 2015 UWMP, estimated that 2,718 AFY of SPW would be purchased from SGPWA and recharged into the Beaumont Basin (banked and extracted when needed). Historically from 2008, the City has recharged an average of 1,294 AFY. The City has an 80,000 AF Groundwater Storage Account, which means they can store up to that amount. The amount of groundwater the City of Banning had in storage as of December 31, 2017 was 51,961 AF.

Banning's 2015 UWMP identified Butterfield Ranch and Rancho San Gorgonio as two major developments; the water demands for the City and these two projects are shown in Table 3-1 extracted from the 2015 UWMP.

TABLE 3-1 CURRENT AND PROJECTED WATER DELIVERIES (AF/YR)[1]								
Year	Water Use Sectors	Residential[3]	Commercial	Industrial	Public	Irrigation[4]	Proposed Specific Plan Developments[3,5]	Total
2015 [2]	# of Accounts	9,787	742	63	46	10	0	10,648
	Deliveries	3,395	1,705	92	53	726	0	5,971
2020	# of Accounts	10,257	778	66	48	10	1,423	12,582
	Deliveries	4,482	2,281	94	63	944	1,609	9,473
2025	# of Accounts	10,714	812	69	50	11	3,086	14,692
	Deliveries	4,683	2,382	99	66	986	1,983	10,198
2030	# of Accounts	11,171	847	72	52	11	5,995	18,101
	Deliveries	4,882	2,484	103	69	1,028	2,288	10,853
2035	# of Accounts	11,627	882	75	54	12	7,305	19,955
	Deliveries	5,082	2,586	107	71	1,070	2,649	11,565
2040	# of Accounts	12,116	919	78	57	12	8,285	21,467
	Deliveries	5,295	2,694	111	74	1,115	2,988	12,278

(1) Deliveries projected for 2020, 2025, 2030, 2035, and 2040 are based on projected population estimates based on SCAG data (refer to **Table 2-2** in **Chapter 2** herein) and a demand factor of 220 gpcd. Deliveries for proposed specific plan developments are based on projected water demands set forth in the documents, *Water Supply Assessment for Butterfield Specific Plan, Issued June 2011 with the Draft EIR and Modified December 2011 by Section 4.1 of the Final EIR* and *Water Supply Assessment Rancho San Gorgonio Specific Plan*, dated September 30, 2015.

(2) Numbers of accounts and deliveries for 2015 are based on City records for calendar year 2015.

(3) Includes accounts and deliveries for lower-income households (refer also to **Section 3.3** herein).

(4) Includes quantities of non-potable water from Well M7 provided for irrigation (approximately 200 AF/year).

(5) Projections of numbers of accounts and water deliveries are based on the water supply assessment documents cited in note (1) above.

Source: City of Banning 2015 UWMP

Butterfield Ranch was projected to start in 2015 and extend for 30 years to buildout in 2045 per the Project's Water Supply Assessment (WSA). As of 2018, the project has not yet started and will probably likely not start before 2020. There are 4,862 EDUs proposed, or an average of 160 EDUs per year over the 30 year build-out period. Rancho San Gorgonio is planned for 3,385 EDUs and initially projected to start in 2017 and be fully built out by 2034 (17 years) per the Project's WSA (about 200 EDUs per year average over the build-out period). This project has not yet started and probably will not start until 2020 or later.

The spreadsheet for Banning included two other projects:

- Diversified Pacific (98 EDUs)
- St. Boniface (171 EDUs)

Specific years when these projects are to begin were not stated, nor were the buildout years. The spreadsheet assume 2021 and 2023 respectively for starting and build out years of 5 and 10 years respectively. These can easily be changed in the spreadsheet.

Banning's existing demand from the 2015 UWMP was 6,709 AFY in 2015, including 738 AFY water system losses. (Actual delivery was 5,971 AFY as reported in Table 3-1 above.) From the SGIRWMP, the demand was indicated to be 6,879 AFY for the City of Banning, High Valleys Water District, and Banning Heights Mutual Water Company. For purposes of developing the spreadsheet, the 2017 demand was estimated to be 7,125 AFY to account for the growth between years 2015 and 2017. This can also be changed, if necessary.

YVWD (SGPWA Service Area Only)

To develop the spreadsheet for YVWD, several references were reviewed for YVWD's water supply and projected demands within their service area lying within the SGPWA boundaries:

- 2015 SGPWA UWMP
- 2015 San Bernardino Valley Regional UWMP
- Mesa Verde Water Supply Assessment (WSA) – Draft August 11, 2017
- YVWD Strategic Plan For Sustainable Future (Adopted August 20, 2008)

A preliminary spreadsheet was developed by BCVWD which was adjusted based on meetings between YVWD and BCVWD in late April 2018.

Table 2-4, extracted from the 2015 SGPWA UWMP shows the YVWD imported water demands for 2020 through 2040.

TABLE 2-4
PROJECTED WATER DEMANDS ON SGPWA (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD[(a)]	10,860	12,476	14,087	15,886	17,334
City of Banning[(b)]	-	501	1,344	2,237	2,718
YVWD[(c)]	1,809	1,967	2,162	2,391	2,644
Other[(d)]	500	1,600	2,800	3,900	5,000
Total Water Demands	**13,169**	**16,544**	**20,393**	**24,414**	**27,696**

Source: SGPWA 2015 UWMP

YWVD has three major developments within Calimesa which are within the service area of the SGPWA:

- Summerwind Ranch (3,841 EDUs)
- Mesa Verde (3,650 EDUs)
- JP Ranch (500 EDUs per discussions with J. Zoba, YVWD)

The EDUs for Summerwind Ranch and Mesa Verde were taken from the Specific Plans for these projects. Grading is in process for Summerwind Ranch, so the first homes should come "on-line" in 2019. Mesa Verde is estimated to start in 2022. An estimated 20 year build-out time for Summerwind Ranch and Mesa Verde was assumed, resulting in an average of 192 and 183 EDUs per year, respectively. Per YVWD, future phases of JP Ranch will likely not start until 2025 with a 10-year build-out period (about 50 EDUs per year). It should be noted there will be additional EDUs associated with the developments for related commercial and retail developments, schools, parks, restaurants, etc.

Water supply sources for these projects are:

- Reallocated unused overlier pumping rights in the Beaumont Basin
- Oak Valley Partners' earmarked transfer right

- Banked groundwater from storage
- Imported Water from SGPWA
- Treated potable water from the YVWD's Regional Water Treatment Plant

YVWD's share (13.58%) of the reallocated unused overlier pumping right was determined from the 2017 Watermaster annual report for 2018 through 2022. To project the amount available under more long term conditions, BCVWD made an evaluation of a fully developed condition of the developable overlier parcels as shown on the worksheet in the spreadsheet. BCVWD believes the total unused overlier right at build-out will be about 1,800 AFY; YVWD's share will be about 240 AFY (rounded).

Both Mesa Verde and Summerwind Ranch are part of the original Oak Valley Development that started with the Landmark Land Company of California in the 1980s. The original Landmark Project was a master planned golf/recreational development. Oak Valley Partners (OVP) took over the project and were involved in the Beaumont Basin Adjudication. OVP has overlying groundwater rights in the Beaumont Basin [originally 1,806 AFY but reduced to 1,398.9 AFY, (round to 1,399 AFY), after the safe yield was reduced in 2014]. These overlier groundwater rights will be transferred to YVWD to serve the Summerwind Ranch development **only** per YVWD. This will include potable and recycled water.

YVWD uses 700 gal/day/EDU for total water demand; but requires all new development to be dual-plumbed and requires the use of recycled water outside. Potable water demands are estimated by YVWD to be 40% of the total water demand, i.e. 280 gal/day/EDU with the remainder, i.e., 420 gal/day/EDU to be recycled water. It is BCVWD's opinion that the Adjudication requires OVP to forebear the pumping of their 1,399 AFY overlier pumping right, on an acre-ft by acre-ft basis, for both potable and recycled water.

YVWD has groundwater banked in the Beaumont Basin; at the end of 2017, per Watermaster, the amount in storage was 15,776 AF. YVWD has a 50,000 AF storage account.

The following Table (Table 1) was extracted from the Mesa Verde WSA. The Mesa Verde WSA indicates 1,200 AFY is proposed to be recharged (banked) by YVWD from 2020 through 2040. YVWD developed a Strategic Plan for a Sustainable Future, The Integration and Preservation of Resources for a Sustainable Future (adopted August 2008) which identified a groundwater banking program for future reliability for droughts and disruption in the SPW supply as shown in Table 1. The Plan indicates a Board Policy of banking of 15 percent of the total water supply used by the YVWD's customers. Data was not available to confirm the 1,200 AFY in Table 1; but 1,200 AFY will be used in this White Paper. YVWD can change it, if necessary.

The total of the drinking water demands for the Water Filtration Facility plus the Conjunctive Use Demands match with the projected imported water demands in the SGPWA 2015 UWMP as shown in Table 2-4 presented previously.

Table 1
YVWD SGPWA Imported Water Demands

Imported Water Demands from the San Gorgonio Pass Water Agency (Acre-feet)	2015	2020	2025	2030	2035	2040
Drinking Water Demands: Yucaipa Valley Water Filtration Facility	454	609	767	962	1,191	1,444
Conjunctive Use Demands -Local Water Banking	0	1,200	1,200	1,200	1,200	1,200
New Development Long-Term Supply - Sustainability Program	0	2,504	3,040	3,596	4,344	3,407
Purchase from SGPWA	**454**	**4,313**	**5,007**	**5,758**	**6,735**	**6,051**

Source: Mesa Verde Project WSA Draft August 11, 2017, page 25

Table 1 also identified "New Development Long-Term Supply—Sustainability Program which relates to YVWD's Strategic Plan for a Sustainable Future mentioned above. YVWD requires all new developments to provide funding to secure 7.0 AF of supplemental imported water per EDU. This amount of water is sufficient to meet the drinking water demands generated by each new EDU for a period of 20 years. YVWD also offers a Crystal Status Development Program whereby the developer provides funding for 15.68 AF of supplemental imported water per EDU which is sufficient to meet the potable and non-potable (recycled) water demands of the new EDU for 20 years. The difference between the two programs is that under the standard (7.0 AF/EDU) program, development will be restricted, (i.e., no grading or building permits will be issued), when a Stage 2 water shortage is declared (10% cutback). However, Crystal Status Development can continue through a Stage 4 Shortage (35% cutback). The 7.0 AF/EDU will not need to be replenished for 20 years. For this spreadsheet, the Standard 7.0 AF/EDU imported water purchase and storage is used, since it is difficult to determine how many new developments will purchase Crystal status. This is conservative.

The spreadsheet assumes that 7.0 AF/EDU will be applied to all new developments (Mesa Verde and JP Ranch) in YVWD, except for Summerwind Ranch, which has overlier pumping rights available to meet its projected demands.

It should be noted there were some inconsistencies between in the imported water requirements between the YVWD's imported water demands in the Mesa Verde WSA and YVWD's imported water demands in SGPWA's 2015 UWMP which YVWD should reconcile. BCVWD staff is available to assist.

BCVWD

BCVWD's source of supply consists of:

- Edgar Canyon (Little San Gorgonio Creek) Groundwater
- Reallocated Unused Overlier Pumping Rights

- Forbearance Water
- Imported Water
- Water from Groundwater Storage

The annual yield for Edgar Canyon is based on 33 years of pumping records. The average annual production for the period 1983 – 2016 was 2,161 AFY, which was rounded to 2,100 AFY in the spreadsheet.

BCVWD estimated the long-term, fully developed unused overlying party pumping rights would be about 1,800 AFY. BCVWD receives 42.51% of the unused overlier rights and would receive 760 AFY (rounded). BCVWD will be supplying the Sunny Cal Egg Ranch Development with both potable and recycled water at some point. Sunny Cal Egg Ranch and associated partners are overlying parties and have pumping rights. BCVWD estimates that fully developed demand from recycled and potable water is about 340 AFY. The amount of forbearance water will increase over time from zero AFY to 340 AFY as the project develops. This is reflected in the spreadsheet.

BCVWD has an 80,000 AF groundwater storage account in the Beaumont Basin. BCVWD's current (2017) groundwater storage account balance is 32,296 AF and at year 2017 potable water demand was 12,921 AFY. This demand is projected to increase to 15,648 AFY (with conservation) by 2035.

Recycled water is assumed to only be used for non-potable uses and is not considered a potable water supply. However, if the non-potable supply is provided to an overlying party like a golf course (Oak Valley Greens or Tukwet), BCVWD would be able to pump the equivalent AF as potable groundwater. This would reduce the need for imported water in the spreadsheet.

The amount of imported water which BCVWD is able to purchase and recharge is only the amount left over after YVWD and the City of Banning have purchased the amount each needs to meet their demands and banking. The total amount of imported water available is the sum of SGPWA's Table A, SBVMWD Surplus, AVEK-Nickel Water, and Yuba Accord Water. Considering the 62% SWP Reliability, this amounts to 15,540 AFY in 2018 reducing to 12,160 in 2035 as the SWP reliability decreases to 48% before the CWF becomes fully operational. BCVWD will be recharging all of the SPW available between now and 2035 -- 13,991 AFY in 2018 reducing to 7,509 AFY in 2035.

Table 2 is a list of development projects within BCVWD. Tournament Hills Ph. 4, Sundance, Fairway Canyon, Heartland, and Four Seasons are actually under construction; the others have been completely or partially through the planning process. These projects were listed in the 2015 BCVWD UWMP and 2013 Potable Water Master Plan.

The developments in Table 2 total over 12,500 EDUs; however BCVWD projects only about 8,660 will be constructed or occupied between now and 2035. This amounts to an average of over 480 EDUs/year for the 18 years of study.

Table 2
BCVWD Service Area Projects
Under Construction or in Planning Stages

Development	Total EDUs Remaining	Years to Build-out
Tournament Hills Ph 4	281	4
Sundance	1,262	5
Fairway Canyon	1,810	20
Heartland	1,081	20
Four Seasons	203	3
Kirkwood Ranch	391	12
Potrero Creek Estates	700	10
Noble Creek Meadows	648	15
Hidden Canyon	82	5
Sunny Cal Egg Ranch	529	10
Jack Rabbit Trail	2,000	25
The Preserve/Legacy Highlands	3,218	25
Taurek	244	20
TR 32950 Manzanita	95	10
Total EDUs	12,545	

Unit demands for new EDUs is 0.546 AFY/EDU which correlates to the recent SGPWA Capacity Fee Study Single Family Dwelling Unit demand factors. The spreadsheets separately calculate the support EDUs such as schools, commercial, industrial, retail, and other facilities.

Results of Spreadsheet Modeling

City of Banning

The City of Banning analysis was performed with new EDU demand of 0.52 AFY/EDU and existing (prior to 2018) EDU demand of 0.62 AFY/EDU and does not consider any conservation. The City should review the appropriateness of these EDU demands.

An initial "run" of the spreadsheet starting with the amount of groundwater in storage of 51,961 AF and no imported water, but using the City's groundwater supplies only. Figure 1 shows the available water supply and demand. Without any imported water, the City of Banning does not begin pulling from their storage account until 2031. Figure 2 shows the amount of water in the City of Banning's Beaumont Basin Groundwater Storage Account. It should also be noted that their groundwater storage account has a maximum banking capacity of 80,000 AF and reaches maximum capacity in 2025 or so and the account will remain level until 2031 when a relatively small amount of water begins to be withdrawn from storage.

The City may want to re-evaluate their need for imported water indicated in their 2015 UWMP for recharge between now and when CWF and Sites Reservoir are on-line. For example the

City's 2015 UWMP estimates an annual recharge of 2,718 AFY from now till 2040. Assuming CWF and Sites Reservoir are on line in 2035, the volume of SWP purchased would be 46,200 AF which has a total cost of $14.6 million based on the current rate of $317/AF. If SGPWA raises their rates, this amount would be even greater.

Figure 1

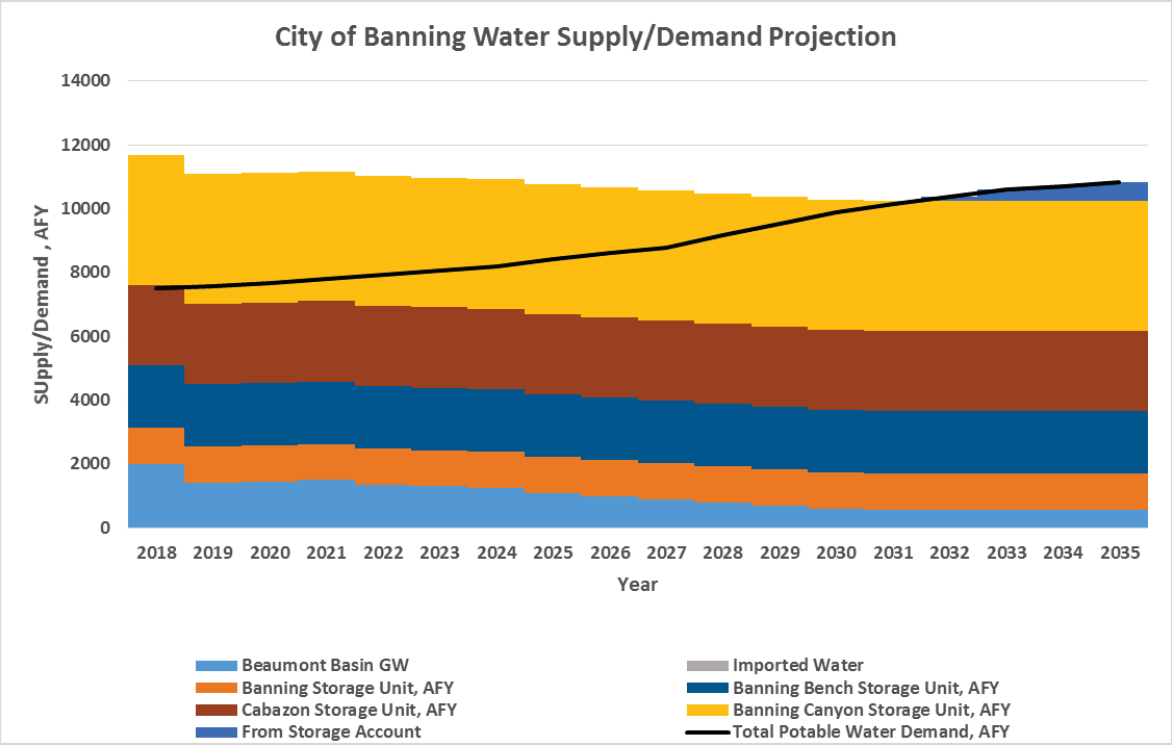
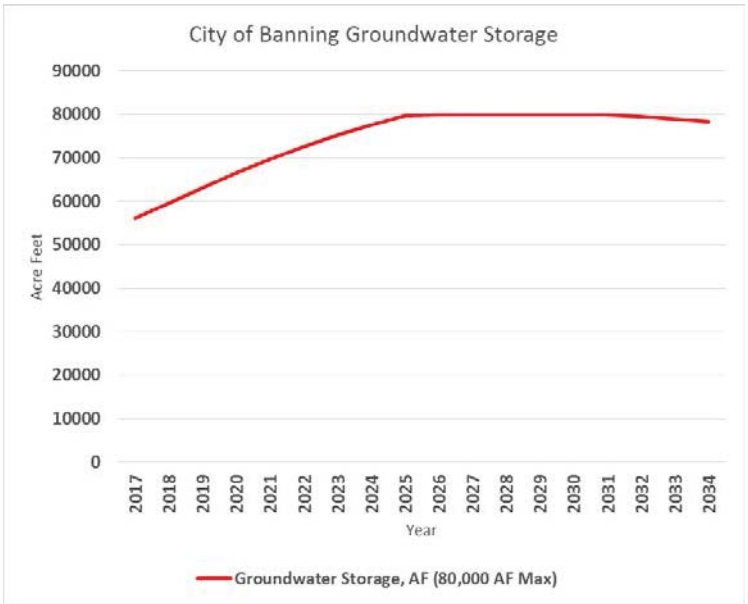


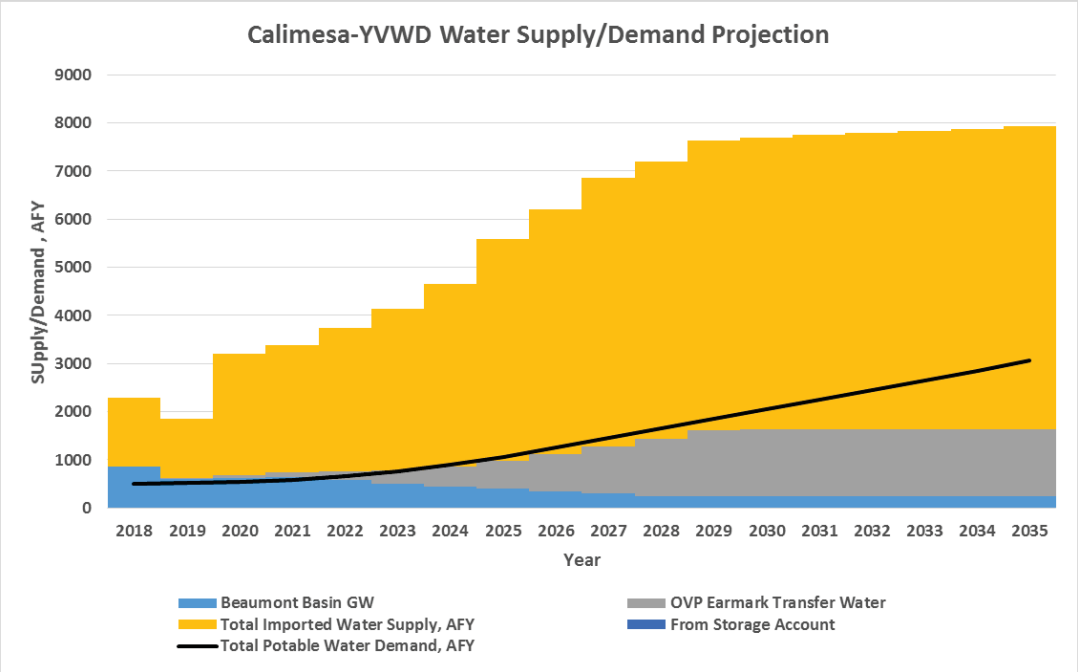
Figure 2



YVWD

Figure 3 shows YVWD's supply and demand within the SGPWA's service area, principally Calimesa,

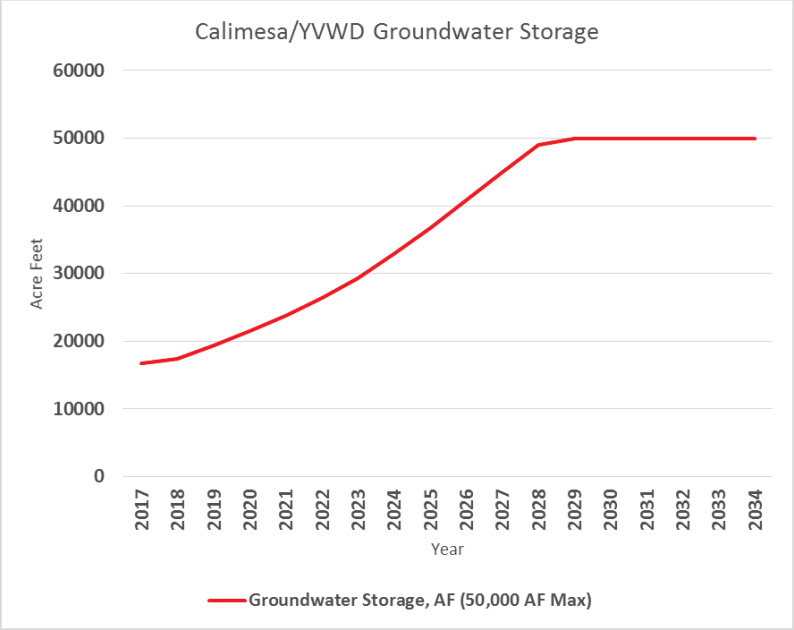
Figure 3



The Calimesa/YVWD analysis was performed with new EDU demand of 0.37 AFY/EDU and existing (prior to 2018) EDU demand of 0.7842 AFY/EDU, (corresponds to 700 gal/day/EDU), and does not considering any conservation. This results in a starting (2018) demand of 500 AFY. YVWD and Calimesa should review the appropriateness of these EDU demands.

YVWD's storage account starts out at 15,776 AF in 2017 per Watermaster's Annual Report. Figure 3 clearly shows the impact of purchasing and banking the new development sustainability imported water, i.e. 7.0 AF/EDU. In addition to the new development sustainability water, the spreadsheet assumes an additional 1,200 AFY will be purchased and banked. If Figure 3 were extended beyond 2038, the supply would drop eventually reaching the demand, probably around 2050 or so unless imported water were purchased. Figure 4 shows the YVWD Groundwater Storage Account Balance; it reaches capacity about 2026 and remains full. It would remain at capacity until about 2038 and then would gradually drop unless additional water were banked.

Figure 4



YVWD may want to reconsider purchasing and banking all of the sustainability water in light of the impact on the storage account. Maintaining storage accounts in a full, or near-full, condition may result in some water "leaking out" of the basin and would preclude taking advantage of any wet years either locally or in the SWP when Article 21 Water may be available for purchase at very low rates.

BCVWD

Figure 5 shows BCVWD's supply and demand based on the following assumptions:

- New EDU water demand = 0.546 AFY/EDU (accounts for separate calculation of associated EDUs such as commercial, retail, restaurants, schools, etc.)
- Conservation of 10% on existing EDUs constructed before 2018 due to higher water costs, replacement of high water using turf with more water efficient landscaping in yards, common areas, and street medians; use of more water efficient, indoor appliances, etc. Conservation of 5% on EDUs constructed after 2018. The percentage is lower than the percent conservation on existing housing due to more stringent landscape ordinances now in place, reduced amount of landscape area in newer homes, and reduced turf and landscaping of common areas and street medians. Conservation percentage gradually increases from zero in 2018 to the respective percentages by year 2035.
- Imported water includes Table A (with reliability adjustment and reliability reduction over time), AVEK-Nickel water, SBVMWD Surplus, and Yuba Accord Water.
- Recharging the modeled imported water after YVWD and City of Banning take all of their planned imported water. BCVWD plans on purchasing and banking all available imported water ranging from 13,990 AFY in 2020 and reducing to 7,509 AFY in 2035.

This reduction is due to reduced reliability of the SWP over time and the fact that other SGPWA member agencies will be increasing their imported water demands.

- All recycled water is used to meet non-potable water demands. It is believed, at some point in time, the demand for recycled water will decrease as landscapes, even those irrigated with recycled water, become more water efficient surplus. This will result in more recycled water, over time, which can be advance treated and recharged becoming part of the potable water supply through indirect potable reuse.

Figure 5

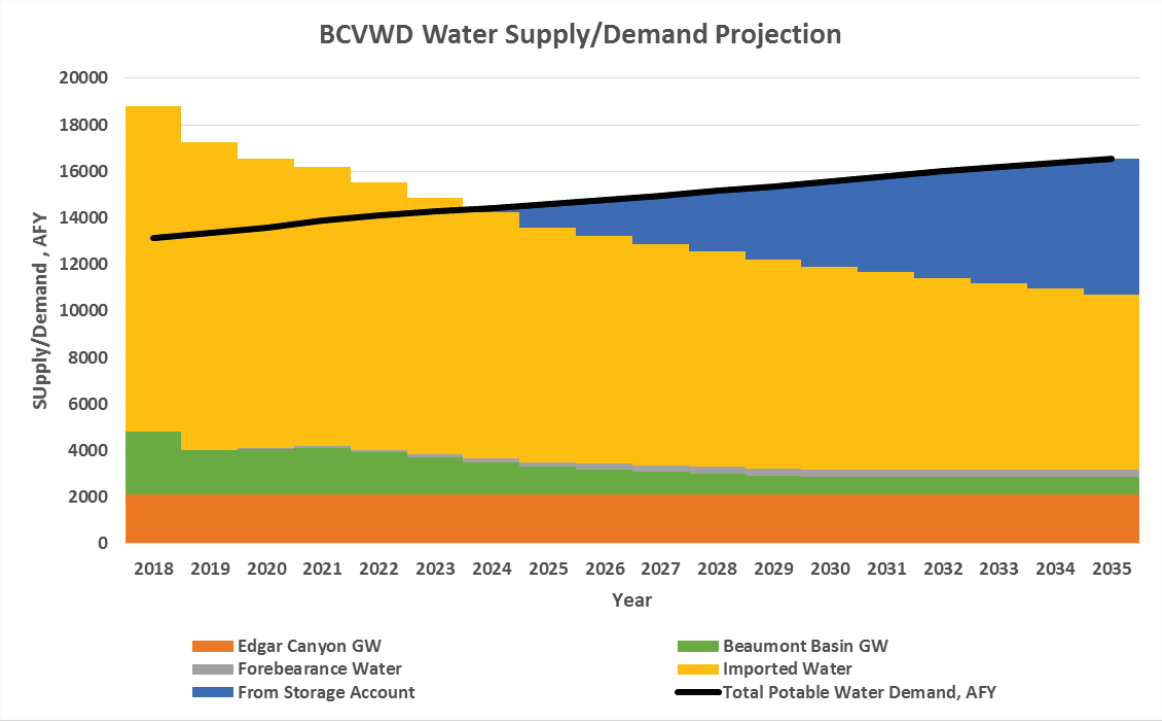
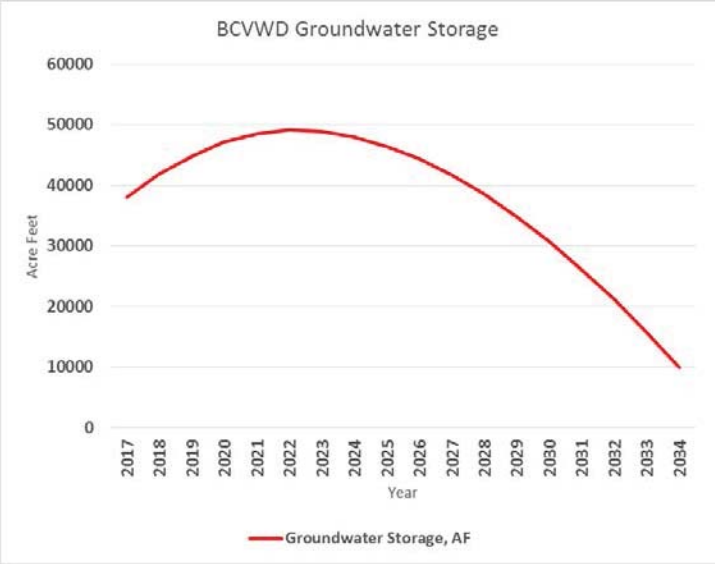


Figure 5 shows that supply exceeds the demand until about 2026; at that point water will be withdrawn from groundwater storage to meet demands. This point could be delayed, i.e. extended into the future, a) if more imported were available perhaps during wet years from SGPWA; b) YVWD deferred or reduced their purchase of imported water for their Sustainability Program; c) BCVWD could advance treat and recharge more recycled water; or d) a combination of all of these options.

Figure 6 shows BCVWD's groundwater storage balance under the above assumptions. Figure 6 shows the current groundwater storage account balance increasing from 32,296 AF in 2017 per Watermaster's Annual Report to about 50,000 AF in 2025 then dropping to about 10,000 AF by the time CWF and Sites Reservoir come on line.

Figure 6



Total SGPWA

Figure 7 aggregates the water demand/supply and groundwater storage accounts for BCVWD, YVWD (SGPWA Service Area Only), and the City of Banning (including Banning Heights Mutual Water Company and High Valleys Water District). It shows the region can meet its demands with banked water and local supplies until about 2028 when a small amount of water must be drawn from storage. As shown in Figure 8, the total regional storage account balance in 2028 is over 167,000 AF -- just above the entire "Temporary Surplus" established with the Adjudication.

Conclusions and Recommendations

1. The spreadsheet and this White Paper No. 6 should be carefully reviewed by the City of Banning, the SGPWA, YVWD/Calimesa and BCVWD and each, respectively. adjusted to match local conditions of demand, development build-out rate, EDU demands, local supplies, etc. A meeting should be held to discuss the findings and results and develop a "final" spreadsheet model that provides a best estimate of the need for imported water over time.
2. The finalized spreadsheet should be used by the SGPWA to develop imported water supply requirements between now and the time CWF and Sites Reservoir are in place. This should be done prior to any imported water purchases (other than Yuba Accord, Article 21 Water, SBVMWD Water, and AVEK/Nickel Water).
3. The model should be reviewed at least every two years to adjust for development, groundwater banked, unit demands, etc.

Figure 7

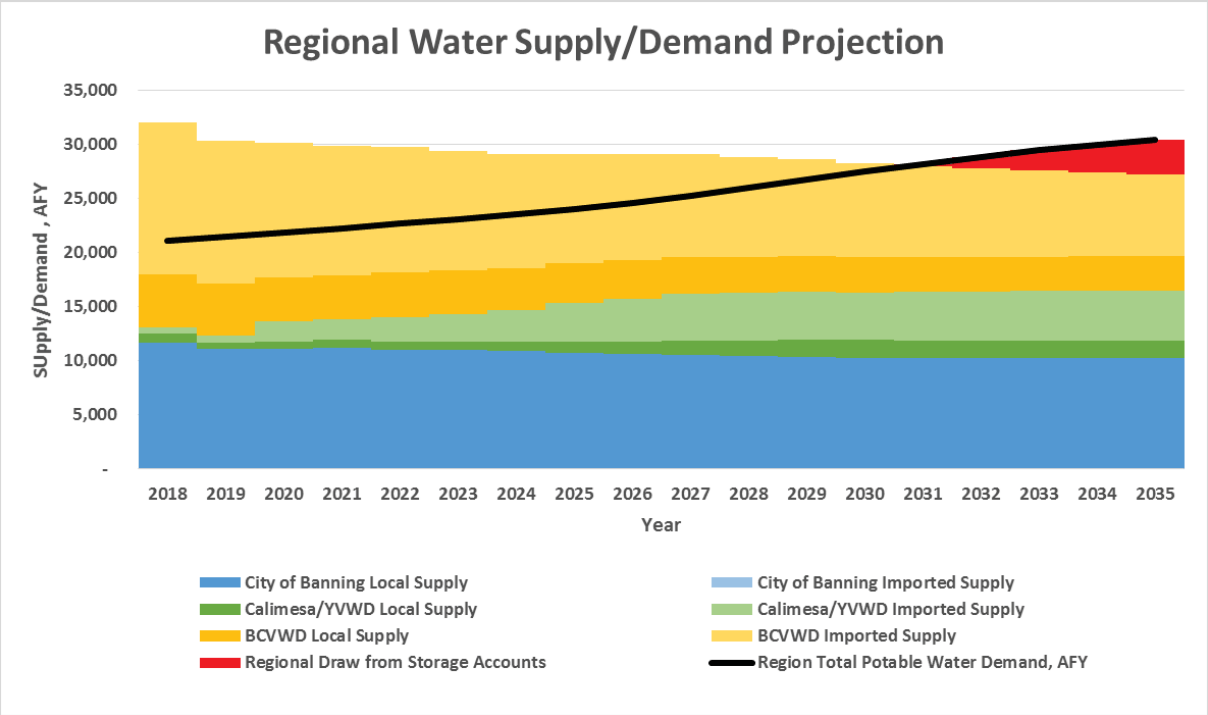
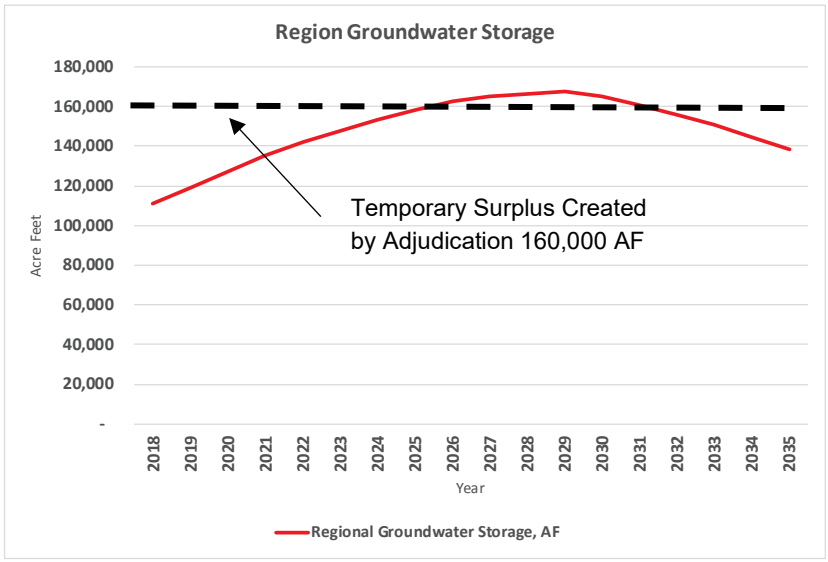


Figure 8



4. The spreadsheet model clearly indicates that with currently planned development, water demands can easily be met using local supplies, groundwater in storage, and currently available imported water, even considering reductions in reliability of the SWP over time until the CWF and Sites Reservoir are in place.
5. There is enough water in storage regionally that other agencies can mutually assist each of the other agencies in the area by exchanging banked groundwater, if necessary.

6. If the risks of not implementing CWF and/or Sites Reservoir increase over time, adjustments will need to be made. SGPWA will need to acquire additional supplies from other SWP Contractors, participate in other water resource projects and water exchanges, or reduce water use through demand management measures.
7. With the implementation of CWF and Sites Reservoir there will be additional water supplies available for purchase or short or long term leases to meet demands well beyond 2050.

Acknowledgements

Analyses and evaluations in support of the white paper and presentations were prepared by BCVWD staff, Joseph C. Reichenberger P.E., BCEE, Senior Engineer, under the direction of and with input from Dan Jaggers P.E., General Manager, and Mark Swanson, District Engineer. Extensive analyses were prepared by Kaden Johnsen, Engineering Assistant, with help from Ivan Garcia, Engineering Intern.

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DRAFT

DATE: August 15, 2018

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: Funding Strategies for New and Existing Regional Water Supplies, Sites Reservoir and Other Sources – White Paper No. 7

This white paper is the seventh of a series of White Papers discussing San Gorgonio Pass Water Agency's (SGPWA's) and Beaumont Cherry Valley Water District's (BCVWD's) imported water needs to near build-out. This white paper focusses on SGPWA's funding requirements for additional imported water supplies listed in Table 1 on the following page. Table 1 shows that the current and projected imported water available to SGPWA range from 24,900 AFY to almost 35,880 AFY depending on the actual yield.

Previous white papers have discussed funding and financing options for these sources. Yuba Accord, SBVMWD Water, and AVEK-Nickel Water were assumed to be funded from SGPWA's existing rate structure and were not included in any previous funding analyses. However, this option is still being evaluated by the SGPWA.

The existing SWP Table A Transportation and Delta Water Charges, totaling about $24 million per year, will continue to be funded through property taxes and rates. This payment will continue to year 2035 at which time the existing contracts expire.

The CWF funding for Phases 1 and 2, ("two tunnels") has been committed and both tunnels are proposed to be constructed initially, pending environmental permits. The CWF is anticipated to be funded by revenue bonds issued by the State or a Joint Powers Financing Agency with payment by State Water Contractors south of the Delta through their existing contracts with the DWR – extended as needed into the future. In addition to other federal, State, and local permits, CWF requires changes to the water rights permits for the SWP and Federal Central Valley Project to authorize the proposed new points of diversion and recombination. The hearings on the "change petition" are underway. The CWF would be funded by SGPWA through their State Water Project (SWP) Debt Service taxes. There are some fixed minimum Operation, Maintenance, Power, and Replacement (OMP&R) costs for the CWF that would be paid on an annual basis from debt service plus the variable OMP&R costs associated with transporting the water from the Delta to Cherry Valley. The variable OMP&R costs are anticipated to be funded from water rates charged by SGPWA to the water retailers purchasing imported water. Although the CWF will not be operational until about 2032, there will be costs for design and permitting that will have to be paid, beginning before 2018.

Table 1
SGPWA Current and Projected Available Long Term Imported Water Supply

Source	Low Yield Case, Annual Amount, AFY	High Yield Case, Annual Amount, AFY	Comment
Existing Table A	8,300	10,380	17,300 AFY but only 60% reliable (10,380 0 AFY) per Bulletin 132; to degrade to approximately 48% (8,300 AFY) without California Water Fix (CWF)
Yuba Accord	300	300	When available
San Bernardino Valley MWD Surplus Table A Water (SBVMWD Water)	2,000	2,000	Up to 5,000 AFY available estimated 2 out of every 5 years (40%) of time = 2,000 AFY; agreement terminates in 2032
Antelope Valley East Kern Water Agency (AVEK) Nickel Water, (AVEK Nickel Water)	1,700	1,700	20 year agreement with option for 20 year extension
California Water Fix (CWF)	2,478	3,119	Expected to increase reliability of State Water Project (SWP) by 14% (2,478 AFY) to 17.62% (3,119 AFY) from 48%
CWFSide Deal	3,500	7,500	Purchase (Transfer) of Additional Table A CWF increased yield to SGPWA from other SWP Contractors
Sites Reservoir	9,100	14,000	Assumes all Class 2 will convert to Class 1 Water (14,000 AFY); worst case with 65% assumed reliability. (BCVWD has committed to 4,000 AFY of the 14,000 AFY)
Total Imported Water Potentially Available	24,900	35,880	

Although all of the “South of the Delta” SWP Contractors will be paying their proportionate share of the CWF, for various reasons, a few SWP Contractors do not need the benefits of the increased yield and are interested in transferring (selling) their incremental yield to other interested SWP Contractors, such as SGPWA. The buyer (in this case SGPWA, for example) would receive the seller’s CWA Table A Reliability Increase which depends on the particular DWR Allocation for the year. These “side deals” work as follows. The seller pays all SWP costs including the CWF cost to DWR, but receives 85% reimbursement from the buyer. The seller retains the right to purchase Article 21 water and retains conveyance capacity for non-SPW. The buyer pays 85% of the sellers CWF cost and obtains the reliability benefit which is based on the DWR allocation for that year for the amount of Table A transferred. The amount of SPW which could be obtained in this type of “side deal” could vary from about 3,500 AF to 7,500 AF assuming a 50,000 AF Table A transfer

based on information published by the SGPWA. The cost for this transfer would be funded from debt service taxes, which is an advantage.

Sites Reservoir was approved for $816 million of Proposition 1 funding on July 24, 2018; the California Water Commission also agreed to provide $40.8 million in early funding to assist in completing the needed environmental analyses and to obtain permits. It is believed that the project participants will receive the combined total of their Phase I Class 1 and Class 2 water amounts, which for the SGPWA is 14,000 AFY, of which, 4,000 AFY is BCVWD's committed participation.

Sites Reservoir will not produce water until about 2030 or so; however, there will be costs incurred by SGPWA to fund design, environmental studies, permitting, etc. until the Sites Project Authority (Sites Authority), the managing agency, can secure long-term funding. SGPWA and other project participants have paid for Phase 1, which is now almost complete. The Sites Reservoir Project Authority (Authority) will finance all Phase 2 costs. The Authority's current plan is a $350 million revolving line of credit with a bank with the funds available in early 2019. The intent is an "interest only" payment through the end of Phase 2, after which, the line of credit will be refinanced with long-term bonds beginning in Phase 3. The first payment on the line of credit is due in January 2020. The preliminary terms on the Line of Credit are 3% interest on the amount borrowed with a 0.75% fee on the undrawn balance.

Table 2 shows the estimated costs that will be incurred by SGPWA and BCVWD for participation in Sites Reservoir Phase 2. This is to pay their proportionate share of the "interest only" line of credit. The initial payment is due in November 2019. In addition, in FY 2019 (ending 30 September 2019), a payment is due to convert Class 2 Water to Class 1 Water. This is shown in Table 3.

Table 2
Sites Reservoir Phase 2 Project Costs

Calendar Year	Cost per AF based on Sites Reservoir Yield of 335,000 AF	SGPWA Cost (14,000 AF)	BCVWD Share (4,000 AF)
2019	$9.89	$138,460	$39,560
2020	$15.32	$214,480	$61,280
Due November 2019	$25.20	$352,940	$100,840
2021	$20.88	$292,320	$83,520
2022	$11.11	$155,540	$44,440
Total	$57.19	$800,660	$228,760

Table 3
Sites Reservoir Cost to Convert Class 2 Water to Class 1 Water

Year Due	Cost per AF to Convert Class 2 to Class 1	SGPWA Cost (5,201 AF)	BCVWD Share (1,486 AF)
2019	$24.25	$126,125	$36,035

If the Sites Reservoir Project does not proceed to Phase 3 and all of the $350 million has been "drawn," there would be a debt obligation of $1,045/AF for all participants. For the SGPWA this would amount to $14.63 million for the 14,000 AF commitment. (Note that BCVWD, at the present time, has committed to 4,000 AF of the 14,000 AF SGPWA commitment.) Assuming the $350 million debt is financed over 30 years, the annual payment would be $67.60/AF/year, or $946,000/year. (BCVWD's share would be $270,400.)

Phase 3 annual debt service costs would begin in 2022 or 2023 gradually ramping up to the maximum in year 2030 or so as shown in Table 4. The values in Table 4 are based on an estimated $564/AF/year as the annual debt service for the project.[1] A simple "S" curve was developed from experience. The debt service cost includes the repayment of the Phase 2 Line of Credit.

Table 4
Sites Reservoir Estimated Debt Service Cost for Phases 3 and 4 and Beyond

Year Due	Cost/AF/year (Estimated as "S" Curve)	SGPWA Cost (14,000 AF)	BCVWD Share (4,000 AF)
2023	$135	$1,890,000	$540,000
2024	$165	$2,310,000	$660,000
2025	$220	$3,080,000	$880,000
2026	$380	$5,320,000	$1,520,000
2027	$490	$6,860,000	$1,960,000
2028	$510	$7,140,000	$2,040,000
2029	$535	$7,490,000	$2,140,000
2030 and beyond	$546	$7,644,000	$2,184,000

The cost for OMP&R cost for Sites Reservoir was estimated to be $98/AF/year.[2] The annual costs for SGPWA and BCVWD are shown in Table 5. These OMP&R costs would be funded through water rates.

[1] From SGPWA Presentation Aug. 13, 2018, "Sites Reservoir Project Status Report" by J. Davis
[2] Ibid.

Table 5
Sites Reservoir Estimated Annual
Operation, Maintenance, Power, and Replacement and Monitoring Costs

Year Start	Cost/AF/year	SGPWA Cost (14,000 AF)	BCVWD Share (4,000 AF)
2030	$98	$1,372,000	$392,000

The Sites Authority will be working closely with the federal Bureau of Reclamation to secure Bureau participation and funding which will reduce the cost to the current participants. Previous White Papers have assumed the Sites Project Authority would be responsible for 60% of the project cost with the rest from the State and federal agencies. This may change since the Sites Authority anticipated slightly more Proposition 1 funding than the $816 million awarded.

In summary both the CWF and Sites Reservoir are moving forward, but there is always some risk that one or both may not be completed and operational. Also, some participants in Sites Reservoir have indicated they will not continue participation in Sites Reservoir if the CWF does not proceed. It is important that SGPWA continue to review and potentially secure low cost short and longer term water purchases/leases throughout the next 5 to 10 years until there is some degree of certainty with either the CWF or Sites Reservoir, or both.

Once there is certainty, SGPWA and the retail agencies can work together to refine imported water needs for the long term and develop a long-range, regional imported water supply plan considering conservation, more efficient landscaping, increased use of recycled water, and reduced indoor water use.

Purpose of this White Paper

The purpose of this White Paper is to provide:

- A preliminary evaluation of the impacts of new short term, leased water sources, such as AVEK-Nickel Water in combination with Yuba Accord and SBVMWD Surplus Water on SGPWA water rates
- Assessment of the impact of construction and operation and maintenance of the SGPWA Fiesta Recharge Facility, currently funded from the General Fund, will have on the Agency's water rates
- Financial impacts of reduced demands by SGPWA retailers due to local water resources development, storm water capture, and recycled water use
- Financial impacts of downturns in housing construction affecting the Agency's share of Riverside County's 1% property tax, potential new connection revenue, and assessed valuation
- ~~Assess the i~~Impact of the OMP&R costs for the CWF and Sites Reservoir on SGPWA water rates
- ~~Options for f~~Funding for Sites Reservoir, if debt service taxes cannot be used as a funding source

Spreadsheet models ~~will~~ have been developed to address these issues.

Supply Demand Model Refinement

The spreadsheet supply-demand model developed previously for White Paper No. 6 was refined to include:

- The impacts of recycled water, storm water capture, captured groundwater, and other local water sources on the need for imported water
- Adjustment factors to account for reduction in the irrigation of street median turf and the potential conversions of street medians and other common area to more drought-tolerant landscaping
- Ability to adjust the amount of imported water purchased by a retailer to either bank water or withdraw water from their groundwater storage account
- Reduced recycled water availability considering the recent restrictions on residential indoor water use to 50 gal/capita/day (gpcd) by 2030. It is assumed the Commercial, Industrial and Institutional (CII) component of the wastewater will add to the indoor residential wastewater and would remain about the same as it currently is, i.e., about 15 gpcd in BCVWD's service area. This is based on BCVWD's annual water demand reporting to the Division of Drinking Water.
- Forbearance water resulting from serving potable and non-potable water to overlying parties as stated in the Beaumont Basin Adjudication

Funding Model Refinement

White Papers No. 3 provided unit costs, ($/AF), for various sources of water; White Paper No. 4 summarized the total funding requirements for the SGPWA including the current SWP and EBXI/EBXII plus CWF and Sites Reservoir. White Paper No. 5 provided revenue forecasts for assessed valuation and potential property tax revenue to fund the CWF and Sites Reservoir (possibly). White Paper No. 6 refined future demand projections within the SGPWA service area and looked at meeting demands until CWF and Sites Reservoir Projects were operational – about 2030 or so.

This White Paper No. 7 builds on the data from the previous white papers and refines the funding sources and requirements:

- SGPWA General Fund
    - General Operation and Administration
    - Local capital projects, including the SGPWA Fiesta Recharge Facility and other Agency capital asset purchases
    - DWR Variable OMP&R charges on the SWP and other water including Yuba Accord, SBVMWD Surplus, and AVEK-Nickel Water
    - SBVMWD annual SWP operational and administrative charges performed on behalf of the SGPWA in the delivery of SPW
    - Purchase of Yuba Accord, SBVMWD Surplus, and AVEK-Nickel Water (possibly)
    - SGPWA Fiesta Recharge Facility operation and maintenance

    - OMP&R of the CWF and Sites Reservoir Project which are assumed to be funded from the General Fund (possibly)
- Debt Service taxes
    - SWP, EBXI/EBXII, except for DWR Variable OMP&R
    - CWF except for DWR Variable OMP&R
- Connection Fees (potential)
    - Sites Reservoir planning, design, and construction

The SGPWA General Fund revenue sources include: SGPWA's share of the 1% Riverside County Property Tax, revenue from water sales, interest earned on investments, and other sources.

In the analysis in this White Paper, a conservative approach was taken; it was assumed that Yuba Accord, SBVMWD Surplus and AVEK-Nickel Water would not be funded from either debt service taxes or connection fees. It was also assumed that the CWF would be funded from debt service taxes, but Sites Reservoir would not. Again, this is believed to be a conservative approach which needs to be verified with SGPWA's legal counsel. The purpose was to "bracket" the potential future costs.

Spreadsheet Funding Model Revenue and Expenditures

The following paragraphs describe some of the principal assumptions in developing the spreadsheet model that supports this White Paper. The assumptions can easily be changed to test/verify other conditions.

SGPWA Administration and Operation Costs

SGPWA annual administration and operating costs were extracted from the Agency's most recent audit[3], and presented in Table 6 on the following page.

Amortization costs, although presented in the audit, were not included. In the analysis it was estimated that SGPWA would always have about $37,000 of annual capital asset purchases for miscellaneous items such as computers, vehicles, furniture, etc. The SGPWA's Fiesta Recharge Facility project estimate was listed as $8 million by the Agency and would continue through construction from 2017 through 2019 at $2.5 to $3 million per year. The Noble Creek Turnout Expansion is listed as a capital project by the Agency funded from the General Fund in the 2017-18 budget, but this cost is to be reimbursed by BCVWD and was not included in the capital project expenditures in the spreadsheet model. The Fiesta Recharge facility operation would begin in 2020 at an estimated rate of $120,000 per year based on BCVWD's experience with their, much larger, facility.

[3] SGPWA Audit (2017). San Gorgonio Pass Water Agency Financial Statements and Supplementary Information with Independent Auditor's Report for years ended June 30, 2017 and 2016, prepared by Eadie & Payne, LLP, October 12.

SGPWA pays a pass through charge to SBVMWD for SBVMWD's operation of the SWP facilities for SGPWA. This cost was extracted from a 2009 Rate Study[4] conducted by the Agency, and escalated 13% based on the Consumer Price Index (CPI) to $112,000 per year.

Table 6
2017-18 FY SGPWA General Fund Budget

General and Administrative	
Salaries and Benefits	$ 725,900
Admin and Professional	$ 496,650
General Engineering	$ 302,000
Legal	$ 200,000
Conservation and Education	$ 54,000
Subtotal	$ 1,778,550
Capital Projects	
Building/furniture/vehicles	$37,000
Recharge Facility	$2,500,000

DWR's Variable OMP&R Charges

DWR's Variable OMP&R Charges (DWR Variable Charges) amount to $260/AF. This was determined in White Paper No. 3, Table 1. This is the cost of delivering the SPW to the SGPWA and is currently included in the water rate paid to SGPWA by the retailers purchasing imported water. For this analysis this is assumed to be the cost SGPWA would pay to DWR for conveying Yuba Accord, SBVMWD Surplus, AVEK-Nickel Water, and other water in the SWP system from the Delta to Cherry Valley.

SWP, EBXI, and EBX II Costs

The debt service, Fixed OMP&R costs and other costs for the SWP, EBXI and EBX II are paid for from debt service taxes based on DWR Bulletin 132 and were included in the previous white papers. These charges will continue to about 2035 or so when the current SWP contract expires.

Costs for Other Imported Water

The Agency has agreements with DWR for Yuba Accord Water, SBVMWD for surplus water, and Antelope Valley-East Kern Water Agency (AVEK) for Nickel Water. These are described in detail in White Papers No.1 and 3. In the spreadsheet model it is assumed that the full quantity

[4] SGPWA (2009). Water Rate Study for the San Gorgonio Pass Water Agency, Draft, prepared by David Taussig Associates, Inc., February 2.

of these sources ~~is~~ could be delivered every year; it is further assumed that the agreements will be extended beyond current termination date.

Yuba Accord Water

The Yuba Dry Year Transfer Program, the official name for Yuba Accord Water, allows the SGPWA to purchase water from Yuba County Water Agency. There are four components to the pricing, varying from $25/AF to $125/AF depending on the hydrologic condition (See White Paper No. 3). A conservative estimate of $125/AF has been assumed in the funding analysis. DWR's variable charge of $260/AF applies to this water also; so the total cost of the water would be $385/AF. SGPWA estimates that 300 AFY are available on the average so the average annual cost for this water is $115,500. This has been rounded to $120,000 per year.

SBVMWD Surplus Water

The agreement to purchase surplus water from SBMVWD terminates in 2032; however, it is likely, with the agreement of both parties, it would be extended. SBVMWD has a set rate, $100 to $400/AF, for the purchase of the surplus water depending on the SWP allocation percentage for the particular year. The lower cost would occur in years with high allocation percentages. BCVWD staff did an analysis, taking into account historical allocation percentages, and developed an average cost of $240/AF for the surplus water. In addition to this cost, the SGPWA would pay DWR's variable cost to convey the water to the Agency. This is estimated to be $260/AF. The total cost for this surplus water is $500/AF or about $1,000,000/year for the 2,000 AFY, on the average. This will vary from year to year depending on the allocation, DWR's variable charge, and the amount of water the Agency will purchase.

AVEK-Nickel Water

The SGPWA entered into a 20-year purchase agreement with AVEK in 2017 to buy 1,700 AFY of water from Nickel Farms. This AVEK-Nickel Water is not subject to the reliability variations of the SWP. The purchase agreement is "take or pay" and there is an option to extend it for another 20 years. The water is available at the Tupman Turnout, west of Bakersfield, at a current price of $1,021.29. In addition SGPWA will need to pay the pumping costs from the Turnout to Cherry Valley, estimated to be about $247/AF; total cost is then $1,268.29/AF. This is rounded to $1,270/AF. The AVEK-Nickel Water has cost escalation costs in the Agreement, 3% per year or the increase in the CPI for Los Angeles, Orange, and Riverside Counties, whichever is greater. Based on the Bureau of Labor Statistics for Los Angeles, Long Beach and Anaheim, the CPI increased about 2.5% per year for the last 18 years, so the 3% escalation in the agreement will be used in this White Paper. The current annual cost for the 1,700 AF is $2,160,000.

Summary of Other Water Costs

Table 7 presents a summary of the "per acre-ft" and annual costs for other water which is projected to be purchased by SGPWA.

Table 7

Summary Cost for Other Water Purchased by SGPWA (including DWR Variable Charges)

Water Source	Annual Amount Purchased, AF	Cost/AF	Annual Cost, ($000s)	Comment
Yuba Accord	300	$385	$120	
SBVMWD	2,000	$500	$1,000	
AVEK-Nickel	1,700	$1,270	$2,160	Subject to annual escalation of 3% or more

City of Ventura/Casitas MWD One-year Exchange

In 2018 the SGPWA, the City of San Buenaventura (Ventura) and Casitas Municipal Water District (Casitas) entered into a one-year exchange agreement wherein SGPWA would receive all of Ventura's and Casitas' SWP allocation for 2018 or 5,250 AF based on DWR's year 2018 35% SWP allocation. Forty percent of the water delivered (2,100 AF) will need to be returned to the agencies within a 10-year period as determined by the agencies and agreed to by SGPWA. SGPWA agreed to pay Ventura and Casitas for the Transportation Capital, Transportation Minimum, Conservation Capital, and Conservation Minimum charges imposed by DWR, totaling $2,230,000 for the water. SGPWA will also pay the variable DWR Pass-through cost, estimated to be $260/AF or $1.365 million. SGPWA indicated the $2.23 million would be paid from debt service taxes.

CWF and Sites Reservoir Water Costs

It is assumed the CWF capital cost and other fixed costs will be paid for through debt service taxes similar to the SWP, EBXI and EBXII. The DWR Variable OMP&R costs to convey the water through the SWP would be paid for through the water rate as is currently done. There are some additional operating costs associated with the CWF, and it is assumed that SGPWA's share of the annual operating cost, $150,000, will be paid for through the water rates beginning in 2032.

For this White Paper, Sites Reservoir capital and fixed costs will be paid for by some other funding source other than debt service taxes, a conservative approach. (If it can be funded through debt service taxes, this will ease the funding burden and open up other options. This will need to be confirmed by the Department of Water Resources as well as the SGPWA's legal counsel.) The SGPWA's share of the annual operating costs of $1.372 million for Sites Reservoir project, (refer to Table 5 presented previously), will be paid for through water rates beginning in 2030. (BCVWD's share of the $1.372 million is $0.392 million.)

These costs are added to the General and Administration costs and the DWR Variable Costs to deliver the existing Table A water to Cherry Valley. The baseline spreadsheet identifies these costs on an annual basis

General Fund Revenues

The General Fund revenue is from three primary sources:

- SGPWA's share of Riverside County's 1% property tax
- Water sales to the retail agencies
- Interest on investments

SGPWA's Share of Riverside County's 1% Property Tax

The annual amount the Agency receives is a portion of the 1% property tax collected by Riverside County through an apportionment process which is complex. The complexities are brought about by the numerous and varied procedures and formulas used, and how each of these interrelate and affect the final apportionment. Figure 1 shows the historical assessed valuation (AV) within the SGPWA and BCVWD since 2002 when the "development push" began. As can be seen, there was a rapid rise in AV from 2002 to 2008. It then leveled off, in fact dropped slightly from 2010 to 2011. It began to rise again after 2013, but at a much more gradual rate, (2.5% per year). Note that BCVWD's AV accounts for about 50% of SGPWA's AV at the present time.

Figure 1
Historical Assessed Valuation in SGPWA and BCVWD

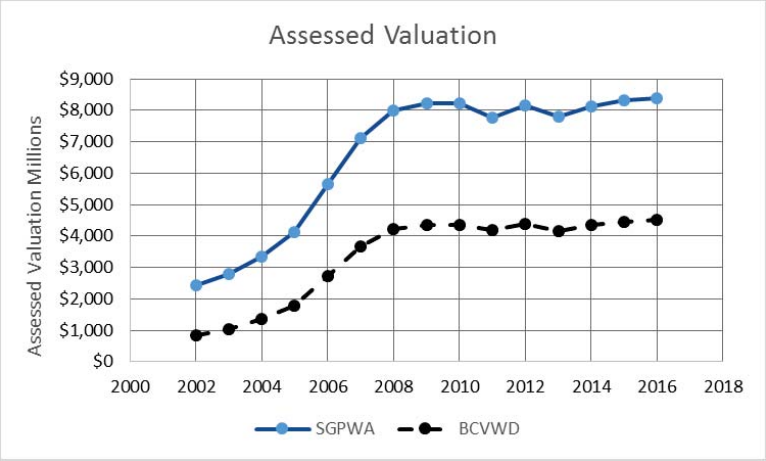
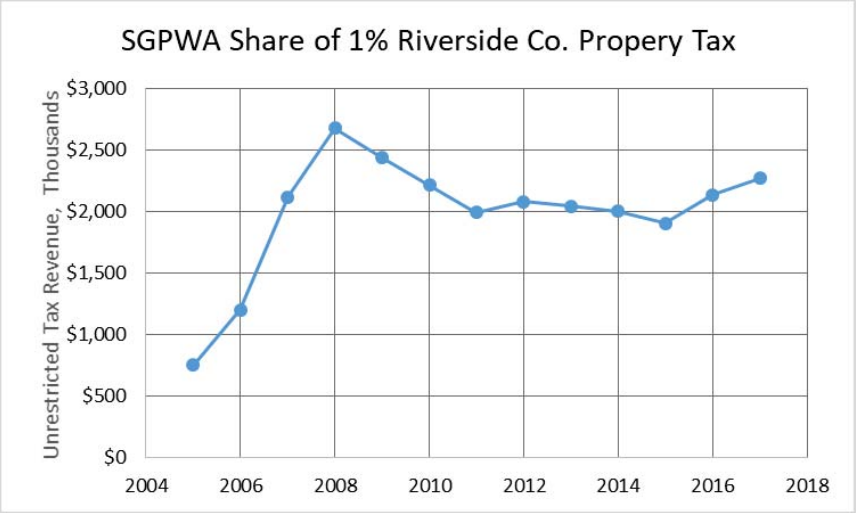


Figure 2 shows SGPWA's historical share of Riverside County's 1% property tax through the apportionment process extracted from the SGPWA annual audits. The share tends to mirror the AV shown in Figure 1; however, it showed a significant decline from 2008 to 2011 and did not begin to pick up again until 2015. This drop adversely affects SGPWA's unrestricted operating revenue. The ~~AV~~ 1% property tax share has gradually increased from 2015 to 2017 at about 9% per year. The model allows for adjustment of this annual increase. A 5% annual increase has been initially set to be conservative.

Figure 2
Historical SGPWA Share of 1% Riverside County Property Tax



It is important to point out that the revenue is subject to fluctuation with the housing market and some decreases should be expected to occur over the next 20 years or so; this should be factored into the revenue stream.

Interest on Investments

SGPWA earns interest on their investments in the Local Agency Investment Fund (LAIF) and other instruments permitted by the Agency's investment policy. The amount of interest income in 2017, per the audit, was $480,000. This amount could increase or decrease depending on the market conditions and the amount of money collected by the Agency and invested. For purposes of this model it is assumed this investment income will gradually decrease over time, (~~by~~ assumed to be $20,000 per year), as reserves are used for capital projects, supplement shortfalls in revenue, and other Agency needs.

Water Rates

The current water rate is $317/AF which generated about $4.752 million in FY 2017. The amount of revenue from water sales depends on the amount of water available and sold. The model allows for the calculation of a "revenue neutral" SGPWA water rate under several assumptions:

- ~~CWF~~ Sites Reservoir design, construction, and operation paid for through financing with the financing costs paid through a new connection charge
- ~~CWF~~ Sites Reservoir design, construction, and operation paid for through financing with the financing costs paid through the water rate

Other assumptions of costs included in the water rates are described above and include the costs for Yuba Accord, SBVMWD Surplus, and AVEK-Nickel water. It is assumed these costs are paid out of the General Fund, although, it is possible that Yuba Accord, SBVMWD Surplus, and other Table A water acquisitions, i.e., Ventura/Casitas, could be paid out of debt service

taxes. This should be confirmed by the SGPWA Legal Counsel. If these lease/purchase costs could be paid from debt service taxes, the water rate could be reduced.

Imported Water Available

The reliability of the SWP is projected to decrease from about 60% current reliability (10,380 AFY per DWR Bulletin 132) to 48% by 2035 (8,300 AFY) as discussed in White Paper No. 6 and shown in Table 1 herein. This will affect the total delivery of Table A water over time. This has been included in the model. Depending on hydrologic conditions, the SGPWA may be able to deliver more than these Table A amounts; but to be conservative, the appropriate reliability factors were included in the model.

SBVMWD Surplus, Yuba Accord, and AVEK-Nickel Water are included in the model as available water supply in addition to the Table A water. This adds another 4,000 AFY to the available water supply bringing the total to 14,380 AFY currently declining to 11,300 AFY by 2035. The one-year Ventura-Casitas Transfer was shown ~~from~~ for 2018.

In the model, in terms of purchase priority, it is assumed that SGPWA will purchase all of the Table A water available, adjusted for reliability plus all AVEK-Nickel Water, since they are obligated to purchase it. If necessary, this will be supplemented by Yuba Accord and SBVMWD Surplus Water in that order, i.e. starting with the least costly water, Yuba Accord Water.

Imported Water Demand

The water demand model developed in previous White Papers was refined to include:

- Future use of City of Beaumont recycled water in BCVWD's non-potable water system beginning in 2020. Because it may not be possible to use all of the recycled water available from the City due to low winter time water use and the reject water ~~in~~ from the membrane treatment system, a factor is included in the model which can be adjusted. An initial value of 75% was used. Wastewater generation in the City is estimated to be 0.25 AFY/EDU.
- The water demand for BCVWD ~~wa~~is 0.546 AFY/EDU for new construction; 0.62 AFY/EDU for existing EDUs constructed before 2017. Ongoing studies underway by BCVWD staff indicated that the new housing units appear to be using less water than the older units possibly due to compliance with new landscape ordinances and the use of more water-efficient appliances such as dishwashers, clothes washers, toilets, and other plumbing fixtures. BCVWD staff has observed annual water use as low as 0.50 AFY/EDU. The 0.546 AFY/EDU includes the impact of commercial, industrial, and institutional (CII) water demands associated with and supporting the new EDUs. This also includes the non-potable demands associated with landscape irrigation of common areas, schools, etc. It should be pointed out that the water demands for BCVWD have been significantly reduced from the demands in BCVWD's 2015 Urban Water Management Plan (UWMP). The water demands from the other retailers (YVWD/Calimesa and City of Banning) were verified by the two retailers as part of the work on previous White Papers. No changes were made in their demands.

- The growth in demand, i.e. EDU growth, was based on data presented in previous White Papers, which was reviewed by BCVWD, YVWD, and the City of Banning. The growth in EDUs is believed to be realistic, based on projections made by the retail agencies and may differ from projections in the retailers' respective UWMPs. Average growth rates in terms of EDUs/yr in BCVWD, City of Banning, and YVWD/Calimesa service areas within SGPWA boundaries over the period 2018 through 2035 are: 431, 356, 392 respectively. Total average projected EDUs within SGPWA service area from these three retailers is 1,229 EDUs/yr. It should be noted that this is greater than the historical average for these areas. If the average growth rates are lower, the growth in imported water demand will be reduded.

Some Model Results

Water Supply

Figure 3 shows the total amount of water available versus the actual demand within the SGPWA based on the growth assumptions stated above. Figure 3 includes the impacts of declining reliability in the SWP Table A. The plot does not include the additional water supply from future single year or multiyear deals (Ventura and Casitas MWD) and the CWF, Sites Reservoir, or any of the CWF "side deals" described above.

Figure 3
SGPWA Imported Water Supply vs Actual Projected Demand

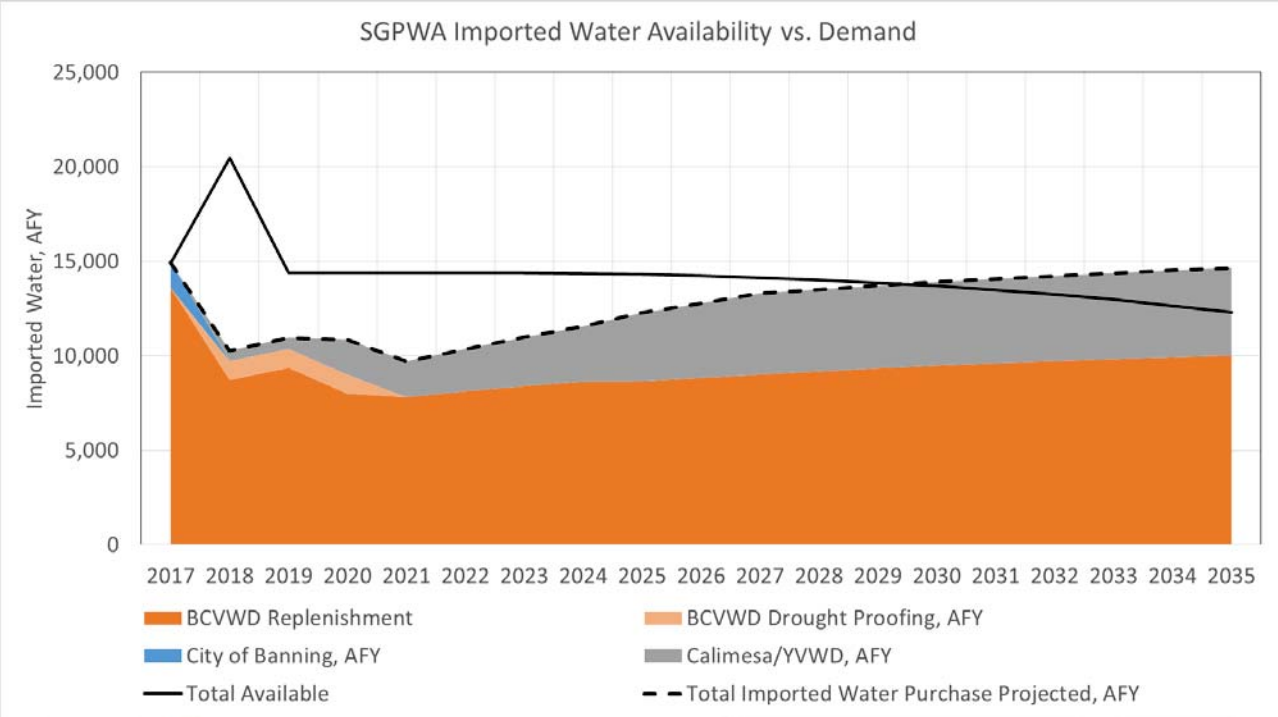


Figure 3 shows there appears to be adequate water supply available to accommodate the projected growth, averaging 1,229 EDUs/year until about 2030, at which time retail agencies

can use “banked” water to meet their needs until CWF and Sites Reservoir become operational. It is anticipated that this would occur before 2035. Figure 3 shows there is extra water available between now and 2028 or so which could be purchased and banked either by the retailers or the SGPWA. In the development of Figure 3, it was assumed that BCVWD would only purchase 1,000 AFY for drought proofing until 2020 when recycled water would be available from the City of Beaumont. This is a slight departure from BCVWD’s 2015 UWMP. However, depending the on SGPWA’s water rate, BCVWD may purchase additional water for “banking” since there is more than enough available.

Once CWF and Sites Reservoir are operational the amount of imported water available will be somewhere between 24,900 AFY and 35,880 AFY as shown in Table 1. This is more than SGPWA will need for a long time.

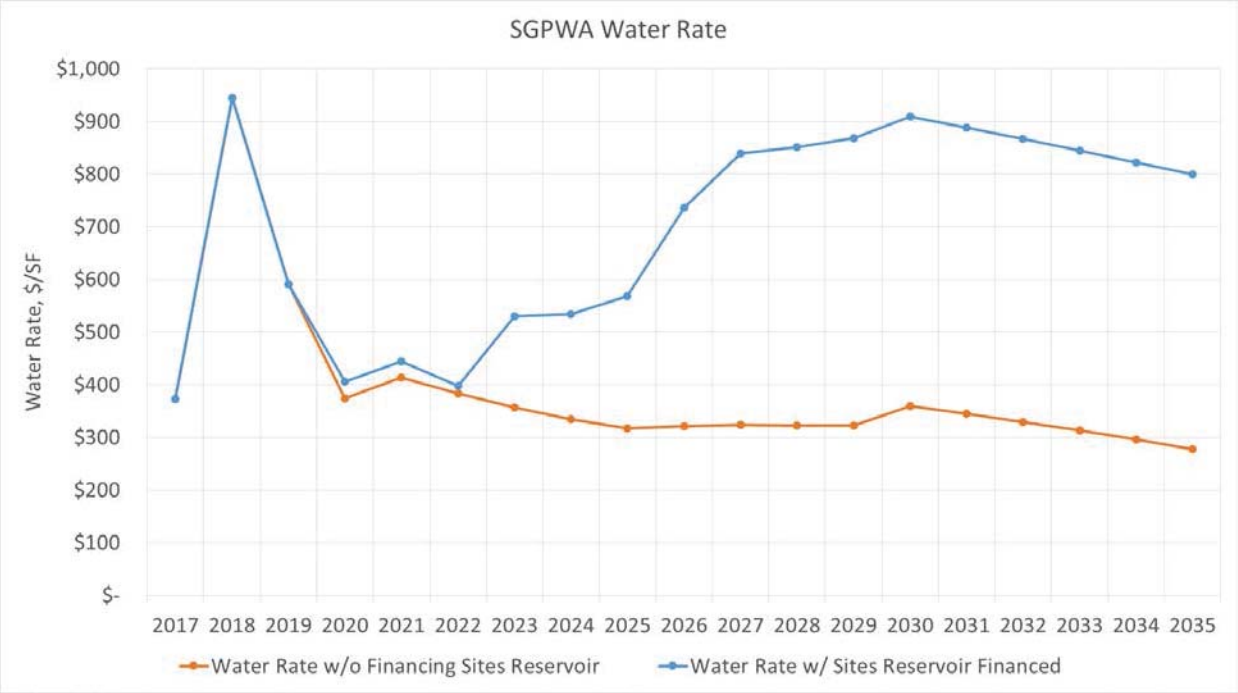
Water Rates

Figure 4 shows the SGPWA water rate needed to maintain a “revenue neutral” position under two conditions:

- Sites Reservoir design and construction paid for with either debt service taxes or through connection charges; variable operating costs would be paid from water rates
- Sites Reservoir design, construction and operation paid for through the water rates

In the analysis for Figure 4, it is assumed that all of the Agency’s operation, purchase of Yuba Accord, SBVMWD Surplus, AVEK-Nickel Water and other water would be paid from the Agency’s General Fund. It also assumes a 5% annual increase in the Agency’s share of the 1% Riverside County property tax. It also assumes that water purchases are as anticipated in Figure 3.

Figure 4
SGPWA Imported Water Rate for Revenue Neutral Position



It appears a water rate in the $375 to $400/AF range would be adequate for the near term and future if Sites Reservoir design and construction is financed and paid through connection charges or debt service taxes. If Sites Reservoir is paid for through the water rates, a rate between $800 to $1,000/AF would be needed.

Figure 3 assumes that SGPWA will continue to participate in Sites Reservoir to the current amount (14,000 AF with 4,000 AF of that funded by BCVWD). If this changes, the rates would change correspondingly. It should be pointed out that Figure 3 does not include the impact of reimbursement for 4,000 AF participation by BCVWD.

Connection Charges for Sites Reservoir

An alternative to increasing the water rate is to pay for Sites Reservoir design and construction through connection charges for new EDUs. The analysis in the model shows that a connection fee of about $3,720/EDU would accumulate enough money to fund the financing until about 2030 or so, at which time the connection fee should be re-evaluated based on projected growth. This should only be considered a rough estimate. A much more detailed assessment needs to be made if this is the method of financing Sites Reservoir.

As discussed above, the estimated connection fee assumes that SGPWA will continue to participate in Sites Reservoir to the current amount (14,000 AF with 4,000 AF of that funded by BCVWD). If this changes, the rates would change correspondingly. It should be pointed out that Figure ~~3~~4 does not include the impact of reimbursement for 4,000 AF participation by BCVWD.

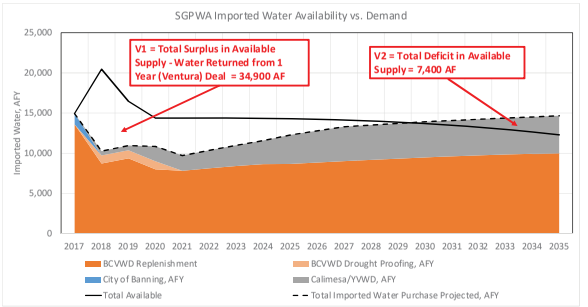
Conclusions

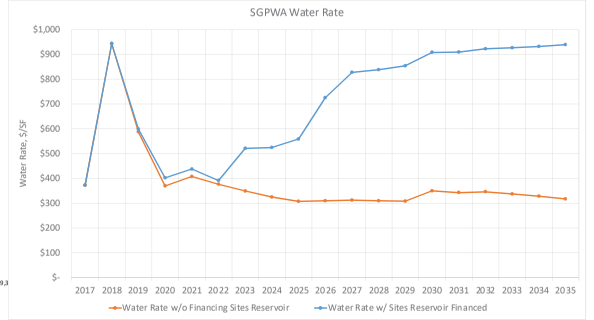
- There appears to be enough water available from SGPWA plus that amount ~~and what is~~ currently in banked storage to meet imported water demands until CWF and Sites Reservoir are on line. This assumes that the region's local water resource projects, including recycled water, are implement by 2020.
- Sites Reservoir design and construction may be best funded by debt service taxes or connection fees rather than rates, although a combination of rates and connection fees is also possible.
- The analysis presented in this White Paper is subject to change depending on changes in development growth, i.e, slowdowns in housing market, reductions in AV, etc. These changes could cause an increase in the water rates (fewer connections to spread cost across).
- The retailers and SGPWA need to refine their projections and evaluate the long term needs for water supply with and without CWF and Sites Reservoir due to the~~ir~~ current uncertainty of these projects.
- SGPWA should continue to look for lease/purchase of Table A, which can be funded through debt service due to the uncertainty of CWF and Sites Reservoir. This should continue until CWF and/or Sites Reservoir is a certainty. At that point the SGPWA along with the regional water retailers should re-evaluate their position in Sites Reservoir, considering long term water demand projections, imported water supplies, current availability of short term deals, and possible use of water in storage to meet near term water supply needs.

BCVWD

Table 1 - SGPWA Funding Requirements for Administration Operations and Water Supply

Cost Escalation	0%																			
Annual increase in County 1% Tax Revenue	5%																			
EXPENDITURES	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
Current Administration and Operation Costs																				
Salaries and Benefits	$ 725,900																			
Admin and Professional	$ 496,650																			
General Engineering	$ 302,000																			
Legal	$ 200,000																			
Conservation and Education	$ 54,000																			
Subtotal	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	
SJBMWMD Pass Through from 2009 Rate Study Escalted 13% using CPI	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	
Recharge Facility Operation				$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	
Subtotal	$ 1,890,550	$ 1,890,550	$ 1,890,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	
SGPWA Capital Projects																				
Building/furniture/vehicles	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	
Recharge Facility	$ 2,500,000	$ 3,000,000	$ 2,500,000																	
Subtotal Capital Projects	$ 2,537,000	$ 3,037,000	$ 2,537,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	
DWR Variable OMP&R Cost/AF	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	
SGPWA Imported Water Demand																				
BCVWD for Replenishment, AFY	13,590	8,723	9,366	8,000	7,817	8,123	8,398	8,639	8,652	8,826	9,006	9,173	9,337	9,492	9,606	9,718	9,825	9,930	10,006	
BCVWD Drought Proofing, AFY		1,000	1,000	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
City of Banning, AFY	1,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Calimesa/YVWD, AFY		549	604	1,860	1,900	2,242	2,584	2,927	3,622	3,963	4,305	4,344	4,383	4,422	4,468	4,554	4,560	4,606	4,651	
Subtotal, AFY	14,940	10,272	10,970	10,860	9,716	10,365	10,982	11,566	12,274	12,789	13,311	13,517	13,720	13,914	14,074	14,232	14,385	14,536	14,657	
Imported Water Available																				
Table A with Reduced Reliability until CWF, AFY	14,940	11,214	10,380	10,380	10,380	10,380	10,379	10,350	10,302	10,234	10,143	10,026	9,882	9,707	9,500	9,258	8,979	8,661	8,300	
AVEK Nickel Water, AFY		1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	
Subtotal SGPWA Must Purchase, AFY	14,940	12,914	12,080	12,080	12,080	12,080	12,079	12,050	12,002	11,934	11,843	11,726	11,582	11,407	11,200	10,958	10,679	10,361	10,000	
Supply Surplus to Storage, (Deficit from Storage), AFY	0	2,642	1,110	1,220	2,364	1,715	1,096	484	(272)	(855)	(1,468)	(1,791)	(2,139)	(2,507)	(2,874)	(3,273)	(3,706)	(4,165)	(4,657)	
Supply Surplus to Storage, (Deficit from Storage) (Without Nickel), AFY	0	2,642	(590)	(480)	664	15	(604)	(1,216)	(1,972)	(2,555)	(3,168)	(3,491)	(3,839)	(4,207)	(4,574)	(4,973)	(5,406)	(5,865)	(6,357)	
Yuba Accord Water Available, AFY		300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	
Yuba Accord Water Purchased, AFY		300	0	0	0	0	0	0	272	300	300	300	300	300	300	300	300	300	300	
Yuba Accord Water Purchased (Without Nickel), AFY		300	300	300	0	0	300	300	300	300	300	300	300	300	300	300	300	300	300	
SJBMWMD Surplus, AFY		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
SJBMWMD Surplus Water Purchased, AFY		2,000	0	0	0	0	0	0	0	555	1,168	1,491	1,839	2,000	2,000	2,000	2,000	2,000	2,000	
SJBMWMD Surplus Water Purchased (Without Nickel), AFY		2,000	290	180	0	0	304	916	1,672	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
One Year Water Supply Deals		5,250	2,100																	
Total Imported Water Available, not considering CWF or Sites Reservoir, AFY	14,940	20,464	16,480	14,380	14,380	14,380	14,379	14,350	14,302	14,234	14,143	14,026	13,882	13,707	13,500	13,258	12,979	12,661	12,300	
Total Imported Water Purchase Projected, AFY	14,940	10,272	10,970	10,860	9,716	10,365	10,982	11,566	12,274	12,789	13,311	13,517	13,720	13,914	14,074	14,232	14,385	14,526	14,657	
DWR OMP&R Variable Cost For Table A Water	$ 3,884,400	$ 4,280,640	$ 2,698,800	$ 2,698,800	$ 2,698,800	$ 2,698,800	$ 2,698,467	$ 2,690,875	$ 2,678,521	$ 2,660,789	$ 2,637,068	$ 2,606,743	$ 2,569,201	$ 2,523,828	$ 2,470,011	$ 2,407,136	$ 2,334,589	$ 2,251,758	$ 2,158,028	
Unit Costs for Other Than Table A, incl. DWR Variable OMP&R																				
Yuba Accord Water 300 AFY	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	
SJBMWMD Surplus , 2000 AFY	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	
AVEK Nickel Water, 1700 AFY, mandatory 3%/year escalation	$ 1,268	$ 1,299	$ 1,330	$ 1,363	$ 1,396	$ 1,430	$ 1,466	$ 1,502	$ 1,539	$ 1,578	$ 1,618	$ 1,659	$ 1,701	$ 1,744	$ 1,789	$ 1,835	$ 1,883	$ 1,932	$ 1,982	
Other Than Table A Cost																				
Yuba Accord Water Purchased	$ -	$ 115,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 104,730	$ 115,500	$ 115,920	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	
SJBMWMD Surplus Water Purchased	$ -	$ 1,000,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 277,745	$ 584,219	$ 745,697	$ 919,347	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	
AVEK Nickel Water Purchased	$ -	$ 2,207,924	$ 2,261,310	$ 2,316,297	$ 2,372,934	$ 2,431,270	$ 2,491,356	$ 2,553,244	$ 2,616,990	$ 2,682,647	$ 2,750,273	$ 2,819,931	$ 2,891,677	$ 2,965,575	$ 3,041,691	$ 3,120,089	$ 3,200,840	$ 3,284,013	$ 3,369,682	$ 49,3
Sites OMP&R not including DWR Variable Cost, (From White Paper 3, Table 4)														$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000	
CWF Annual OMP&R, not including DWR Variable Cost (from White Paper 3)																$ 150,000	$ 150,000	$ 150,000	$ 150,000	
Subtotal	$ -	$ 3,323,424	$ 2,261,310	$ 2,316,297	$ 2,372,934	$ 2,431,270	$ 2,491,356	$ 2,553,244	$ 2,721,720	$ 3,075,892	$ 3,449,994	$ 3,681,128	$ 3,926,524	$ 4,729,075	$ 4,805,191	$ 5,033,589	$ 5,114,340	$ 5,197,513	$ 5,283,182	
Total Estimated Expenditure Funded From General Fund	$ 8,311,950	$ 12,531,614	$ 9,387,660	$ 7,062,647	$ 7,119,284	$ 7,177,620	$ 7,237,373	$ 7,291,670	$ 7,447,790	$ 7,784,231	$ 8,134,612	$ 8,335,421	$ 8,543,274	$ 9,300,453	$ 9,322,751	$ 9,488,275	$ 9,496,479	$ 9,496,821	$ 9,488,760	
REVENUES																				
Water Rate, $/AF	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	
Water Sales	$ 4,735,980	$ 3,256,230	$ 3,477,312	$ 3,442,706	$ 3,080,097	$ 3,285,759	$ 3,481,444	$ 3,666,424	$ 3,890,267	$ 4,054,206	$ 4,219,590	$ 4,284,993	$ 4,349,314	$ 4,410,741	$ 4,461,541	$ 4,511,434	$ 4,560,073	$ 4,604,731	$ 4,646,244	
SGPWA Share of 1% Riverside County Property Tax	$ 2,267,676	$ 2,381,060	$ 2,500,113	$ 2,625,118	$ 2,756,374	$ 2,894,193	$ 3,038,903	$ 3,190,848	$ 3,350,390	$ 3,517,910	$ 3,693,805	$ 3,878,496	$ 4,072,420	$ 4,276,041	$ 4,489,843	$ 4,714,336	$ 4,950,052	$ 5,197,555	$ 5,457,433	
Investment Interest	$ 480,000	$ 460,000	$ 440,000	$ 420,000	$ 400,000	$ 380,000	$ 360,000	$ 340,000	$ 320,000	$ 300,000	$ 280,000	$ 260,000	$ 240,000	$ 220,000	$ 200,000	$ 180,000	$ 160,000	$ 140,000	$ 120,000	
Subtotal Unrestricted Income	$ 7,483,656	$ 6,097,309	$ 6,417,465	$ 6,487,824	$ 6,236,472	$ 6,559,952	$ 6,880,347	$ 7,197,272	$ 7,560,657	$ 7,872,116	$ 8,193,395	$ 8,423,489	$ 8,661,735	$ 8,906,782	$ 9,151,385	$ 9,405,770	$ 9,670,125	$ 9,942,286	$ 10,223,677	
Surplus (Shortfall)	($824,294)	($6,434,304)	($2,970,194)	($574,823)	($882,812)	($617,667)	($357,026)	($94,398)	$113,467	$87,885	$574,782	$588,068	$118,460	($393,671)	($171,367)	($82,505)	$173,646	$445,463	$734,917	
Water Rate for Revenue Neutral Position, $/AF	$ 372.44	$ 941.39	$ 587.77	$ 569.93	$ 457.86	$ 376.59	$ 349.51	$ 325.16	$ 307.76	$ 315.13	$ 332.58	$ 335.48	$ 308.37	$ 330.51	$ 343.38	$ 346.50	$ 337.86	$ 328.52	$ 317.99	
ADDING SITES RESERVOIR (OPTION 1 Pay from Water Rates)																				
Class Two Conversion Cost			$ 126,125																	
Annual Cost, assuming 5.5% line of credit on Phase 2 Cost of $350 million, SGPWA share 0.039					$ 352,940	$ 292,320	$ 155,540													
Phase 3 and 4 Financed, White Paper 3, Table 4								$ 1,890,000	$ 2,310,000	$ 3,080,000	$ 5,320,000	$ 6,860,000	$ 7,140,000	$ 7,490,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	
Total Annual Payment			$ 126,125.00	$352,940	$292,320	$155,540	$1,890,000	$2,310,000	$3,080,000	$5,320,000	$6,860,000	$7,140,000	$7,490,000	$7,644,000	$7,644,000	$7,644,000	$7,644,000	$7,644,000	$7,644,000	
Total Estimated Expenditure With Sites	$ 8,311,950	$ 12,531,614	$ 9,513,785	$ 7,415,587	$ 7,411,604	$ 7,331,160	$ 9,127,373	$ 9,601,670	$ 10,527,790	$ 13,104,231	$ 14,994,612	$ 15,475,421	$ 16,033,274	$ 16,944,453	$ 16,966,751	$ 17,132,275	$ 17,140,479	$ 17,140,821	$ 17,132,760	
Water Rate for Revenue Neutral Position, $/AF	$ 372.44	$ 941.39	$ 593.26	$ 462.43	$ 457.94	$ 391.60	$ 521.00	$ 524.88	$ 568.69	$ 726.10	$ 827.95	$ 838.70	$ 854.28	$ 918.18	$ 919.40	$ 923.05	$ 926.90	$ 932.28	$ 933.45	
ADDING SITES RESERVOIR (OPTION 2 Pay entirely from Connection Fee)																				
Class Two Conversion Cost			$ 126,125																	
Annual Cost, assuming 5.5% line of credit on Phase 2 Cost of $350 million, SGPWA share 0.039					$ 352,940	$ 292,320	$ 155,540													
Phase 3 and 4 Financed, White Paper 3, Table 4								$ 1,890,000	$ 2,310,000	$ 3,080,000	$ 5,320,000	$ 6,860,000	$ 7,140,000	$ 7,490,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	
Cumulative Amount Paid			$ 126,125		$ 479,065	$ 771,385	$ 926,925	$ 2,816,925	$ 5,126,925	$ 8,206,925	$ 13,526,925	$ 20,386,925	$ 27,526,925	$ 35,016,925	$ 42,660,925	$ 50,304,925	$ 57,948,925	$ 65,592,925	$ 73,236,925	$ 80,880,925
SGPWA Number of New Connections per year		364	676	844	974	1025	940	988	1280	1348	1408	1448	1749	1740	1773	1526	1522	1506	1341	1211
Cumulative New Connections		364	1040	1885	2859	3884	4823	5812	7091	8440	9848	11297	13336	15110	16635	18157	19663	20904	22115	
Unit Cost per New Connection (adjust)	$ 3,757																			
Annual Connection Revenue		$ 1,353,002.97	$ 2,513,612	$ 3,139,004	$ 3,620,249	$ 3,810,041	$ 3,492,866	$ 3,673,552	$ 4,756,103	$ 5,012,207	$ 5,235,304	$ 5,499,395	$ 6,465,942	$ 6,591,541	$ 5,671,907	$ 5,657,039	$ 5,596,786	$ 4,613,480	$ 4,501,369	
Cumulative Connection Revenue		$ 1,353,003	$ 3,866,615	$ 7,005,619	$ 10,625,868	$ 14,435,910	$ 17,928,776	$ 21,602,328	$ 26,358,431	$ 31,370,638	$ 36,605,941	$ 43,105,336	$ 49,571,278	$ 56,162,819	$ 61,834,726	$ 67,491,765	$ 73,088,551	$ 77,702,031	$ 82,204,000	
Surplus or Shortfall		$ 1,353,003	$ 3,740,490	$ 6,526,914	$ 9,854,483	$ 13,508,985	$ 15,111,851	$ 16,475,403	$ 18,153,506	$ 17,840,713	$ 16,219,016	$ 15,578,411	$ 14,534,333	$ 13,501,894	$ 11,523,801	$ 9,542,840	$ 7,495,626	$ 4,465,106	$ 1,323,075	





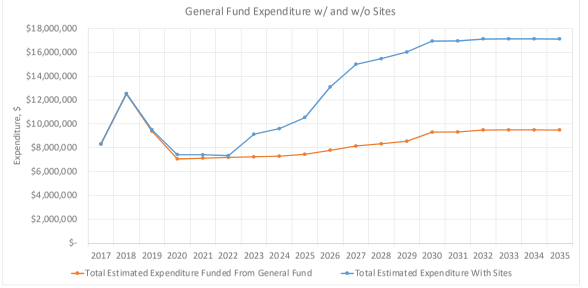


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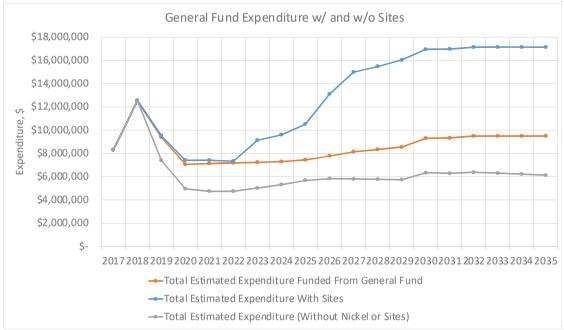
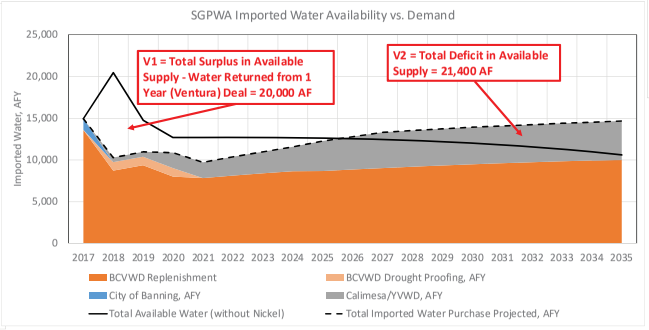
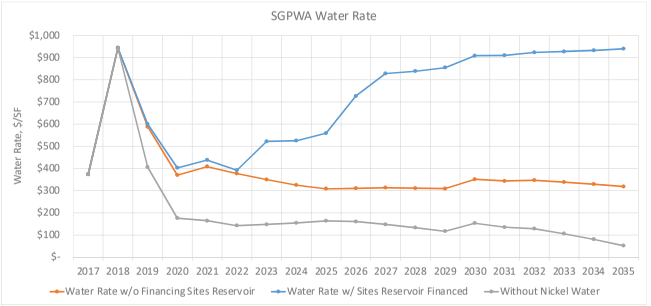
Table 1 (Cont.) - SGPWA Funding Requirements for Administration Operations and Water Supply

ADDING SITES RESERVOIR (OPTION 3 Rate without Nickel Water) Other Than Table A Cost																								
Yuba Accord Water Purchased	$ -	$ 115,500	$ 115,500	$ 115,500	$ -	$ -	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500
SBVWD Surplus Water Purchased	$ -	$ 1,000,000	$ 144,783	$ 90,135	$ -	$ -	$ 151,877	$ 458,242	$ 836,013	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
AVEK-Nickel Water Purchased	$ -	$ 2,207,924	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Sites OMP&R not including DWR Variable Cost, (from White Paper 3, Table 4)																		$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000
CWF Annual OMP&R, not including DWR Variable Cost (from White Paper 3)																			$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000
Subtotal	$ -	$ 3,323,424	$ 260,283	$ 205,635	$ -	$ -	$ 267,377	$ 573,742	$ 951,513	$ 1,115,500	$ 1,115,500	$ 1,115,500	$ 1,115,500	$ 1,115,500	$ 1,115,500	$ 1,763,500	$ 1,763,500	$ 1,913,500	$ 1,913,500	$ 1,913,500	$ 1,913,500	$ 1,913,500	$ 1,913,500	$ 1,913,500
Total Estimated Expenditure Funded From General Fund	$ 8,311,950	$ 12,531,614	$ 7,386,633	$ 4,951,985	$ 4,746,350	$ 4,746,350	$ 5,013,395	$ 5,312,168	$ 5,677,588	$ 5,823,839	$ 5,800,118	$ 5,769,793	$ 5,732,251	$ 6,334,878	$ 6,281,061	$ 6,368,186	$ 6,295,639	$ 6,212,808	$ 6,119,078					
Water Rate for Revenue Neutral Position, $/AF	$ 372.44	$ 943.39	$ 405.35	$ 175.58	$ 168.64	$ 142.03	$ 147.01	$ 154.01	$ 163.53	$ 160.04	$ 146.78	$ 132.35	$ 116.56	$ 153.15	$ 134.85	$ 127.52	$ 105.11	$ 79.85	$ 51.10					
Total Available Water (without Nickel)	14,940	20,464	14,780	12,680	12,680	12,680	12,679	12,650	12,602	12,534	12,443	12,326	12,182	12,007	11,800	11,558	11,279	10,961	10,600					
Total Estimated Expenditure (Without Nickel or Sit	$ 8,311,950	$ 12,531,614	$ 7,386,633	$ 4,951,985	$ 4,746,350	$ 4,746,350	$ 5,013,395	$ 5,312,168	$ 5,677,583	$ 5,823,839	$ 5,800,118	$ 5,769,793	$ 5,732,251	$ 6,334,878	$ 6,281,061	$ 6,368,186	$ 6,295,639	$ 6,212,808	$ 6,119,078					
Annual Savings without Nickel	$ -	$ -	$ 2,001,026	$ 2,110,662	$ 2,372,934	$ 2,431,270	$ 2,223,978	$ 1,979,502	$ 1,770,207	$ 1,960,392	$ 2,334,494	$ 2,565,628	$ 2,811,024	$ 2,965,575	$ 3,041,691	$ 3,120,089	$ 3,200,840	$ 3,284,013	$ 3,369,682					
Cummulative Savings without Nickel	$ -	$ -	$ 2,001,026	$ 4,111,688	$ 6,484,622	$ 8,915,891	$ 11,139,870	$ 13,119,372	$ 14,889,579	$ 16,849,971	$ 19,184,465	$ 21,750,093	$ 24,561,117	$ 27,526,692	$ 30,568,383	$ 33,688,473	$ 36,889,313	$ 40,173,326	$ 43,543,008					



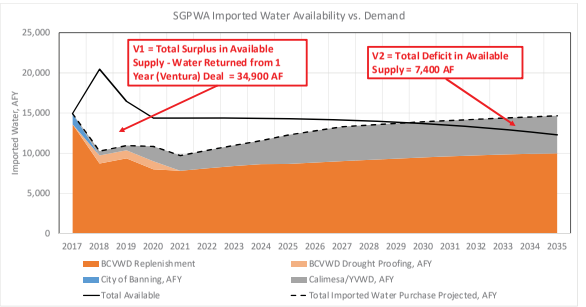


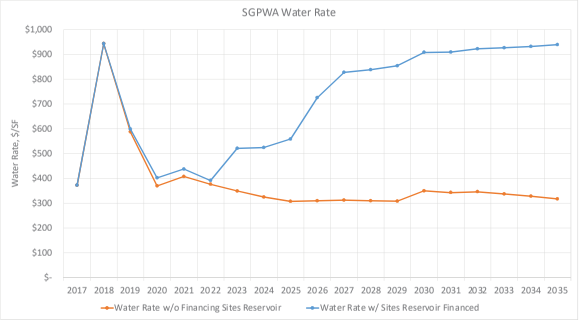


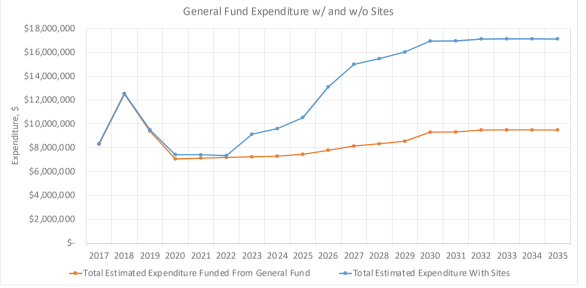
BCVWD

Table 1 - SGPWA Funding Requirements for Administration Operations and Water Supply

Cost Escalation	0%																			
Annual increase in County 1% Tax Revenue	5%																			
EXPENDITURES	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
Current Administration and Operation Costs																				
Salaries and Benefits	$ 725,900																			
Admin and Professional	$ 496,650																			
General Engineering	$ 302,000																			
Legal	$ 200,000																			
Conservation and Education	$ 54,000																			
Subtotal	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	$ 1,778,550	
SBVMWD Pass Through from 2009 Rate Study Escalted 11% using CPI	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	$ 112,000	
Recharge Facility Operation				$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	$ 120,000	
Subtotal	$ 1,890,550	$ 1,890,550	$ 1,890,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	$ 2,010,550	
SGPWA Capital Projects																				
Building/furniture/vehicles	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	
Recharge Facility	$ 2,500,000	$ 3,000,000	$ 2,500,000																	
Subtotal Capital Projects	$ 2,537,000	$ 3,037,000	$ 2,537,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	$ 37,000	
DWR Variable OMP&R Cost/AF	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	$ 260	
SGPWA Imported Water Demand																				
BCVWD for Replenishment, AFY	13,590	8,723	9,366	8,000	7,817	8,123	8,398	8,639	8,652	8,826	9,006	9,173	9,337	9,492	9,606	9,718	9,825	9,930	10,006	
BCVWD Drought Proofing, AFY		1,000	1,000	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
City of Banning, AFY	1,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Calimesa/YVWD, AFY		549	604	1,860	1,900	2,242	2,584	2,927	3,622	3,963	4,305	4,344	4,383	4,422	4,468	4,514	4,560	4,606	4,651	
Subtotal, AFY	14,940	10,272	10,970	10,860	9,716	10,365	10,982	11,566	12,274	12,789	13,311	13,517	13,720	13,914	14,074	14,232	14,385	14,536	14,657	
Imported Water Available																				
Table A with Reduced Reliability until CWF, AFY	14,940	11,214	10,380	10,380	10,380	10,380	10,379	10,350	10,302	10,234	10,143	10,026	9,882	9,707	9,500	9,258	8,979	8,661	8,300	
AVEK Nickel Water, AFY		1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	1,700	
Subtotal SGPWA Must Purchase, AFY	14,940	12,914	12,080	12,080	12,080	12,080	12,079	12,050	12,002	11,934	11,843	11,726	11,582	11,407	11,200	10,958	10,679	10,361	10,000	
Supply Surplus to Storage, (Deficit from Storage), AFY	0	2,642	1,110	1,220	2,364	1,715	1,096	484	(272)	(855)	(1,468)	(1,791)	(2,139)	(2,507)	(2,874)	(3,273)	(3,706)	(4,165)	(4,657)	
Supply Surplus to Storage, (Deficit from Storage) (Without Nickel), AFY	0	2,642	(590)	(480)	664	15	(604)	(1,216)	(1,972)	(2,555)	(3,168)	(3,491)	(3,839)	(4,207)	(4,574)	(4,973)	(5,406)	(5,865)	(6,357)	
Yuba Accord Water Available, AFY		300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300	
Yuba Accord Water Purchased, AFY		300	0	0	0	0	0	0	272	300	300	300	300	300	300	300	300	300	300	
Yuba Accord Water Purchased (Without Nickel), AFY		300	300	300	0	0	300	300	300	300	300	300	300	300	300	300	300	300	300	
SBVMWD Surplus, AFY		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
SBVMWD Surplus Water Purchased, AFY		2,000	0	0	0	0	0	0	0	555	1,168	1,491	1,839	2,000	2,000	2,000	2,000	2,000	2,000	
SBVMWD Surplus Water Purchased (Without Nickel), AFY		2,000	290	180	0	0	304	916	1,672	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
One Year Water Supply Deals		5,250	2,100																	
Total Imported Water Available, not considering CWF or Sites Reservoir, AFY	14,940	20,464	16,480	14,380	14,380	14,380	14,379	14,350	14,302	14,234	14,143	14,026	13,882	13,707	13,500	13,258	12,979	12,661	12,300	
Total Imported Water Purchase Projected, AFY	14,940	10,272	10,970	10,860	9,716	10,365	10,982	11,566	12,274	12,789	13,311	13,517	13,720	13,914	14,074	14,232	14,385	14,526	14,657	
DWR OMP&R Variable Cost For Table A Water	$ 3,884,400	$ 4,280,640	$ 2,698,800	$ 2,698,800	$ 2,698,800	$ 2,698,800	$ 2,698,467	$ 2,690,875	$ 2,678,521	$ 2,660,789	$ 2,637,068	$ 2,606,743	$ 2,569,201	$ 2,523,828	$ 2,470,011	$ 2,407,136	$ 2,334,589	$ 2,251,758	$ 2,158,028	
Unit Costs for Other Than Table A, incl. DWR Variable OMP&R																				
Yuba Accord Water 300 AFY	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	$ 385	
SBVMWD Surplus , 2,000 AFY	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	$ 500	
AVEK Nickel Water, 1,700 AFY, mandatory 3%/year escalation	$ 1,268	$ 1,299	$ 1,330	$ 1,363	$ 1,396	$ 1,430	$ 1,466	$ 1,502	$ 1,539	$ 1,578	$ 1,618	$ 1,659	$ 1,701	$ 1,744	$ 1,789	$ 1,835	$ 1,883	$ 1,932	$ 1,982	
Other Than Table A Cost																				
Yuba Accord Water Purchased	$ -	$ 115,500	$ -	$ -	$ -	$ -	$ -	$ -	$ 104,730	$ 115,500	$ 115,920	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	
SBVMWD Surplus Water Purchased	$ -	$ 1,000,000	$ -	$ -	$ -	$ -	$ -	$ -	$ 277,745	$ 584,219	$ 745,697	$ 919,347	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	
AVEK Nickel Water Purchased	$ -	$ 2,207,924	$ 2,261,310	$ 2,316,297	$ 2,372,934	$ 2,431,270	$ 2,491,356	$ 2,553,244	$ 2,616,990	$ 2,682,647	$ 2,750,273	$ 2,819,931	$ 2,891,677	$ 2,965,575	$ 3,041,691	$ 3,120,089	$ 3,200,840	$ 3,284,013	$ 3,369,682	$ 49,3
Sites OMP&R not including DWR Variable Cost, (From White Paper 3, Table 4)														$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000	
CWF Annual OMP&R, not including DWR Variable Cost (from White Paper 3)																$ 150,000	$ 150,000	$ 150,000	$ 150,000	
Subtotal	$ -	$ 3,323,424	$ 2,261,310	$ 2,316,297	$ 2,372,934	$ 2,431,270	$ 2,491,356	$ 2,553,244	$ 2,721,720	$ 3,075,892	$ 3,449,994	$ 3,681,128	$ 3,926,524	$ 4,729,075	$ 4,805,191	$ 5,033,589	$ 5,114,340	$ 5,197,513	$ 5,283,182	
Total Estimated Expenditure Funded From General Fund	$ 8,311,950	$ 12,531,614	$ 9,387,660	$ 7,062,647	$ 7,119,284	$ 7,177,620	$ 7,237,373	$ 7,291,670	$ 7,447,790	$ 7,784,231	$ 8,134,612	$ 8,335,421	$ 8,543,274	$ 9,300,453	$ 9,322,751	$ 9,488,275	$ 9,496,479	$ 9,496,821	$ 9,488,760	
REVENUES																				
Water Rate, $/AF	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	$317	
Water Sales	$4,735,980	$3,256,230	$3,477,312	$3,442,706	$3,080,097	$3,285,759	$3,481,444	$3,666,424	$3,890,867	$4,054,206	$4,219,590	$4,284,993	$4,349,314	$4,410,741	$4,461,541	$4,511,434	$4,560,073	$4,604,731	$4,646,244	
SGPWA Share of 1% Riverside County Property Tax	$2,267,676	$2,381,060	$2,500,113	$2,625,118	$2,756,374	$2,894,193	$3,038,903	$3,190,848	$3,350,390	$3,517,910	$3,693,805	$3,878,496	$4,072,420	$4,276,041	$4,489,843	$4,714,336	$4,950,052	$5,197,555	$5,457,433	
Investment Interest	$480,000	$460,000	$440,000	$420,000	$400,000	$380,000	$360,000	$340,000	$320,000	$300,000	$280,000	$260,000	$240,000	$220,000	$200,000	$180,000	$160,000	$140,000	$120,000	
Subtotal Unrestricted Income	$7,483,656	$6,097,309	$6,417,465	$6,487,824	$6,236,472	$6,559,952	$6,880,347	$7,197,272	$7,561,257	$7,872,116	$8,193,395	$8,423,489	$8,661,735	$8,906,782	$9,151,385	$9,405,770	$9,670,125	$9,942,286	$10,223,677	
Surplus (Shortfall)	($824,294)	($6,434,304)	($2,970,194)	($574,823)	($882,812)	($617,667)	($357,026)	($94,398)	$113,467	$87,885	$574,782	$586,068	$118,460	($393,671)	($171,367)	($82,505)	$179,646	$445,465	$734,917	
Water Rate for Revenue Neutral Position, $/AF	$ 372.44	$ 941.39	$ 587.77	$ 569.93	$ 457.86	$ 376.59	$ 349.51	$ 325.16	$ 307.76	$ 315.13	$ 332.58	$ 335.48	$ 308.37	$ 330.51	$ 343.38	$ 346.50	$ 337.36	$ 328.52	$ 317.99	
ADDING SITES RESERVOIR (OPTION 1 Pay from Water Rates)																				
Class Two Conversion Cost			$ 126,125																	
Annual Cost, assuming 5.5% line of credit on Phase 2 Cost of $350 million, SGPWA share 0.039				$ 352,940	$ 292,320	$ 155,540														
Phase 3 and 4 Financed, White Paper 3, Table 4							$ 1,890,000	$ 2,310,000	$ 3,080,000	$ 5,320,000	$ 6,860,000	$ 7,140,000	$ 7,490,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	
Total Annual Payment			$ 126,125.00	$352,940	$292,320	$155,540	$ 1,890,000	$ 2,310,000	$ 3,080,000	$ 5,320,000	$ 6,860,000	$ 7,140,000	$ 7,490,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	
Total Estimated Expenditure With Sites	$ 8,311,950	$ 12,531,614	$ 9,513,785	$ 7,415,587	$ 7,411,604	$ 7,331,160	$ 9,127,373	$ 9,601,670	$ 10,527,790	$ 13,104,231	$ 14,994,612	$ 15,475,421	$ 16,033,274	$ 16,944,453	$ 16,966,751	$ 17,132,275	$ 17,140,479	$ 17,140,821	$ 17,132,760	
Water Rate for Revenue Neutral Position, $/AF	$ 372.44	$ 941.39	$ 593.26	$ 422.43	$ 417.94	$ 391.60	$ 521.00	$ 524.88	$ 568.69	$ 726.10	$ 827.95	$ 836.70	$ 854.28	$ 908.18	$ 909.40	$ 923.05	$ 926.90	$ 932.28	$ 933.45	
ADDING SITES RESERVOIR (OPTION 2 Pay entirely from Connection Fee)																				
Class Two Conversion Cost			$ 126,125																	
Annual Cost, assuming 5.5% line of credit on Phase 2 Cost of $350 million, SGPWA share 0.039				$ 352,940	$ 292,320	$ 155,540														
Phase 3 and 4 Financed, White Paper 3, Table 4							$ 1,890,000	$ 2,310,000	$ 3,080,000	$ 5,320,000	$ 6,860,000	$ 7,140,000	$ 7,490,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	$ 7,644,000	
Cumulative Amount Paid			$126,125	$479,065	$771,385	$926,925	$ 2,816,925	$ 5,126,925	$ 8,206,925	$ 13,526,925	$ 20,386,925	$ 27,526,925	$ 35,016,925	$ 42,660,925	$ 50,304,925	$ 57,948,925	$ 65,592,925	$ 73,236,925	$ 80,880,925	
SGPWA Number of New Connections per year	364	676	844	974	1025	940	988	1280	1348	1408	1448	1749	1740	1773	1526	1522	1506	1341	1211	
Cumulative New Connections	364	1040	1885	2859	3884	4823	5812	7091	8440	9848	11297	13336	15110	16635	18157	19663	20904	22115		
Unit Cost per New Connection (adjust)	$ 3,717																			
Annual Connection Revenue		$ 1,353,002.97	$ 2,513,612	$ 3,139,004	$ 3,620,249	$ 3,810,041	$ 3,492,866	$ 3,673,552	$ 4,756,103	$ 5,012,207	$ 5,235,304	$ 6,499,395	$ 6,465,942	$ 6,591,541	$ 5,671,907	$ 5,657,039	$ 5,596,786	$ 4,613,480	$ 4,501,969	
Cumulative Connection Revenue		$ 1,353,003	$ 3,866,615	$ 7,005,619	$ 10,625,868	$ 14,435,910	$ 17,928,776	$ 21,602,328	$ 26,358,431	$ 31,370,638	$ 36,605,941	$ 43,105,336	$ 49,571,278	$ 56,162,819	$ 61,834,726	$ 67,491,765	$ 73,088,551	$ 77,702,031	$ 82,204,000	
Surplus or Shortfall		$ 1,353,003	$ 3,740,490	$ 6,526,914	$ 9,854,483	$ 13,508,985	$ 15,111,851	$ 16,675,403	$ 18,153,506	$ 17,840,713	$ 16,219,016	$ 15,578,411	$ 14,534,333	$ 13,501,894	$ 11,525,801	$ 9,542,840	$ 7,495,626	$ 4,465,106	$ 1,223,075	







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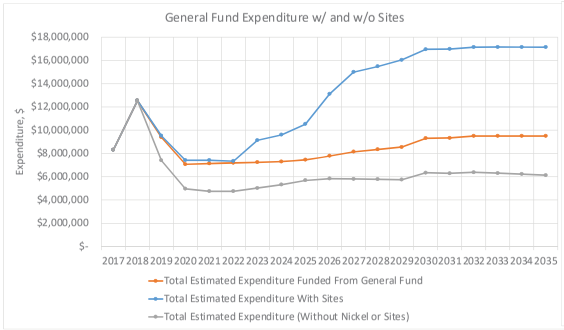
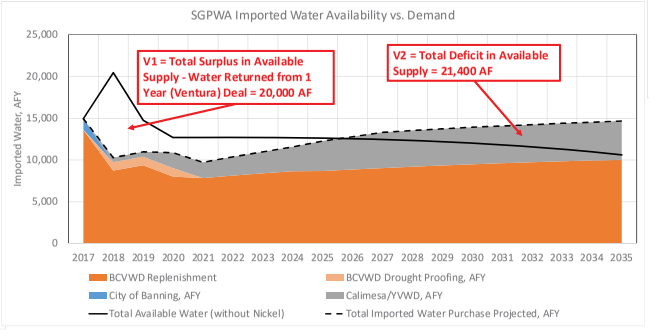
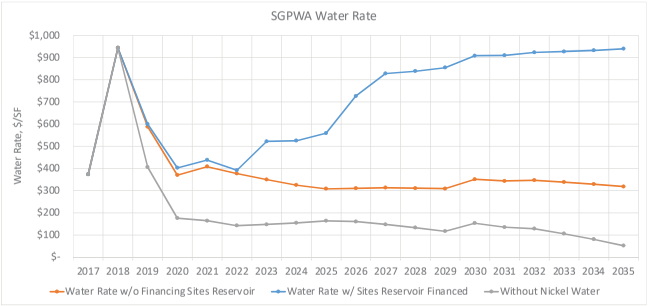
BCVWD

Table 1 (Cont.) - SGPWA Funding Requirements for Administration Operations and Water Supply

ADDING SITES RESERVOIR (OPTION 3 Rate without Nickel Water) Other Than Table A Cost																									
Yuba Accord Water Purchased	$ -	$ 115,500	$ 115,500	$ 115,500	$ -	$ -	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500	$ 115,500
SBVWD Surplus Water Purchased	$ -	$ 1,000,000	$ 144,783	$ 90,135	$ -	$ -	$ 151,877	$ 458,242	$ 836,013	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
AVEK-Nickel Water Purchased	$ -	$ 2,207,924	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Sites OMP&R not including DWR Variable Cost, (from White Paper 3, Table 4)																	$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000	$ 648,000
CWF Annual OMP&R, not including DWR Variable Cost (from White Paper 3)																		$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000
Subtotal	$ -	$ 3,323,424	$ 260,283	$ 205,635	$ -	$ -	$ 267,377	$ 573,742	$ 951,513	$ 1,115,500	$ 1,115,500	$ 1,115,500	$ 1,115,500	$ 1,115,500	$ 1,115,500	$ 1,115,500	$ 1,763,500	$ 1,763,500	$ 1,913,500	$ 1,913,500	$ 1,913,500	$ 1,913,500	$ 1,913,500	$ 1,913,500	$ 1,913,500
Total Estimated Expenditure Funded From General Fund	$ 8,311,950	$ 12,531,614	$ 7,386,633	$ 4,951,985	$ 4,746,350	$ 4,746,350	$ 5,013,395	$ 5,312,168	$ 5,677,588	$ 5,823,839	$ 5,800,118	$ 5,769,793	$ 5,732,251	$ 6,334,878	$ 6,281,061	$ 6,368,186	$ 6,295,639	$ 6,212,808	$ 6,119,078						
Water Rate for Revenue Neutral Position, $/AF	$ 372.44	$ 943.39	$ 405.35	$ 175.58	$ 168.64	$ 142.03	$ 147.01	$ 154.01	$ 163.53	$ 160.04	$ 146.78	$ 132.35	$ 116.56	$ 153.15	$ 134.85	$ 127.52	$ 105.11	$ 79.85	$ 51.10						
Total Available Water (without Nickel)	14,940	20,464	14,780	12,680	12,680	12,680	12,679	12,650	12,602	12,534	12,443	12,326	12,182	12,007	11,800	11,558	11,279	10,961	10,600						
Total Estimated Expenditure (Without Nickel or Sit	$ 8,311,950	$ 12,531,614	$ 7,386,633	$ 4,951,985	$ 4,746,350	$ 4,746,350	$ 5,013,395	$ 5,312,168	$ 5,677,583	$ 5,823,839	$ 5,800,118	$ 5,769,793	$ 5,732,251	$ 6,334,878	$ 6,281,061	$ 6,368,186	$ 6,295,639	$ 6,212,808	$ 6,119,078						
Annual Savings without Nickel	$ -	$ -	$ 2,001,026	$ 2,110,662	$ 2,372,934	$ 2,431,270	$ 2,223,978	$ 1,979,502	$ 1,770,207	$ 1,960,392	$ 2,334,494	$ 2,565,628	$ 2,811,024	$ 2,965,575	$ 3,041,691	$ 3,120,089	$ 3,200,840	$ 3,284,013	$ 3,369,682						
Cummulative Savings without Nickel	$ -	$ -	$ 2,001,026	$ 4,111,688	$ 6,484,622	$ 8,915,891	$ 11,139,870	$ 13,119,372	$ 14,889,579	$ 16,849,971	$ 19,184,465	$ 21,750,093	$ 24,561,117	$ 27,526,692	$ 30,568,383	$ 33,688,473	$ 36,889,313	$ 40,173,326	$ 43,543,008						







Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, CA 92223
951-845-9581
www.bcvwd.org

DATE: September 12, 2018

TO: Dan Jaggers, General Manager

FROM: Joe Reichenberger PE, Senior Engineer

SUBJECT: Updated SGPWA's Imported Water Demands Accounting for BCVWD's Reduced Demands and Sites Reservoir Participation---DRAFT FOR REVIEW

At the recent SGPWA Board Meeting, SGPWA provided an updated estimate of the Agency's imported water demands and supplies based on the imported water demands in their 2015 Urban Water Management Plan (UWMP) and the Agency's new water purchases and projects. Table 2-4, extracted from the Agency's 2015 UWMP is shown below below, which includes the imported water demands of the principal agencies.

TABLE 2-4
PROJECTED WATER DEMANDS ON SGPWA (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD[a]	10,860	12,476	14,087	15,886	17,334
City of Banning[b]	-	501	1,344	2,237	2,718
YVWD[c]	1,809	1,967	2,162	2,391	2,644
Other[d]	500	1,600	2,800	3,900	5,000
Total Water Demands	**13,169**	**16,544**	**20,393**	**24,414**	**27,696**

Source: SGPWA 2015 UMWP

The "other" demands in Table 2-4 are estimates of future demand from agencies within SGPWA service are that do not have current imported water demands on the Agency, including South Mesa Water Company, Cabazon Water District, Banning Heights Mutual Water Company, High Valleys Water District, Mission Springs Water District and Morongo Band of Mission Indians.

BCVWD has revised its water demands since the 2015 UWMP estimates in Table 2-4 above to account for the recent water conservation legislation, the results of studies performed by BCVWD on the water use in some of the new developments, use of City of Beaumont recycled water, and other local water resource projects. In addition, at the time BCVWD's imported water demands were provided to SGPWA for their UWMP, BCVWD had not made a commitment of 4,000 AF participation in Sites Reservoir. As a result the BCVWD demands that were presented by SGPWA at the Board Meeting were significantly higher than BCVWD's current estimated demands. Table 1 below presents BCVWD's adjusted projected demands under various conservation scenarios.

Table 1
Adjusted Projected BCVWD Imported Water Demands (AFY)

Condition	2020	2025	2030	2035	2040
5% Conservation on Existing and New EDUs	9,000	10,652	11,992	12,506	13,000
5% Conservation on Existing EDUs Only	9,003	10,674	12,056	12,632	13,200
No Conservation	9,079	10,940	12,512	13,278	14,000

In Table 1, the year 2040 demands were estimated as the BCVWD "White Paper" demands were only extended to 2035, when California Water Fix and Sites Reservoir would be on line.

The imported demands were based on 0.546 AFY/EDU and included the use of recycled water with a 75% capacity factor (only 75% of available recycled water actually utilized), storm water capture and other local water resources development.

The Sites Reservoir yield is believed to be reduced. SGPWA committed to a 10,000 AF participation; BCVWD committed to 4,000 AF participation. Table 2 shows the projected yield, based on the data provided by SGPWA.

Table 2
Sites Reservoir Yield Under Various Conditions

	Original Participation, AFY	Projected, AFY		
		Average Year (60% Year)	Wet Year (75% Year)	Dry Year (30% Year)
SGPWA	10,000	5,000	8,000	5,000
BCVWD	4,000	2,000	3,200	2,000

A spreadsheet was developed based on SGPWA's presentation, adjusting BCVWD's imported water demands as stated above and adjusting for the new Sites Reservoir yield. Three scenarios were presented by SGPWA:

- Average for the period 2020 to 2040
- Dry Year extending continuous from 2020 to 2040
- Wet Year extending continuous from 2020 to 2040

The latter two scenarios are probably unrealistic. The results of the analysis is summarized in Table 3.

Table 3
Year 2040 Accumulated Volume to or (from) Storage

Water Year Condition for the Entire Period 2020 to 2040	Total Volume of Water to or (from) Storage over the period 2020 to 2040, AF		
	5% Conservation on Existing and New EDUs	5% Conservation on Existing EDUs only	No Conservation
Average Year (60% Year)	45,738	44,170	35,140
Dry Year (30% Year)	(104,988)	(106,555)	(115,585)
Wet Year (75% Year)	245,713	244,145	235,115

As can be seen, under the average condition there would be water accumulating in storage.

The 2015 SWP Delivery Capability Report Table C-25, presented the "Percent of Maximum Table A" from simulations from 1922 to 2003, (81 years of record) based on 2035 development conditions. A 20-year moving average of the "Percent of Maximum Table A", corresponding to any 20-year period from 1922 to 2003, resulted in an average of 63%, a maximum of 73%, and a minimum of 54%. This means that there was no 20-year long period when the average delivery was less than 54%. So considering a 30% delivery capability extending for a period of 20 years may not reasonable. The "average" and "wet year" deliveries are reasonable for the 20-year period.

The conclusions that can be drawn from the analysis are:

- The 60% average delivery in the SGPWA Analysis is close to the 20-year moving average; in fact it is 3% conservative.
- The 73% delivery in the SGPWA Analysis for a "wet year" is also very close to the maximum in the period, so it is possible for a 73% delivery reliability over the 20-year period.
- The lowest average delivery capability over a 20-year period was 54%, not too much below the 60% average. This means the "driest" 20-year period still had an average delivery over the 20-year period of 54%.
- Having a 30% delivery capability over a 20-year has never occurred; but that does not mean it cannot occur. The delivery reliability has only been below an average of 30% for a maximum of 6 years over the 81-year period of analysis.

BCVWD ANALYSIS OF SAN GORGONIO PASS WATER AGENCY SUPPLY AND DEMAND SPREADSHEET
5% CONSERVATION ON EXISTING AND NEW DEMANDS

SGPWA UWMP TABLE 2-4 — **Date: 9/11/2018**

PROJECTED WATER DEMANDS ON SGPWA, AF

Agency Name	2020	2025	2030	2035	2040	Comments
BCVWD (2015 UWMP)	*9,000*	*10,652*	*11,992*	*12,506*	*13,000*	From BCVWD White Paper demands with Recycled Water and other local water resources, etc; 5% Conservation on existing and new demands
BCVWD (Sites Reduction)	*-*	*-*	*-*	*(2,000)*	*(2,000)*	*BCVWD AdJustment for 4,000 AF Sites*
BCVWD (2015 UWMP ADJ)	9,000	10,652	11,992	10,506	11,000	BCVWD Adjusted Water Supply (Sites)
City of Banning	-	501	1,344	2,237	2,718	
YVWD	1,809	1,967	2,162	2,391	2,644	
Other	500	1,600	2,800	3,900	5,000	Other Agency Future Demand Projections
Total Water Demands	**11,309**	**14,720**	**18,298**	**19,034**	**21,362**	

SGPWA AVERAGE YEAR SUPPLY, AF

Source	2020	2025	2030	2035	2040	Comments
Table A	10,380	10,034	9,688	10,380	10,726	Reliability gradually decreases until CWF
Yuba	200	200	200	200	200	This was previously 300 AF
Nickel	1,700	1,700	1,700	1,700	-	Reliability did not change
Muni Surplus	-	-	-	-	-	Assumes none in average years
CWF Incremental	-	-	-	5,000	5,000	This was previously 3,395 AF
Add'l Table A	6,000	5,800	3,000	2,500	2,500	Assumes Partner will start taking water in 2026
Sites	-	-	-	5,000	5,000	this is an estimate for a 10,000 AF yield
Total Supply Available	18,280	17,734	14,588	24,780	23,426	
Supply or Defecit	**6,971**	**3,014**	**(3,710)**	**5,746**	**2,064**	

					Total (AF)	Comments
Water Available for Storage thru period	**24,963**		**5,090**	**19,525**	**49,578**	
Water From Storage thru period		**(1,740)**			**(1,740)**	
Water Exchange Return	**(2,100)**				**(2,100)**	Ventura/Casitas MWD payback only
Total Water to/from Storage over Period if all water is Purchased:					**45,738**	Surplus during average year

Assumptions:

Nickel agreement is not extended for another 20 years
Sites Reservoir is constructed
Cal Water Fix is constructed
Temp. Table A Water is available at full entitlement through 2025
50,000 AF of incremental water is purchaced **(This was previously 35,000 AF)**
No paybackreturn component assumed on Add'l Table A Water

DKJ
9/11/2018
Water Supply Projections_20180912 DKJ from Pass with BCVWD New Demand w Cons New and EX
60% START AVG YR DEMANDS, AF

DRAFT
9/12/2018

BCVWD ANALYSIS OF SAN GORGONIO PASS WATER AGENCY SUPPLY AND DEMAND SPREADSHEET
5% CONSERVATION ON EXISTING AND NEW DEMANDS

SGPWA UWMP TABLE 2-4 — **Date: 9/11/2018**

PROJECTED WATER DEMANDS ON SGPWA, AF

Agency Name	2020	2025	2030	2035	2040	Comments
BCVWD (2015 UWMP)	*9,000*	*10,652*	*11,992*	*12,506*	*13,000*	From BCVWD White Paper demands with Recycled Water and other local water resources, etc; 5% Conservation on existing and new demands
BCVWD (Sites Reduction)	*-*	*-*	*-*	*(3,200)*	*(3,200)*	*BCVWD AdJustment for 4,000 AF Sites*
BCVWD (2015 UWMP ADJ)	9,000	10,652	11,992	9,306	9,800	BCVWD Adjusted Water Supply (Sites)
City of Banning	-	501	1,344	2,237	2,718	
YVWD	1,809	1,967	2,162	2,391	2,644	
Other	500	1,600	2,800	3,900	5,000	Other Agency Future Demand Projections
Total Water Demands	**11,309**	**14,720**	**18,298**	**17,834**	**20,162**	

SGPWA DRY YEAR SUPPLY (30% YEAR), AF

Source	2020	2025	2030	2035	2040	Comments
Table A	5,190	5,190	5,190	5,190	5,190	
Yuba	-	-	-	-	-	None in dry years
Nickel	1,700	1,700	1,700	1,700	-	100% reliable
Muni Surplus	-	-	-	-	-	None in dry years
CWF Incremental	-	-	-	2,000	2,000	This is a wet year supply
Add'l Table A	3,000	2,800	-	-	-	None available in 30% Year
Sites	-	-	-	8,000	8,000	Less losses in dry year
Total Supply Available	9,890	9,690	6,890	16,890	15,190	
Supply or Defecit	**(1,419)**	**(5,030)**	**(11,408)**	**(944)**	**(4,972)**	

	Total (AF)	Comments
Water Available for Storage thru period	-	
Water From Storage thru period	**(102,888)**	
Water Exchange Return	**(2,100)**	Ventura/Casitas MWD payback only
Total Water to/from Storage over Period if all water is Purchased:	**(104,988)**	Not enough water if 30% year for 20 years

Assumptions:

Nickel agreement is not extended for another 20 years
Sites Reservoir is constructed
Cal Water Fix is constructed
Temp. Table A Water is available at full entitlement through 2025
50,000 AF of incremental water is purchaced **(This was previously 35,000 AF)**
No paybackreturn component assumed on Add'l Table A Water

BCVWD ANALYSIS OF SAN GORGONIO PASS WATER AGENCY SUPPLY AND DEMAND SPREADSHEET

5% CONSERVATION ON EXISTING AND NEW DEMANDS

SGPWA UWMP TABLE 2-4 **Date: 9/11/2018**

PROJECTED WATER DEMANDS ON SGPWA, AF

Agency Name	2020	2025	2030	2035	2040	Comments
BCVWD (2015 UWMP)	*9,000*	*10,652*	*11,992*	*12,506*	*13,000*	From BCVWD White Paper demands with Recycled Water and other local water resources, etc; 5% Conservation on existing and new demands
BCVWD (Sites Reduction)	*-*	*-*	*-*	*(2,000)*	*(2,000)*	*BCVWD AdJustment for 4,000 AF Sites*
BCVWD (2015 UWMP ADJ)	9,000	10,652	11,992	10,506	11,000	BCVWD Adjusted Water Supply (Sites)
City of Banning	-	501	1,344	2,237	2,718	
YVWD	1,809	1,967	2,162	2,391	2,644	
Other	500	1,600	2,800	3,900	5,000	Other Agency Future Demand Projections
Total Water Demands	**11,309**	**14,720**	**18,298**	**19,034**	**21,362**	

SGPWA WET YEAR SUPPLY (75% YEAR), AF

Source	2020	2025	2030	2035	2040	Comments
Table A	12,975	12,975	12,975	12,975	12,975	
Yuba	200	200	200	200	200	Same as average year
Nickel	1,700	1,700	1,700	1,700	-	assumes we do not renew
Muni Surplus	-	5,000	5,000	5,000	5,000	very likely to be a surplus
CWF Incremental	-	-	-	10,000	10,000	only 2000 in a dry year
Add'l Table A	6,000	5,800	4,500	4,000	4,000	Even with new infrastructure
Sites	-	-	-	5,000	5,000	Best guess at losses in a dry year
Total Supply Available	20,875	25,675	24,375	38,875	37,175	
Supply or Defecit	**9,566**	**10,955**	**6,077**	**19,841**	**15,813**	

					Total (AF)	Comments
Water Available for Storage thru period	**51,303**	**42,580**	**64,795**	**89,135**	**247,813**	
Water From Storage thru period						
Water Exchange Return	**(2,100)**				**(2,100)**	Ventura/Casitas MWD payback only
Total Water to/from Storage over Period if all water is Purchased:					**245,713**	Supply greater than demand

Note: EBX can only pump max of 34,000 AF max through Cherry Valley Pump Station

Assumptions:

Nickel agreement is not extended for another 20 years
Sites Reservoir is constructed
Cal Water Fix is constructed
Temp. Table A Water is available at full entitlement through 2025
50,000 AF of incremental water is purchaced **(This was previously 35,000 AF)**
No paybackreturn component assumed on Add'l Table A Water

BEAUMONT-CHERRY VALLEY WATER DISTRICT

BCVWD ANALYSIS OF SAN GORGONIO PASS WATER AGENCY SUPPLY AND DEMAND SPREADSHEET
5% CONSERVATION ON EXISTING DEMANDS ONLY

SGPWA UWMP TABLE 2-4 — **Date: 9/11/2018**

PROJECTED WATER DEMANDS ON SGPWA, AF

Agency Name	2020	2025	2030	2035	2040	Comments
BCVWD (2015 UWMP)	*9,003*	*10,674*	*12,056*	*12,632*	*13,200*	From BCVWD White Paper demands with Recycled Water and other local water resources, etc; 5% Conservation on existing demands only
BCVWD (Sites Reduction)	*-*	*-*	*-*	*(2,000)*	*(2,000)*	*BCVWD AdJustment for 4,000 AF Sites*
BCVWD (2015 UWMP ADJ)	9,003	10,674	12,056	10,632	11,200	BCVWD Adjusted Water Supply (Sites)
City of Banning	-	501	1,344	2,237	2,718	
YVWD	1,809	1,967	2,162	2,391	2,644	
Other	500	1,600	2,800	3,900	5,000	Other Agency Future Demand Projections
Total Water Demands	**11,312**	**14,742**	**18,362**	**19,160**	**21,562**	

SGPWA AVERAGE YEAR SUPPLY, AF

Source	2020	2025	2030	2035	2040	Comments
Table A	10,380	10,034	9,688	10,380	10,726	Reliability gradually decreases until CWF
Yuba	200	200	200	200	200	This was previously 300 AF
Nickel	1,700	1,700	1,700	1,700	-	Reliability did not change
Muni Surplus	-	-	-	-	-	Assumes none in average years
CWF Incremental	-	-	-	5,000	5,000	This was previously 3,395 AF
Add'l Table A	6,000	5,800	3,000	2,500	2,500	Assumes Partner will start taking water in 2026
Sites	-	-	-	5,000	5,000	this is an estimate for a 10,000 AF yield
Total Supply Available	18,280	17,734	14,588	24,780	23,426	
Supply or Defecit	**6,968**	**2,992**	**(3,774)**	**5,620**	**1,864**	

					Total (AF)	Comments
Water Available for Storage thru period	**24,900**		**4,615**	**18,710**	**48,225**	
Water From Storage thru period		**(1,955)**			**(1,955)**	
Water Exchange Return	**(2,100)**				**(2,100)**	Ventura/Casitas MWD payback only
Total Water to/from Storage over Period if all water is Purchased:					**44,170**	Surplus during average year

Assumptions:

Nickel agreement is not extended for another 20 years
Sites Reservoir is constructed
Cal Water Fix is constructed
Temp. Table A Water is available at full entitlement through 2025
50,000 AF of incremental water is purchaced **(This was previously 35,000 AF)**
No paybackreturn component assumed on Add'l Table A Water

DKJ
9/11/2018
Water Supply Projections_20180912 DKJ from Pass with BCVWD New Demand w Cons Ex Only
60% START AVG YR DEMANDS, AF

DRAFT
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BCVWD ANALYSIS OF SAN GORGONIO PASS WATER AGENCY SUPPLY AND DEMAND SPREADSHEET
5% CONSERVATION ON EXISTING DEMANDS ONLY

SGPWA UWMP TABLE 2-4 — **Date: 9/11/2018**

PROJECTED WATER DEMANDS ON SGPWA, AF

Agency Name	2020	2025	2030	2035	2040	Comments
BCVWD (2015 UWMP)	*9,003*	*10,674*	*12,056*	*12,632*	*13,200*	From BCVWD White Paper demands with Recycled Water and other local water resources, etc; 5% Conservation on existing demands only
BCVWD (Sites Reduction)	*-*	*-*	*-*	*(3,200)*	*(3,200)*	*BCVWD AdJustment for 4,000 AF Sites*
BCVWD (2015 UWMP ADJ)	9,003	10,674	12,056	9,432	10,000	BCVWD Adjusted Water Supply (Sites)
City of Banning	-	501	1,344	2,237	2,718	
YVWD	1,809	1,967	2,162	2,391	2,644	
Other	500	1,600	2,800	3,900	5,000	Other Agency Future Demand Projections
Total Water Demands	**11,312**	**14,742**	**18,362**	**17,960**	**20,362**	

SGPWA DRY YEAR SUPPLY (30% YEAR), AF

Source	2020	2025	2030	2035	2040	Comments
Table A	5,190	5,190	5,190	5,190	5,190	
Yuba	-	-	-	-	-	None in dry years
Nickel	1,700	1,700	1,700	1,700	-	100% reliable
Muni Surplus	-	-	-	-	-	None in dry years
CWF Incremental	-	-	-	2,000	2,000	This is a wet year supply
Add'l Table A	3,000	2,800	-	-	-	None available in 30% Year
Sites	-	-	-	8,000	8,000	Less losses in dry year
Total Supply Available	9,890	9,690	6,890	16,890	15,190	
Supply or Defecit	**(1,422)**	**(5,052)**	**(11,472)**	**(1,070)**	**(5,172)**	

	Total (AF)	Comments
Water Available for Storage thru period	-	
Water From Storage thru period	**(104,455)**	
Water Exchange Return	**(2,100)**	Ventura/Casitas MWD payback only
Total Water to/from Storage over Period if all water is Purchased:	**(106,555)**	Not enough water if 30% year for 20 years

Assumptions:

Nickel agreement is not extended for another 20 years
Sites Reservoir is constructed
Cal Water Fix is constructed
Temp. Table A Water is available at full entitlement through 2025
50,000 AF of incremental water is purchaced **(This was previously 35,000 AF)**
No paybackreturn component assumed on Add'l Table A Water

BCVWD ANALYSIS OF SAN GORGONIO PASS WATER AGENCY SUPPLY AND DEMAND SPREADSHEET
5% CONSERVATION ON EXISTING DEMANDS ONLY

SGPWA UWMP TABLE 2-4 — **Date: 9/11/2018**

PROJECTED WATER DEMANDS ON SGPWA, AF

Agency Name	2020	2025	2030	2035	2040	Comments
BCVWD (2015 UWMP)	*9,003*	*10,674*	*12,056*	*12,632*	*13,200*	From BCVWD White Paper demands with Recycled Water and other local water resources, etc; 5% Conservation on existing demands only
BCVWD (Sites Reduction)	*-*	*-*	*-*	*(2,000)*	*(2,000)*	*BCVWD AdJustment for 4,000 AF Sites*
BCVWD (2015 UWMP ADJ)	9,003	10,674	12,056	10,632	11,200	BCVWD Adjusted Water Supply (Sites)
City of Banning	-	501	1,344	2,237	2,718	
YVWD	1,809	1,967	2,162	2,391	2,644	
Other	500	1,600	2,800	3,900	5,000	Other Agency Future Demand Projections
Total Water Demands	**11,312**	**14,742**	**18,362**	**19,160**	**21,562**	

SGPWA WET YEAR SUPPLY (75% YEAR), AF

Source	2020	2025	2030	2035	2040	Comments
Table A	12,975	12,975	12,975	12,975	12,975	
Yuba	200	200	200	200	200	Same as average year
Nickel	1,700	1,700	1,700	1,700	-	assumes we do not renew
Muni Surplus	-	5,000	5,000	5,000	5,000	very likely to be a surplus
CWF Incremental	-	-	-	10,000	10,000	only 2000 in a dry year
Add'l Table A	6,000	5,800	4,500	4,000	4,000	Even with new infrastructure
Sites	-	-	-	5,000	5,000	Best guess at losses in a dry year
Total Supply Available	20,875	25,675	24,375	38,875	37,175	
Supply or Defecit	**9,563**	**10,933**	**6,013**	**19,715**	**15,613**	

					Total (AF)	Comments
Water Available for Storage thru period	**51,240**	**42,365**	**64,320**	**88,320**	**246,245**	
Water From Storage thru period						
Water Exchange Return	**(2,100)**				**(2,100)**	Ventura/Casitas MWD payback only
Total Water to/from Storage over Period if all water is Purchased:					**244,145**	Supply greater than demand

Note: EBX can only pump max of 34,000 AF max through Cherry Valley Pump Station

Assumptions:

Nickel agreement is not extended for another 20 years
Sites Reservoir is constructed
Cal Water Fix is constructed
Temp. Table A Water is available at full entitlement through 2025
50,000 AF of incremental water is purchaced **(This was previously 35,000 AF)**
No paybackreturn component assumed on Add'l Table A Water

BEAUMONT-CHERRY VALLEY WATER DISTRICT

BCVWD ANALYSIS OF SAN GORGONIO PASS WATER AGENCY SUPPLY AND DEMAND SPREADSHEET

NO CONSERVATION

SGPWA UWMP TABLE 2-4 **Date: 9/11/2018**

PROJECTED WATER DEMANDS ON SGPWA, AF

Agency Name	2020	2025	2030	2035	2040	Comments
BCVWD (2015 UWMP)	*9,079*	*10,940*	*12,512*	*13,278*	*14,000*	From BCVWD White Paper demands with Recycled Water and other local water resources, etc; No Conservation
BCVWD (Sites Reduction)	*-*	*-*	*-*	*(2,000)*	*(2,000)*	*BCVWD AdJustment for 4,000 AF Sites*
BCVWD (2015 UWMP ADJ)	9,079	10,940	12,512	11,278	12,000	BCVWD Adjusted Water Supply (Sites)
City of Banning	-	501	1,344	2,237	2,718	
YVWD	1,809	1,967	2,162	2,391	2,644	
Other	500	1,600	2,800	3,900	5,000	Other Agency Future Demand Projections
Total Water Demands	**11,388**	**15,008**	**18,818**	**19,806**	**22,362**	

SGPWA AVERAGE YEAR SUPPLY, AF

Source	2020	2025	2030	2035	2040	Comments
Table A	10,380	10,034	9,688	10,380	10,726	Reliability gradually decreases until CWF
Yuba	200	200	200	200	200	This was previously 300 AF
Nickel	1,700	1,700	1,700	1,700	-	Reliability did not change
Muni Surplus	-	-	-	-	-	Assumes none in average years
CWF Incremental	-	-	-	5,000	5,000	This was previously 3,395 AF
Add'l Table A	6,000	5,800	3,000	2,500	2,500	Assumes Partner will start taking water in 2026
Sites	-	-	-	5,000	5,000	this is an estimate for a 10,000 AF yield
Total Supply Available	18,280	17,734	14,588	24,780	23,426	
Supply or Defecit	**6,892**	**2,726**	**(4,230)**	**4,974**	**1,064**	

					Total (AF)	Comments
Water Available for Storage thru period	**24,045**		**1,860**	**15,095**	**41,000**	
Water From Storage thru period		**(3,760)**			**(3,760)**	
Water Exchange Return	**(2,100)**				**(2,100)**	Ventura/Casitas MWD payback only
Total Water to/from Storage over Period if all water is Purchased:					**35,140**	Surplus during average year

Assumptions:

Nickel agreement is not extended for another 20 years
Sites Reservoir is constructed
Cal Water Fix is constructed
Temp. Table A Water is available at full entitlement through 2025
50,000 AF of incremental water is purchaced **(This was previously 35,000 AF)**
No paybackreturn component assumed on Add'l Table A Water

DKJ
9/11/2018
Water Supply Projections_20180912 DKJ from Pass with BCVWD New Demand w No Cons
60% START AVG YR DEMANDS, AF

DRAFT
9/12/2018

BCVWD ANALYSIS OF SAN GORGONIO PASS WATER AGENCY SUPPLY AND DEMAND SPREADSHEET
NO CONSERVATION

SGPWA UWMP TABLE 2-4 — **Date: 9/11/2018**

PROJECTED WATER DEMANDS ON SGPWA, AF

Agency Name	2020	2025	2030	2035	2040	Comments
BCVWD (2015 UWMP)	*9,079*	*10,940*	*12,512*	*13,278*	*14,000*	From BCVWD White Paper demands with Recycled Water and other local water resources, etc; No Conservation
BCVWD (Sites Reduction)	*-*	*-*	*-*	*(3,200)*	*(3,200)*	*BCVWD AdJustment for 4,000 AF Sites*
BCVWD (2015 UWMP ADJ)	9,079	10,940	12,512	10,078	10,800	BCVWD Adjusted Water Supply (Sites)
City of Banning	-	501	1,344	2,237	2,718	
YVWD	1,809	1,967	2,162	2,391	2,644	
Other	500	1,600	2,800	3,900	5,000	Other Agency Future Demand Projections
Total Water Demands	**11,388**	**15,008**	**18,818**	**18,606**	**21,162**	

SGPWA DRY YEAR SUPPLY (30% YEAR), AF

Source	2020	2025	2030	2035	2040	Comments
Table A	5,190	5,190	5,190	5,190	5,190	
Yuba	-	-	-	-	-	None in dry years
Nickel	1,700	1,700	1,700	1,700	-	100% reliable
Muni Surplus	-	-	-	-	-	None in dry years
CWF Incremental	-	-	-	2,000	2,000	This is a wet year supply
Add'l Table A	3,000	2,800	-	-	-	None available in 30% Year
Sites	-	-	-	8,000	8,000	Less losses in dry year
Total Supply Available	9,890	9,690	6,890	16,890	15,190	
Supply or Defecit	**(1,498)**	**(5,318)**	**(11,928)**	**(1,716)**	**(5,972)**	

					Total (AF)	Comments
Water Available for Storage thru period					-	
Water From Storage thru period	**(17,040)**	**(43,115)**	**(34,110)**	**(19,220)**	**(113,485)**	
Water Exchange Return	**(2,100)**				**(2,100)**	Ventura/Casitas MWD payback only
Total Water to/from Storage over Period if all water is Purchased:					**(115,585)**	Not enough water if 30% year for 20 years

Assumptions:

Nickel agreement is not extended for another 20 years
Sites Reservoir is constructed
Cal Water Fix is constructed
Temp. Table A Water is available at full entitlement through 2025
50,000 AF of incremental water is purchaced **(This was previously 35,000 AF)**
No paybackreturn component assumed on Add'l Table A Water

BCVWD ANALYSIS OF SAN GORGONIO PASS WATER AGENCY SUPPLY AND DEMAND SPREADSHEET
NO CONSERVATION

SGPWA UWMP TABLE 2-4 — **Date: 9/11/2018**

PROJECTED WATER DEMANDS ON SGPWA, AF

Agency Name	2020	2025	2030	2035	2040	Comments
BCVWD (2015 UWMP)	*9,079*	*10,940*	*12,512*	*13,278*	*14,000*	From BCVWD White Paper demands with Recycled Water and other local water resources, etc; No Conservation
BCVWD (Sites Reduction)	*-*	*-*	*-*	*(2,000)*	*(2,000)*	*BCVWD AdJustment for 4,000 AF Sites*
BCVWD (2015 UWMP ADJ)	9,079	10,940	12,512	11,278	12,000	BCVWD Adjusted Water Supply (Sites)
City of Banning	-	501	1,344	2,237	2,718	
YVWD	1,809	1,967	2,162	2,391	2,644	
Other	500	1,600	2,800	3,900	5,000	Other Agency Future Demand Projections
Total Water Demands	**11,388**	**15,008**	**18,818**	**19,806**	**22,362**	

SGPWA WET YEAR SUPPLY (75% YEAR), AF

Source	2020	2025	2030	2035	2040	Comments
Table A	12,975	12,975	12,975	12,975	12,975	
Yuba	200	200	200	200	200	Same as average year
Nickel	1,700	1,700	1,700	1,700	-	assumes we do not renew
Muni Surplus	-	5,000	5,000	5,000	5,000	very likely to be a surplus
CWF Incremental	-	-	-	10,000	10,000	only 2000 in a dry year
Add'l Table A	6,000	5,800	4,500	4,000	4,000	Even with new infrastructure
Sites	-	-	-	5,000	5,000	Best guess at losses in a dry year
Total Supply Available	20,875	25,675	24,375	38,875	37,175	
Supply or Defecit	**9,487**	**10,667**	**5,557**	**19,069**	**14,813**	

					Total (AF)	Comments
Water Available for Storage thru period	**50,385**	**40,560**	**61,565**	**84,705**	**237,215**	
Water From Storage thru period						
Water Exchange Return	**(2,100)**				**(2,100)**	Ventura/Casitas MWD payback only
Total Water to/from Storage over Period if all water is Purchased:					**235,115**	Supply greater than demand

Note: EBX can only pump max of 34,000 AF max through Cherry Valley Pump Station

Assumptions:

Nickel agreement is not extended for another 20 years
Sites Reservoir is constructed
Cal Water Fix is constructed
Temp. Table A Water is available at full entitlement through 2025
50,000 AF of incremental water is purchaced **(This was previously 35,000 AF)**
No paybackreturn component assumed on Add'l Table A Water

Exhibit 1

San Gorgonio Pass Water Agency

Updated Imported Water Demands and Supplies

Provided at SGPWA September 10, 2018 Engineering Workshop

	A	B	C	D	E	F	G	H	I
1				UWMP Demands, AF					
2									
3			2020	2025	2030	2035	2040		
4									
5			13,169	16,544	20,393	24,414	27,696		
6									
7				Average Supply, AF					
8									
9		Source	2020	2025	2030	2035	2040		Comments
10		Table A	10,380	10,034	9,688	10,726	10,726		Reliability gradually decreases until CWF
11									
12		Yuba	200	200	200	200	200		This was previously 300 AF
13									
14		Nickel	1700	1700	1700	1700	0		Reliability does not change
15									
16		Muni surplus	0	0	0	0	0		Assume none in average years
17									
18		CWF Incremental	0	0	0	5000	5000		This was previously 3395 AF.
19									
20		Add'l Table A	6000	5800	3000	2500	2500		Assumes partner will start taking water in 2026
21									
22		Sites	0	0	0	5,000	5,000		This is an estimate for a 10,000 AF yield
23									
24		Other (TBD)	0	0	5,805	0	4,270		Additional supplies needed
25									
26			18,280	17,734	20,393	25,126	27,696		
27									
28		Assumptions:							
29		Nickel agreement is not extended for another 20 years.							
30		Sites Reservoir is constructed.							
31		Cal Water Fix is constructed.							
32		Temp Table A water is available at full entitlement through 2025							
33		50,000 AF of incremental water is purchased.				This was previously 35,000 AF.			

			UWMP Demands, AF				
		2020	2025	2030	2035	2040	
		13169	16544	20393	24414	27696	
				DRY YEAR			
	Source	2020	2025	2030	2035	2040	Comments
30%	Table A	5190	5190	5190	5190	5190	
	Yuba	0	0	0	0	0	None in dry years
	Nickel	1700	1700	1700	1700	0	100% reliable
	Muni surplus	0	0	0	0	0	None in dry years
	CWF Incremental	0	0	0	2000	2000	This is a wet year supply
	Add'l Table A	6000	5800	0	0	0	None available in 30% year
	Sites	0	0	0	8000	8000	Less losses in dry years
	Other (TBD)	279	3854	13503	7524	12506	Additional supplies needed
		13169	16544	20393	24414	27696	

			UWMP Demands, AF				
		2020	2025	2030	2035	2040	
		13169	16544	20393	24414	27696	
				WET YEAR			
	Source	2020	2025	2030	2035	2040	Comments
75%	Table A	12,975	12,975	12,975	12,975	12,975	
	Yuba	200	200	200	200	200	Same as in average years
	Nickel	1700	1700	1700	1700	0	Assumes we do not renew
	Muni surplus	0	5000	5000	5000	5000	Very likely to be a surplus
	CWF Incremental	0	0	0	10,000	10,000	Only 2000 in a dry year
	Add'l Table A	6000	5800	4500	4000	4000	Even with new infrastructure
	Sites	0	0	0	5000	5000	Best guess at losses in a dry year
	Other (TBD)						No additional water needed
		20,875	25,675	24,375	38,875	37,175	
	Surplus	7,706	9,131	3,982	14,461	9,479	Lots of surplus water to store
	Note: EBX can pump about 34,000 AFY max						

Attachment C

Notice of Exemption Filed with the Riverside County Clerk

NOTICE OF EXEMPTION

TO:	FROM: Beaumont-Cherry Valley Water District (Public Agency) 560 Magnolia Avenue Beaumont, CA 92223-2258
☐ Office of Planning and Research P. O. Box 3044, Room 113 Sacramento, CA 95812-3044	
Clerk of the Board of Supervisors or ☒ County Clerk County of: Riverside 2720 Gateway Drive Riverside, CA 92507	

1.	Project Title:	Annexation of Parcel Map No. 28348 to the Beaumont Cherry Valley Water District
2.	Project Applicant:	Israel Levy 15862 Vincennes St., North Hills, CA 91343
3.	Project Location – Identify street address and cross streets or attach a map showing project site (preferably a USGS 15' or 7 1/2' topographical map identified by quadrangle name):	The project site encompasses approximately 30.25 acres south of Fourth Street east of Risco Circle and west of Vielle Avenue. (See Figure 1 – Project Area.) The project site is located in the north half of the southwest quarter of Section 9, Township 3 South, Range 1 West. San Bernardino Base and Meridian. (See Figure 2 – USGS Map.)
4.	(a) Project Location – City:	Beaumont
	(b) Project Location – County:	Riverside
5.	Description of nature, purpose, and beneficiaries of Project:	The project is the annexation of the territory within Parcel Map 28348 to the Beaumont Cherry Valley Water District.
6.	Name of Public Agency approving project:	Beaumont Cherry Valley Water District
7.	Name of Person or Agency undertaking the project, including any person undertaking an activity that receives financial assistance from the Public Agency as part of the activity or the person receiving a lease, permit, license, certificate, or other entitlement of use from the Public Agency as part of the activity:	Beaumont Cherry Valley Water District
8.	Exempt status: (check one)	
	(a) ☐ Ministerial project.	
	(b) ☐ Not a project.	
	(c) ☐ Emergency Project.	
	(d) ☐ Categorical Exemption. State type and section number:	
	(e) ☐ Declared Emergency.	

	(f) ☐ Statutory Exemption. State Code section number:	
	(g) ☒ Other. Explanation:	The Project falls under CEQA's "General Rule" Exemption per CEQA Guidelines Section 15061(b)(3), which states: *The activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.* The change in the jurisdictional boundaries of BCVWD will not in and of itself result in any physical change in the environment. BCVWD does not have land use authority. Land use authority rests with the City of Beaumont for the area proposed for Annexation. Further, the construction and operation of the parking lot for Randolph Foods at 929 4th Street (City of Beaumont Plot Plan PP2018-0094), which is the only new development within PM 28348, was determined to be exempt from CEQA by the City of Beaumont Planning Commission on May 8, 2018. Additionally, there have been no entitlement applications submitted or development proposed for the remaining parcels in PM 28348. Finally, no additional water or wastewater facilities are proposed or needed to serve the annexation area.
9.	Reason why project was exempt:	The proposed annexation is an adjustment of jurisdictional boundaries and as such will not result in any change in the environment. The City of Beaumont has land use authority and would be responsible for preparing CEQA documents for any future development within the annexation area. No additional water or wastewater facilities are proposed or needed to serve the annexation area.
10.	Lead Agency Contact Person: Telephone:	Daniel K. Jaggers (951) 845-9581
11.	If filed by applicant: Attach Preliminary Exemption Assessment (Form "A") before filing.	
12.	Has a Notice of Exemption been filed by the public agency approving the project? Yes ☒ No ☐	
13.	Was a public hearing held by the lead agency to consider the exemption? Yes ☒ No ☐ If yes, the date of the public hearing was: _____	

Signature:_____ Date:_____

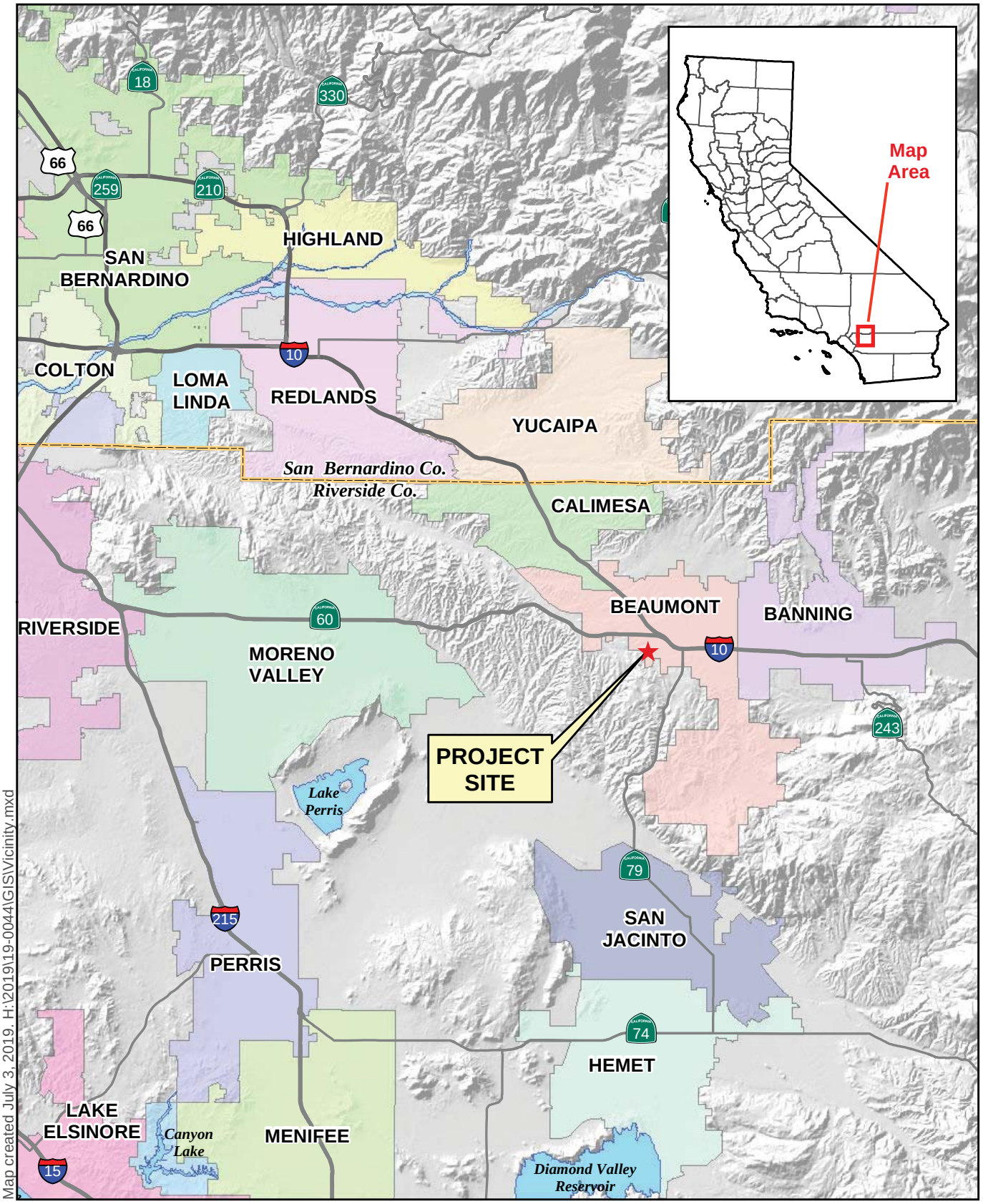
Title:___Daniel, K, Jaggers, General Manager

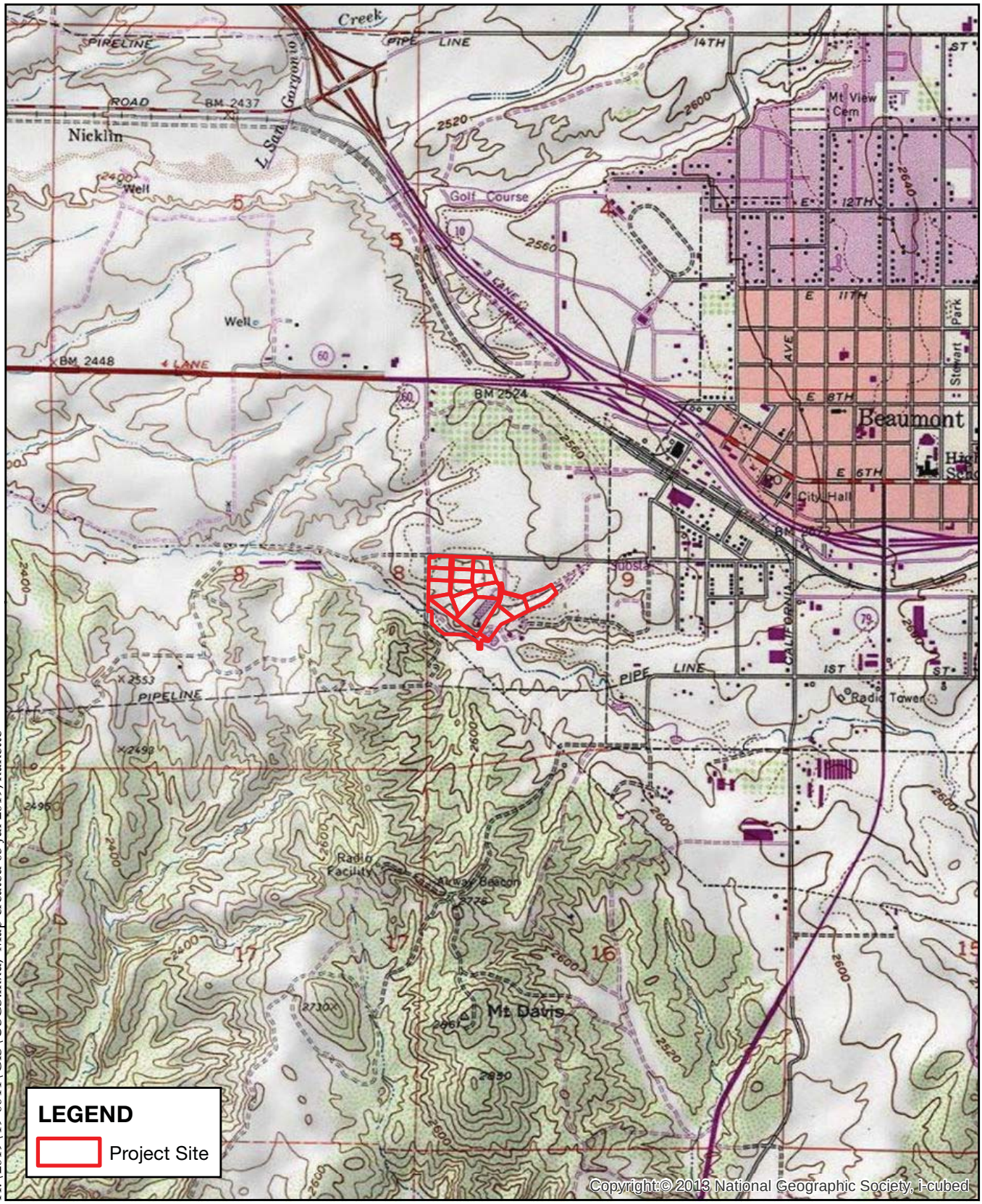
☒ Signed by Lead Agency ☐ Signed by Applicant

Date Received for Filing: _____

(Clerk Stamp Here)

Authority cited: Sections 21083 and 21100, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.


Map Area
18
330
66
259
210
66
HIGHLAND
SAN BERNARDINO
10
COLTON
LOMA LINDA
REDLANDS
YUCAIPA
San Bernardino Co.
Riverside Co.
CALIMESA
BEAUMONT
BANNING
RIVERSIDE
60
MORENO VALLEY
10
243
PROJECT SITE
Lake Perris
79
SAN JACINTO
215
PERRIS
74
HEMET
LAKE ELSINORE
Canyon Lake
MENIFEE
15
Diamond Valley Reservoir
Map created July 3, 2019, H:\201919-0044\GIS\Vicinity.mxd
0 2 4 6 Miles
Annexation of PM 28348 to BCVWD
ALBERT A. WEBB ASSOCIATES



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Sources: ESRI / USGS 7.5min Quad
DRGs: BEAUMONT / EL CASCO

0 1,000 2,000 3,000 Feet

Figure 2 - USGS Map
Annexation of PM 28348 to BCVWD

ALBERT A. WEBB ASSOCIATES

PRELIMINARY EXEMPTION ASSESSMENT

(Certificate of Determination
When Attached to Notice of Exemption)

1.	Name or description of project:	Annexation of Parcel Map No. 28348 to the Beaumont Cherry Valley Water District
2.	Project Location – Identify street address and cross streets or attach a map showing project site (preferably a USGS 15' or 7 1/2' topographical map identified by quadrangle name):	The project site encompasses approximately 30.25 acres south of Fourth Street east of Risco Circle and west of Veile Avenue. (See **Figure 1 – Project Area**.) The project site is located in the north half of the southwest quarter of Section 9, Township 3 South, Range 1 West. San Bernardino Base and Meridian. (See **Figure 2 – USGS Map**.)
3.	Entity or person undertaking project:	Beaumont Cherry Valley Water District 560 Magnolia Avenue Beaumont, CA 92223-2258

4. Staff Determination:

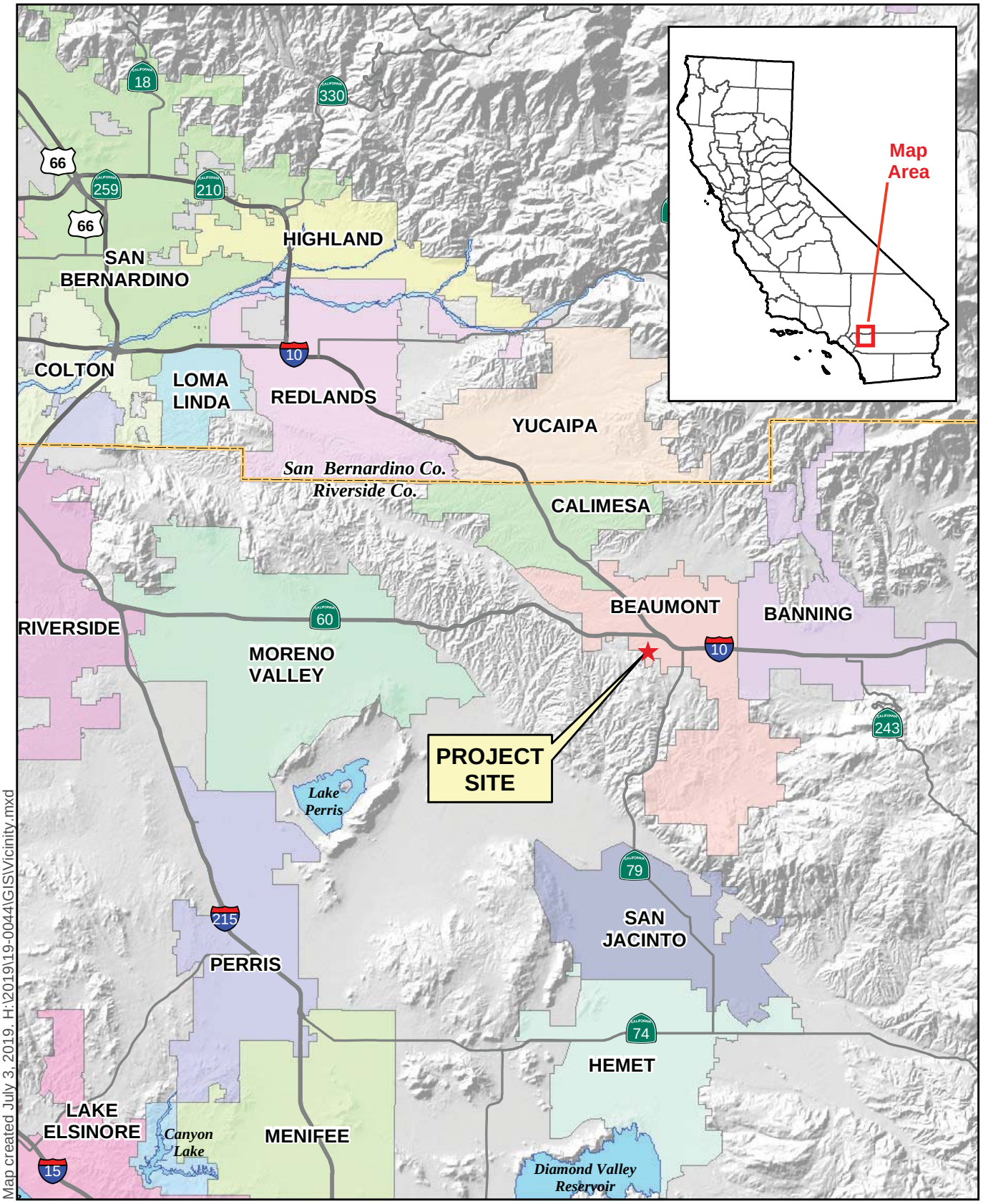
The Lead Agency's Staff, having undertaken and completed a preliminary review of this project in accordance with the Lead Agency's "Local Guidelines for Implementing the California Environmental Quality Act (CEQA)" has concluded that this project does not require further environmental assessment because:

a.	☐	The proposed action does not constitute a project under CEQA.	
b.	☐	The project is a Ministerial Project.	
c.	☐	The project is an Emergency Project.	
d.	☐	The project constitutes a feasibility or planning study.	
e.	☐	The project is categorically exempt.	
		Applicable Exemption Class:	
f.	☐	The project is statutorily exempt.	
		Applicable Exemption:	
g.	☒	The project is otherwise exempt on the following basis:	The Project falls under CEQA's "General Rule Exemption per CEQA Guidelines Section 15061(b)(3), which states: *The activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.* The change in the jurisdictional boundaries of BCVWD will not in and of itself result in any physical change in the environment. BCVWD does not have land use authority. Land use authority rests with the City of Beaumont for the area proposed for Annexation. Further, the construction and operation of the parking lot for Randolph Foods at 929 4th Street (City of Beaumont Plot Plan PP2018-0094), which is the only new development within PM 28348, was determined to be exempt from CEQA by the City of Beaumont Planning Commission on May 8, 2018. Additionally, there have been no entitlement applications submitted or development proposed for the remaining parcels in PM 28348. Finally, no additional water or wastewater facilities are proposed or needed to serve the annexation area.

h. ☐	The project involves another public agency which constitutes the Lead Agency.	
	Name of Lead Agency:	

Date: _____ Staff: _____

Daniel K. Jaggers, General Manager
Beaumont Cherry Valley Water District

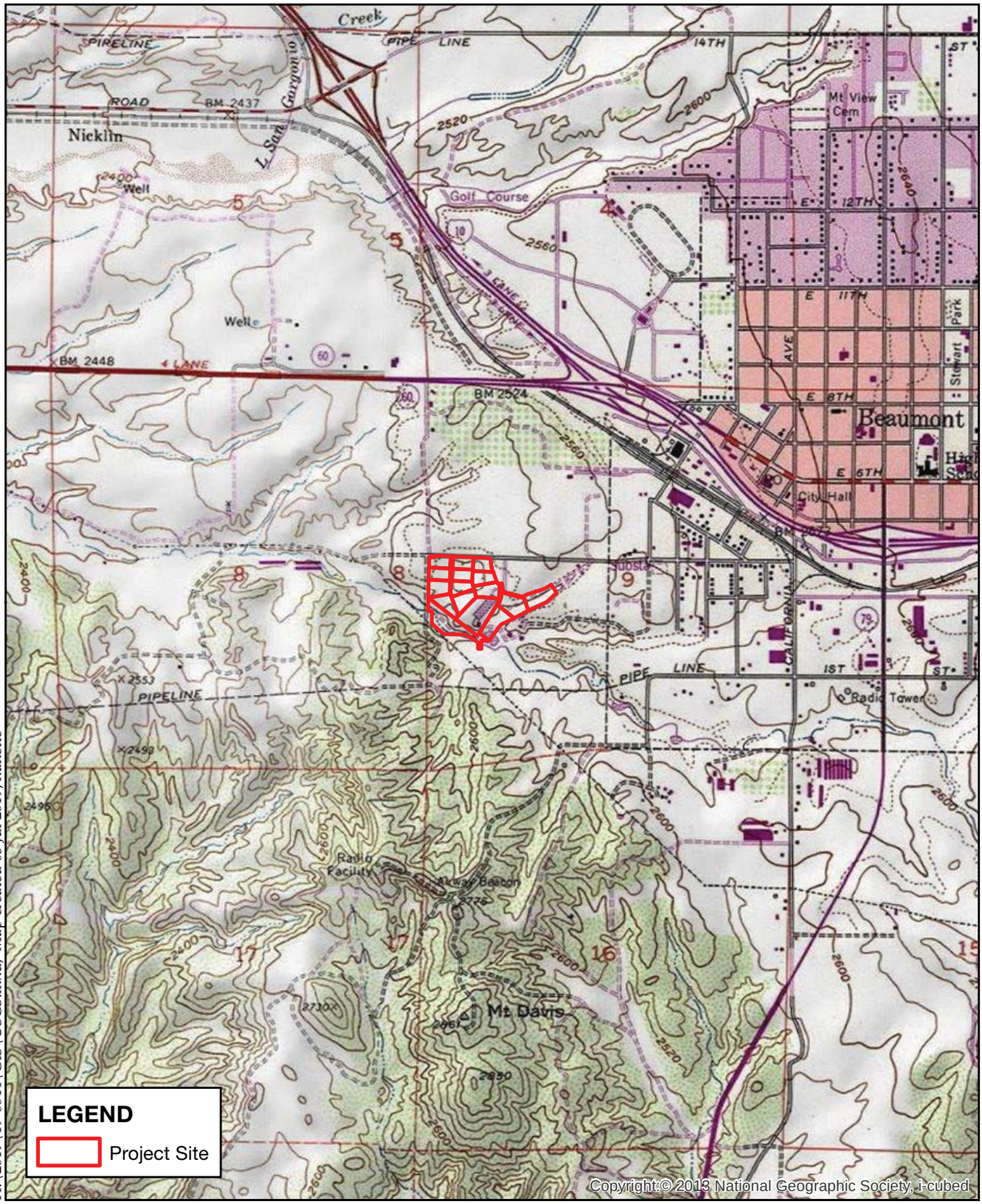


Map created July 3, 2019, H:\201919-0044\GIS\Vicinity.mxd

0 2 4 6 Miles

Annexation of PM 28348 to BCVWD

ALBERT A. WEBB ASSOCIATES



H:\2019\19-0044\GIS\USGS.mxd; Map created 03 Jul 2019; nanette

Sources: ESRI / USGS 7.5min Quad
DRGs: BEAUMONT / EL CASCO

0 1,000 2,000 3,000 Feet

Figure 2 - USGS Map
Annexation of PM 28348 to BCVWD

ALBERT A. WEBB ASSOCIATES

BEAUMONT-CHERRY VALLEY WATER DISTRICT
AGENDA
REGULAR MEETING OF THE BOARD OF DIRECTORS
560 Magnolia Avenue, Beaumont, CA 92223
Wednesday, December 12, 2018 - 6:00 p.m.

Call to Order: President Covington

Pledge of Allegiance: President Covington

Invocation: Director Williams

Roll Call

Public Comment

PUBLIC COMMENT:
At this time, any person may address the Board of Directors on matters within its jurisdiction which are not on the agenda. However, state law prohibits the Board from discussing or taking action on any item not listed on the agenda. Any non-agenda matters that require action will be referred to Staff for a report and possible action at a subsequent meeting. To provide comments on specific agenda items, please complete a speaker's request form and provide the completed form to the Board Secretary prior to the Board meeting. **Please limit your comments to three minutes.** Sharing or passing time to another speaker is not permitted.

ACTION ITEMS
Information on the following items is included in the full Agenda Packet.

1. **Adjustments to the Agenda**

2. **Reorganization of the Board of Directors** (page 5 - 6)

   - Nomination and Election of the President
   - Nomination and Election of the Vice President
   - Nomination and Election of the District Treasurer
   - Nomination and Election of the District Secretary
   - Appointment of the Personnel Committee
   - Appointment of the Finance & Audit Committee
   - Appointment to Ad Hoc committees
   - Appointment of the Recording Secretary

3. **Consent Calendar:** All matters listed under the Consent Calendar are considered by the Board of Directors to be routine and will be enacted in one motion. There will be no discussion of these items prior to the time the Board considers the motion unless members of the Board, the administrative staff, or

the public request specific items to be discussed and/or removed from the Consent Calendar.

a. October 2018 Budget Variance Report (pages 7 - 11)
b. October 31, 2018 Cash/Investment Balance Report (page 12)
c. November 2018 Check Register (pages 13 - 29)
d. November 2018 Invoices Pending Approval (pages 30 - 32)
e. Minutes of the Regular Meeting of November 14, 2018 (pages 33 - 41)

4. **Review and Consider Annual Meeting Calendar** (pages 42 - 44) No staff report, calendars only

5. **Review and Consideration of the BCVWD Fiscal Year 2019 Operating and Capital Improvement Budget** (pages 45 - 136)

6. **Review of Proposals and Consideration of Authorization of General Manager to enter into a Contract for Public Relations and Community Outreach Consulting Services** (pages 137 - 142)

7. **Consideration of Change of Service Request for 1010 W. Fourth Street, Parcels 3 and 4 of Parcel Map 34209 of Crossroads Development** (pages 143 - 156)

8. **Consideration of Resolution 2018-__: Approving, Authorizing and Directing a Grant of Interest in Real Property located in Edgar Canyon to Southern California Edison Company** (pages 157 - 164)

9. **Consideration of Resolution 2018-__: Acceptance of Easement for Public Utility Purposes on behalf of BCVWD for a sub area of the Cherry Avenue Drainage Channel Parcel, a parcel that extends parallel to Cherry Avenue, west of Anna Hause Elementary School** (pages 165 - 172)

10. **Consideration of Approval of Request for Extension of Water Service "Will Serve Letter for three (3) parcels to be created by the proposed subdivision of Assessor's Parcel Number 401-080-022 per Tentative Parcel Map 36704 located on the north side of Lakeview Court and west of Oak Glen Road in the community of Cherry Valley** (pages 173 - 180)

11. **Consideration of Approval of Request for Extension of Water Service "Will Serve Letter" for three (3) parcels to be created by the proposed subdivision of Assessor's Parcel Number 402-200-005 (10707 Jonathan Avenue) per Tentative Parcel Map 37080** (pages 181 - 188)

12. **Consideration of Request for Update of Will Serve Letter (APN 417-220-009), Request for Annexation and New Will Serve Letter (APN 417-220-042), and Annexation of the Remainder of Parcels included in Parcel Map 26348, for a Proposed Office and Warehouse Commercial Development in the City of Beaumont** (pages 189 - 204)

INFORMATION / DISCUSSION ITEMS

13. Reports For Discussion

a. Ad Hoc Committees
b. General Manager
c. Directors' Reports
d. Legal Counsel Report

14. Announcements

- District Offices will be closed on Tuesday, December 25 in observance of Christmas Day
- District Offices will be closed on Tuesday, January 1, 2019 in observance of New Year's Day
- Collaborative Agencies Committee meeting: January 2, 2019 at 5:00 p.m. (*Location: Beaumont-Cherry Valley Recreation and Park District – Noble Creek Community Center, 390 W. Oak Valley Pkwy*)
- Finance and Audit Committee meeting: January 3, 2019 at 3:00 p.m.
- Regular Board meeting: January 9, 2019 at 6:00 p.m.
- Engineering Workshop: January 24, 2019 at 6:00 p.m.
- Personnel Committee meeting: January 28, 2019 at 5:30 p.m.
- Bogart Park Ad Hoc Committee (Pending): February 4, 2019 at 5:45 p.m.
- Beaumont Basin Watermaster meeting: February 6, 2019 at 10:00 a.m.

15. Action List for Future Meetings

- Proposition 1 Bond Opportunities
- Proposition 68
- Water supply for BCVWD and the region

16. Adjournment

NOTICES

AVAILABILITY OF AGENDA MATERIALS - Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Beaumont-Cherry Valley Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, at 560 Magnolia Avenue, Beaumont, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during the meeting, they can be made available from the District Office in the Board Room of the District's Office. Materials may also be available on the District's website: www.bcvwd.org.

REVISIONS TO THE AGENDA - In accordance with §54954.2(a) of the Government Code (Brown Act), revisions to this Agenda may be made up to 72 hours before the Board Meeting, if necessary, after mailings are completed. Interested persons wishing to receive a copy of the set Agenda may pick one up at the District's Main Office, located at 560 Magnolia Avenue, Beaumont, California, up to 72 hours prior to the Board Meeting.

REQUIREMENTS RE: DISABLED ACCESS - In accordance with §54954.2(a), requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting, should be made to the District Office, at least 48 hours in advance of the meeting to ensure availability of the requested service or accommodation. The District Office may be contacted by telephone at (951) 845-9581, email at info@bcvwd.org or in writing at the Beaumont-Cherry Valley Water District, 560 Magnolia Avenue, Beaumont, California 92223.

CERTIFICATION OF POSTING

I certify that on or before Dec. 9, 2018, a copy of the foregoing notice was posted near the regular meeting place of the Board of Directors of Beaumont-Cherry Valley Water District and to its website at least 72 hours in advance of the meeting (Government Code §54954.2(a)).

LYNDA J. KERNEY, ADMIN.

Yolanda Rodriguez
Director of Finance and Administration

Beaumont-Cherry Valley Water District
Regular Board Meeting
December 12, 2018

Item 12

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Consideration of Request for Update of Will Serve Letter (APN 417-220-009), Request for Annexation and New Will Serve Letter (APN 417-220-042), and Annexation of the Remainder of Parcels included in Parcel Map 26348, for a Proposed Office and Warehouse Commercial Development in the City of Beaumont**

Staff Recommendation

Approve the following actions for Parcel Map 26348 located within the City of Beaumont, California at the southwest corner of the intersection of West 4th Street and Risco Circle:

1. Approve the update of "Annexation and Will Serve Letter" for Parcel 9 (APN 417-220-009)
2. Approve a the request for a new "Annexation and Will Serve Letter" for Parcel 1 (APN 417-220-042)
3. Approve annexation of remaining Parcels 2, 3, 4, 5, 6, 7, 8, 10, and 11 of Parcel Map 26348

Background

At its Regular Meeting on March 8, 2017, the Board of Directors approved a request for annexation and water service for Parcel 9 of Parcel Map 26348 to accommodate service for a proposed office and warehouse development. At that time, Staff also discussed the possibility of proceeding with annexation of all parcels associated with said Parcel Map 26348, however, the Board motion approved only the written staff recommendation to annex and serve Parcel 9 of said Parcel Map. Per the developer of Parcel 9, the property owners associated with this Parcel Map are interested in having the entire parcel map annexed into the District's service area.

Staff has also received plans and an associated desire for irrigation (non-potable) water service from the current owner of APN 417-220-001 for water service to landscape a proposed parking lot.

Based upon these facts the following three items require Board consideration:

1. Update Annexation and Will Serve Letter for Parcel 9

   As previously noted, Parcel 9 was approved for annexation at the March 8, 2017 Board meeting. The developer is now requesting an update of this action. Staff recommends approval.

2. New "Annexation and Will Serve Letter" for Parcel 1

Staff requests that the Board consider the addition of annexation and associated "Will Serve Letter" for Parcel 1 (Riverside County APN 417-220-042) of Parcel Map 26348, in order to provide non-potable water service for a proposed parking lot (with landscaping) for an existing food manufacturing company (Rudolf Foods) located on the north side of the street (and directly across from said Parcel 1). (See attached landscape plans.)

3. Annexation of parcels 2, 3, 4, 5, 6, 7, 8, 10, and 11

District records indicate that the remaining parcels of Parcel Map 26348 are not within the District's Service Area Boundary and require annexation. In 2017, staff confirmed this fact with the Riverside Local Agency Formation Commission (LAFCO). Riverside LAFCO staff were unable to find records regarding any annexation proceedings related to the other parcels identified on Parcel Map 26348.

It should be noted that one existing business entity that overlies eight of the parcels identified on Parcel Map 26348 (Parcels 2, 3, 4, 5, 6, 7, 10, and 11) continues to receive service from the District, but does not appear to be annexed into the District's service area. District Staff further identifies that Parcels 14 and 15 appear to be used by the Robertson Ready Mix Facility, located on 4th Street, to store materials and supplies and Parcel 13 is utilized by the City of Beaumont Wastewater Treatment Plant as a pond facility. Figure 1, hereafter, identifies the limits parcels of Parcel Map No. 26348 in red and blue outline.

Staff now recommends the Board consider annexation of all parcels associated with Parcel Map 26348.

The following Table 1 summarizes anticipated water uses for Parcels 1 and 9:

Table 1 – Anticipated Water Uses

	Domestic Water Use		Recycled Water Use		Total Parcel Water Use	
Parcel	Gallons per Day	Equivalent Dwelling Units	Gallons per Day	Equivalent Dwelling Units	Gallons per Day	Equivalent Dwelling Units
9	1,746	3.01	256	0.44	2,002	3.45
1	0	0	1,222	2.106	1,222	2.106

Fiscal Impact

None. Annexation costs will be borne by the developer of the property.

Attachments

Staff Report of March 8, 2017

Will-Serve Letter

Staff Report prepared by Lynda Kerney

FIGURE No. 1
PARCEL MAP No. 26348 PARCELS

Beaumont-Cherry Valley Water District
Regular Board Meeting
March 8th, 2017

DATE: March 2, 2017

TO: Board of Directors

FROM: Eric Fraser, General Manager

SUBJECT: Consideration of Request for "Annexation and Will Serve Letter" for a proposed Office and Warehouse Commercial Development located on Riverside County Assessor's Parcel No. (APN) 417-220-009 (Parcel 9 of Parcel Map No. 26348)

Recommendation:

Consider request for "Annexation and Will Serve Letter" for a proposed office and warehouse commercial development located on Riverside County Assessor's Parcel No. (APN) 417-220-009 (Parcel 9 of Parcel Map No. 26348) within the City of Beaumont, CA.

Background:

The Applicant (Joseph E. Bonadiman & Associates) has requested annexation into the District's service area boundary and water service to the subject parcel on behalf of the property owner per the attached request for "Annexation" and "Will Serve Letter" for a 19,095 square foot office and warehouse facility proposed to be constructed within the City of Beaumont on a **1.20 acre** parcel identified as Riverside County Assessor's Parcel No (APN) 417-220-009 to confirm water supply to said parcel. Said parcel is further identified as Parcel 9 on Parcel Map No. 26348. Said parcel is located within the City of Beaumont California at the southwest corner of the intersection of W. 4th Street and Risco Circle.

Annexation is required at this time due to the fact that upon review of District records and associated information related to this parcel, Staff has determined that said Parcel 9 has not been annexed into the District's Service Area. In fact all parcels identified on Parcel Map No. 26348 have not been annexed into the District's Service Area. Staff confirmed this fact with Riverside LAFCO and Riverside LAFCO Staff who were also unable to find records regarding any annexation proceedings related to Parcels identified on Parcel Map 26348.

In should be noted that one existing business entity that overlies 8 of the parcels identified on Parcel Map 26348 (Parcels 2, 3, 4, 5, 6, 7, 10, and 11) currently receives service from the District, but does not appear to be annexed into the District's Service Area. District Staff further identifies that Parcels 14 and 15 appear to be used by the Robertson Ready Mix Facility, located on 4th street, to store materials and supplies and Parcel 13 is utilized by the City of Beaumont Wastewater Treatment Plant as a pond facility. Figure 1 hereafter, identifies the limits parcels of Parcel Map No. 26348 in red and blue outline.

FIGURE No. 1
PARCEL MAP No. 26348 PARCELS

Figure 2, below further identifies the location of the proposed development (PM 26348-Parcel 9 (Riv. Co. APN. 417-220-009)).

FIGURE No. 2
PARCEL 9 of PARCEL MAP No. 26348,
Riv. Co APN 417-220-009

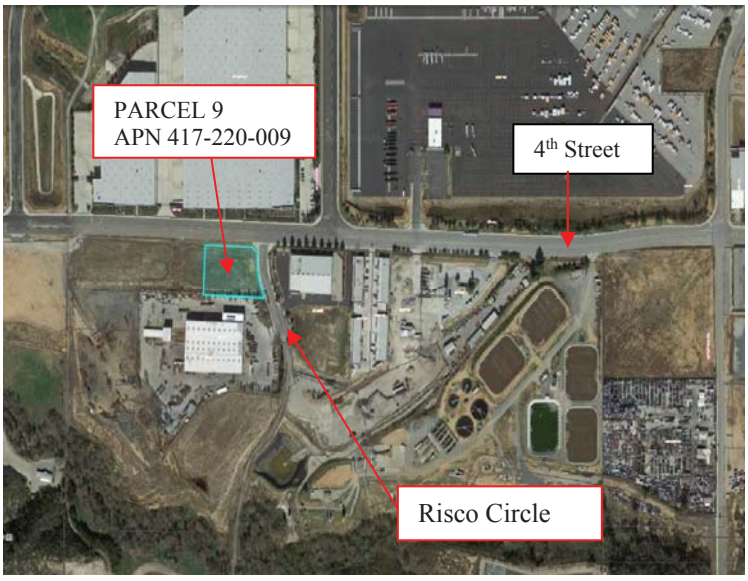


Table 1 and 2 hereafter, sets forth the District's total estimated project water demand for Parcel 9 of Parcel Map No. 26348 for the development proposed by the Applicant.

Proposed Development for Parcel 9 of PM. 26348 (APN 417-220-009):

Table 1 Estimated Domestic Water Demand

Office/Warehouse Space	Total Space Size (sq. ft.)	Office size (sq. ft.)	Average Day Demand (GPD)	Estimated Domestic Water Demand (EDU's)
1	3,000 sf	220 sf	249.4	0.43
2	1,500 sf	220 sf	156.6	0.27
3	2,025 sf	220 sf	185.6	0.32
4	3,570 sf	220 sf	278.4	0.48
5	1,500 sf	220 sf	156.6	0.27
6	1,500 sf	220 sf	156.6	0.27
7	1,500 sf	220 sf	156.6	0.27
8	1,500 sf	220 sf	156.6	0.27
9	3,000 sf	220 sf	249.4	0.43
Sub Total	**19,095 sf**	**1,980 sf**	**1,745.8**	**3.01**

Table 2 Estimated Non-Potable Water Demand

Landscape Area	Description	Average Gallons Per Day	Estimated Domestic Water Demand (EDU's)
1	Landscape Demand	256 gpd	.44 EDU's
	Landscape Sub Total	**256 gpd**	**.44 EDUs**

Based upon Table 1 and 2 above, the District's total estimated project water demand is approximately **3.45** Equivalent Dwelling Units (EDUs) or approximately **2,001** gallons per day.

As stated previously, Riverside County Assessor's Parcel Number 417-220-009 is not within the District's Service Area Boundary and requires annexation.

Conditions:

Prior to final project development the following conditions must be met:

1. The Applicant will be required to prepare a Riverside County LAFCO Annexation package and associated CEQA documentation. The District will participate in said process as a review entity in the preparation of LAFCO documentation and as the lead agency in the CEQA documentation prepared by the Applicant.

2. The Applicant shall enter into a water facilities extension agreement and pay all fees associated with the domestic and non-potable water services for the proposed development. The Applicant shall also pay all fees related to new fire service facilities including any facilities improvements that may be necessary to meet the current City of Beaumont fire protection conditions and/or fire flow requirements.
3. The Applicant shall pay front footage fees along all property frontages where facilities are currently installed.
4. The Applicant shall connect to the non-potable water system for irrigation supply. To minimize the use of potable water, the District requires the applicant conform to the City of Beaumont Landscaping Ordinances and Zoning Requirements and/or County of Riverside Landscaping Ordinances (as applicable) which pertains to water efficient landscape requirements and the following:
    a. Landscaped areas which have turf shall have “smart irrigation controllers” which use Evapotranspiration (ET) data to automatically control the watering. Systems shall have an automatic rain sensor to prevent watering during and shortly after rainfall and automatically determine watering schedule based on weather conditions, and not require seasonal monitoring changes. Orchard areas, if any, shall have drip irrigation.
    b. Landscaping in non-turf areas should be drought tolerant consisting of planting materials. Irrigation systems for these areas should be drip or bubbler type.
5. The Applicant shall prepare plans (as determined by District Staff) in accordance with current District Standards showing all required domestic water system and non-potable water system improvements. Said plans shall be approved by the District prior to construction.
6. The Applicant shall conform to all District requirements and all City of Beaumont requirements.

Fiscal Impact:

There will be no fiscal impact to the District as all the fees and deposits will be paid for by the Applicant.

Prepared by Daniel K. Jaggers, Director of Engineering

53430

BEAUMONT CHERRY VALLEY WATER DISTRICT
560 Magnolia Avenue • PO Box 2037
Beaumont, CA 92223-2258
Phone (951) 845-9581
www.bcvwd.org

☑ **Will Serve Request** ☐ **Water Supply Assessment (SB210)**

Applicant Name: JOSEPH E. BONADIMAN & ASSOC.	Contact Phone # (909) 885-3806 x132
Mailing Address: 234 N. ARROWHEAD AVE	Fax #: (909) 381-1721
City: SAN BERNARDINO	E-mail: ED@BONADIMAN.COM
State & Zip: CA 92408	
Service Address: N/A	
Assessor's Parcel Number (APN), Tract Map No. Parcel Map No.: 417-220-009	
Project Type: ☐ Single-Family ☐ Multi-Family ☐ Commercial/Industrial ☐ Minor Subdivision (5 lots or less) ☐ Major subdivision (6+ lots) ☒ Other ANNEXATION	
Site Map Attached: ☐ Yes ☒ No	

The letter should be delivered to:

Recipient: ED BONADIMAN
(ADDRESS ABOVE)

PLEASE CHOOSE ONE:

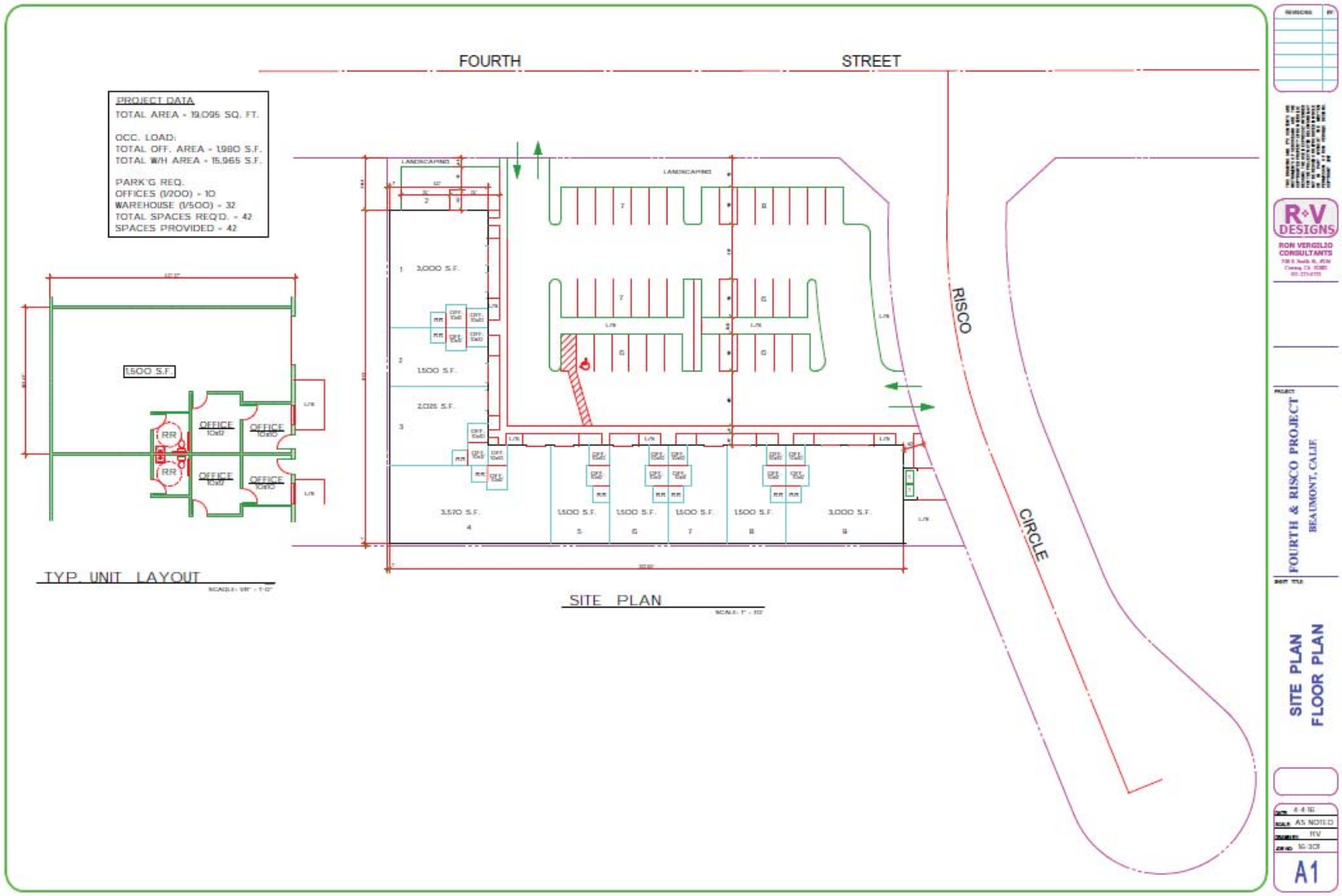
☒ **Mail (above address)** ☐ **E-mail**
☐ **Fax** ☐ **Will pick up**

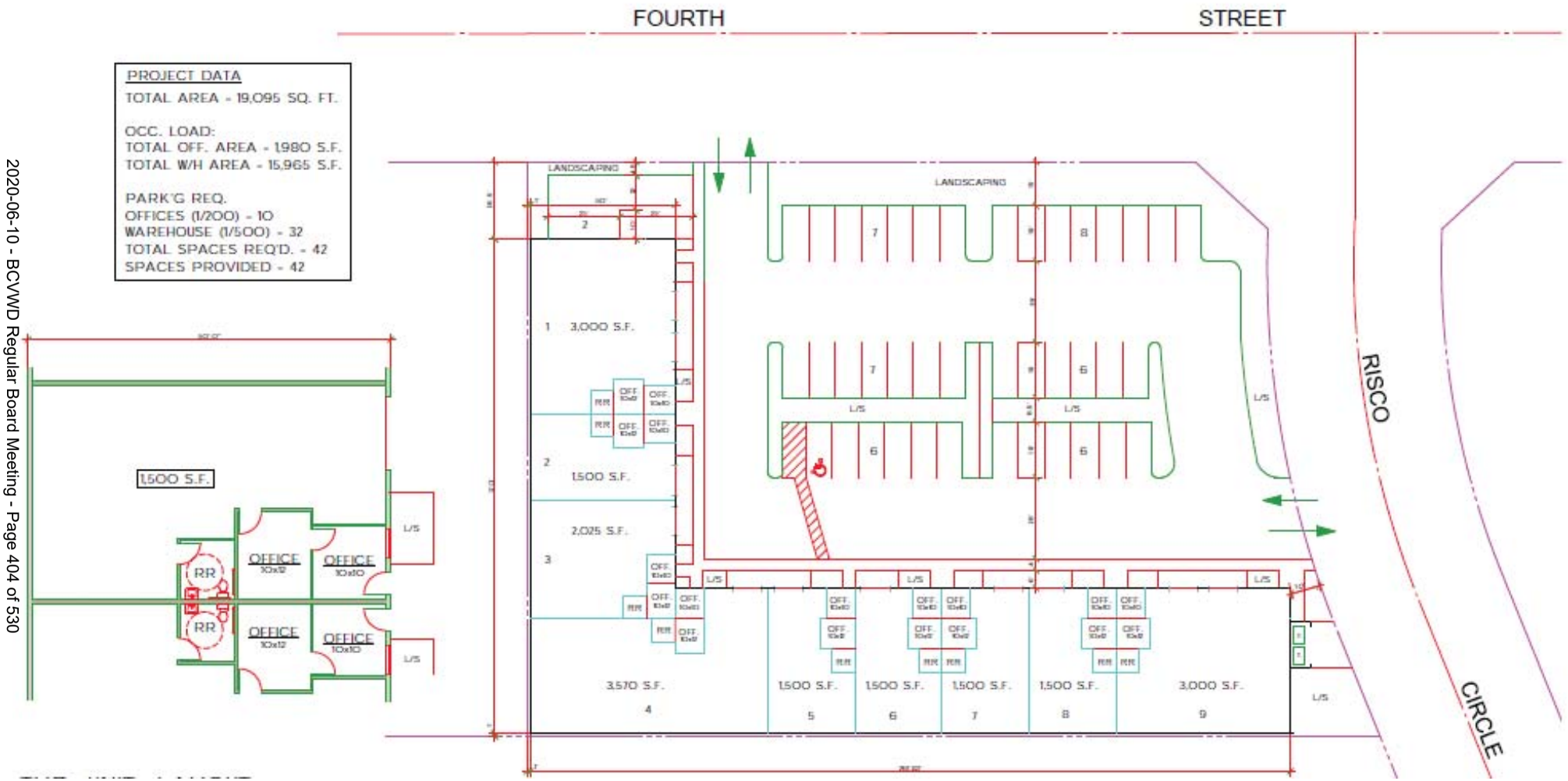
The District reserves the right to impose terms and conditions in Will Serve Letters and/or Water Supply Assessment Reports that take into account water availability issues, conservation issues and the District's existing facilities, all of which impact the District's ability to provide service to the subject property and maintain the District's ability to meet existing water demands.

Applicant's Signature

2-7-17
Date

RECEIVED
FEB 07 2017
BY:


FOURTH
STREET
PROJECT DATA
TOTAL AREA = 19,095 SQ. FT.
OCC. LOAD:
TOTAL OFF. AREA = 1,980 S.F.
TOTAL W/H AREA = 15,965 S.F.
PARK'G REQ.
OFFICES (1/200) = 10
WAREHOUSE (1/500) = 32
TOTAL SPACES REQ'D. = 42
SPACES PROVIDED = 42
1,500 S.F.
OFFICE
RR
TYP. UNIT LAYOUT
SITE PLAN
RISCO
CIRCLE
R·V DESIGNS
RON VERGILIO CONSULTANTS
FOURTH & RISCO PROJECT
BEAUMONT, CALIF
SITE PLAN
FLOOR PLAN
A1


FOURTH
STREET
PROJECT DATA
TOTAL AREA - 19,095 SQ. FT.
OCC. LOAD:
TOTAL OFF. AREA - 1980 S.F.
TOTAL W/H AREA - 15,965 S.F.
PARK'G REQ.
OFFICES (1/200) - 10
WAREHOUSE (1/500) - 32
TOTAL SPACES REQ'D. - 42
SPACES PROVIDED - 42
1,500 S.F.
OFFICE
RR
L/S
LANDSCAPING
1 3,000 S.F.
2 1,500 S.F.
2,025 S.F.
3
3,570 S.F.
4
1,500 S.F.
5
1,500 S.F.
6
1,500 S.F.
7
1,500 S.F.
8
3,000 S.F.
9
RISCO
CIRCLE

2002-240047
ORIGINAL
201
72

IN THE CITY OF BEAUMONT, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

SHEET 1 OF 3

PARCEL MAP NO. 28348

BEING A SUBDIVISION OF A PORTION OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 9, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN.

URBAN LOGIC CONSULTANTS

FEBRUARY, 2001

OWNER'S STATEMENT

WE HEREBY STATE THAT WE ARE THE OWNERS OF THE LAND INCLUDED WITHIN THE SUBDIVISION SHOWN HEREON; THAT WE ARE THE ONLY PERSONS WHOSE CONSENT IS NECESSARY TO PASS A CLEAR TITLE TO SAID LAND; THAT WE CONSENT TO THE MAKING AND RECORDING OF THIS SUBDIVISION MAP AS SHOWN WITHIN THE DISTINCTIVE BORDER LINE.
WE HEREBY DEDICATE TO PUBLIC USE FOR STREET AND PUBLIC UTILITY PURPOSES, LOTS "A" THROUGH "J" INCLUSIVE.
WE ALSO HEREBY RETAIN THE EASEMENT INDICATED AS LOT "J" FOR PRIVATE USE FOR THE SOLE BENEFIT OF OURSELVES, OUR SUCCESSORS, ASSIGNEES, AND LOT OWNERS WITHIN THIS PARCEL MAP.

THE CITY OF BEAUMONT

BY: _____

SECURITY TRUST COMPANY Trustee of Trust No. 00-1784

BY: Shelley Eskildsen, Vice President Craig L. Horton, Vice President

NOTARY ACKNOWLEDGMENT

STATE OF CALIFORNIA
COUNTY OF ~~RIVERSIDE~~ SAN DIEGO } S.S.

ON January 16, 2002 BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE STATE OF CALIFORNIA, PERSONALLY APPEARED Shelley Eskildsen & Craig L. Horton, PERSONALLY KNOWN TO ME (OR ~~PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE~~) TO BE THE PERSON(S) WHOSE NAME(S) IS/~~ARE~~ SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/~~THEY~~ EXECUTED THE SAME IN HIS/HER/~~THEIR~~ AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/~~THEIR~~ SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

MY COMMISSION EXPIRES June 15, 2004

WITNESS MY HAND AND OFFICIAL SEAL.

Kathleen A. Clemens
NOTARY PUBLIC IN AND FOR SAID STATE

MY PRINCIPAL PLACE OF BUSINESS IS

IN San Diego, CA

NOTARY ACKNOWLEDGMENT

STATE OF CALIFORNIA
COUNTY OF RIVERSIDE } S.S.

ON _____ BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE STATE OF CALIFORNIA, PERSONALLY APPEARED _____, PERSONALLY KNOWN TO ME (OR PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE) TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

MY COMMISSION EXPIRES _____

WITNESS MY HAND AND OFFICIAL SEAL.

_____
NOTARY PUBLIC IN AND FOR SAID STATE

MY PRINCIPAL PLACE OF BUSINESS IS

IN _____

TAX COLLECTOR'S CERTIFICATE

I HEREBY CERTIFY THAT ACCORDING TO THE RECORDS OF THIS OFFICE, AS OF THIS DATE, THERE ARE NO LIENS AGAINST THE PROPERTY SHOWN ON THE WITHIN MAP FOR UNPAID STATE, COUNTY, MUNICIPAL, OR LOCAL TAXES OR SPECIAL ASSESSMENTS COLLECTED AS TAXES EXCEPT TAXES OR SPECIAL ASSESSMENTS COLLECTED AS TAXES NOW A LIEN BUT NOT YET PAYABLE, WHICH ARE ESTIMATED TO BE $_____.

DATED: _____, 2002 PAUL McDONNELL, COUNTY TAX COLLECTOR

BY: _____, DEPUTY

TAX BOND CERTIFICATE

I HEREBY CERTIFY THAT A BOND IN THE SUM OF $_____ HAS BEEN EXECUTED AND FILED WITH THE BOARD OF SUPERVISORS OF THE COUNTY OF RIVERSIDE, CALIFORNIA, CONDITIONED UPON THE PAYMENT OF ALL TAXES, STATE, COUNTY, MUNICIPAL, OR LOCAL, AND ALL SPECIAL ASSESSMENTS COLLECTED AS TAXES, WHICH AT THE TIME OF FILING OF THIS MAP WITH THE COUNTY RECORDER ARE A LIEN AGAINST SAID PROPERTY BUT NOT YET PAYABLE AND SAID BOND HAS BEEN DULY APPROVED BY SAID BOARD OF SUPERVISORS.

DATED: _____, 2002

CASH TAX BOND
PAUL McDONNELL
COUNTY TAX COLLECTOR

BY: _____ DEPUTY

GERALD A. MALONEY
CLERK OF THE BOARD OF SUPERVISORS

BY: _____ DEPUTY

SIGNATURE OMISSIONS

PURSUANT TO SECTION 66436 OF THE SUBDIVISION MAP ACT, THE SIGNATURES OF THE FOLLOWING OWNERS OF EASEMENTS AND\OR OTHER INTERESTS HAVE BEEN OMITTED:

(1) AN EASEMENT IN FAVOR OF BEAUMONT IRRIGATION DISTRICT FOR THE PURPOSE OF TRANSMISSION LINES, PIPELINES, FLUMES, OTHER CONDUITS, ROADS, AND RIGHTS, RECORDED JANUARY 13, 1921 IN BOOK 539, PAGE(S) 499 OF DEEDS.
(2) AN EASEMENT IN FAVOR OF GEORGE MCMILLIAN MARTIN, ELLEN CLARK MARTIN AND CLAIR MARTIN FOR THE PURPOSE OF PIPELINES, RECORDED JUNE 17, 1931 IN BOOK 28, PAGE(S) 562 AS INSTRUMENT NO. 1110 OFFICIAL RECORDS.
(3) AN EASEMENT IN FAVOR OF METROPOLITAN WATER DISTRICT FOR THE PURPOSE OF POLELINES, RECORDED SEPTEMBER 28, 1933 IN BOOK 142, PAGE 95 O.R.
(4) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, FOR THE PURPOSE OF AN ELECTRIC LINE, RECORDED SEPTEMBER 10, 1948 AS INSTRUMENT NO. 917 OFFICIAL RECORDS.
(5) AN EASEMENT IN FAVOR OF SOUTHERN PACIFIC PIPELINES, INC. A CORPORATION, FOR THE PURPOSE OF PIPELINES, RECORDED JUNE 16, 1955 IN BOOK 1752, PAGE(S) 394 AS INSTRUMENT NO. 39400.
(6) AN EASEMENT IN FAVOR OF FOUR CORNERS PIPELINE COMPANY, A DELAWARE CORPORATION, FOR THE PURPOSE OF PIPELINES, RECORDED SEPTEMBER 24, 1957 IN BOOK 2152, PAGE(S) 73 OFFICIAL RECORDS.
(7) AN EASEMENT IN FAVOR OF FOUR CORNERS PIPELINE COMPANY, A DELAWARE CORPORATION, FOR THE PURPOSE OF PIPELINES, RECORDED FEBRUARY 17, 1958 IN BOOK 2224, PAGE(S) 32 AS INSTRUMENT NO. 11852 OFFICIAL RECORDS.
(8) AN EASEMENT IN FAVOR OF CITY OF BEAUMONT FOR THE PURPOSE OF FLOWING AND DRAINING SEWERAGE EFFLUENT BY MEANS OF PIPES, CONDUITS OR OPEN DITCH, INSTRUMENT NO. 126991, RECORDED DECEMBER 18, 1970 OFFICIAL RECORDS.
(9) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA GAS COMPANY, A CORPORATION, FOR THE PURPOSE OF PIPELINES, RECORDED MARCH 4, 1971 AS INSTRUMENT NO. 21609 OFFICIAL RECORDS.
(10) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA GAS COMPANY, A CORPORATION, FOR THE PURPOSE OF PIPELINES, RECORDED MARCH 18, 1971 AS INSTRUMENT NO. 27244 OFFICIAL RECORDS.
(11) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, FOR THE PURPOSE OF OVERHEAD AND UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS, RECORDED SEPTEMBER 7, 1971 AS INSTRUMENT NO. 101420 OFFICIAL RECORDS.
(12) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION, FOR THE PURPOSE OF UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS, RECORDED OCTOBER 3, 1978 AS INSTRUMENT NO. 209438 OFFICIAL RECORDS.
(13) AN EASEMENT IN FAVOR OF THE CITY OF BEAUMONT FOR THE PURPOSE OF UTILITIES, RECORDED JULY 29, 1981 AS INSTRUMENT NO. 143383 OFFICIAL RECORDS.
(14) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, CORPORATION, FOR THE PURPOSE OF OVERHEAD AND UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS, RECORDED DECEMBER 11, 1981 AN INSTRUMENT NO. 229716 OFFICIAL RECORDS.
(15) AN EASEMENT IN FAVOR OF THE CITY OF BEAUMONT FOR THE PURPOSE OF SEWER LINE, RECORDED OCTOBER 13, 1928 IN BOOK 781, PAGE(S) 453 OF DEEDS.
(16) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY FOR THE PURPOSE OF ELECTRIC LINES, RECORDED OCTOBER 19, 1955 IN BOOK 1809, PAGE(S) 83 AS INSTRUMENT NO. 67058 O.R.

RECORDER'S STATEMENT

FILED THIS 7th DAY OF May, 2002 AT 8 A.M. IN BOOK 201 OF PARCEL MAPS, AT PAGES 72-74 AT THE REQUEST OF THE COUNTY CLERK.

NO. 2002-240047
FEE $16.00

GARY L. ORSO
COUNTY ASSESSOR - CLERK - RECORDER

BY: _____, DEPUTY

SUBDIVISION GUARANTEE BY:
FIRST AMERICAN TITLE INSURANCE COMPANY

SURVEYOR'S STATEMENT

THIS MAP WAS PREPARED BY ME OR UNDER MY SUPERVISION AND IS BASED ON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE, AT THE REQUEST OF THE CITY OF BEAUMONT ON FEBRUARY 1, 2001. I HEREBY STATE THAT ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED, AND THAT SAID MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. I HEREBY STATE THAT THIS PARCEL MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP, IF ANY.

DATED: 15 APRIL, 2002

Dennis W Janda

DENNIS W. JANDA
L.S. 6359
EXP. 12/31/02

CITY ENGINEER'S STATEMENT

I HEREBY STATE THAT I HAVE EXAMINED THE WITHIN MAP; THAT THE SUBDIVISION AS SHOWN HEREON IS SUBSTANTIALLY THE SAME AS IT APPEARED ON THE TENTATIVE MAP OF ~~TRACT~~ NO. 28348, AND ANY APPROVED ALTERATION THEREOF; THAT ALL PROVISIONS OF THE PARCEL MAP SUBDIVISION MAP ACT AND OF TITLE 16 OF THE BEAUMONT MUNICIPAL CODE APPLICABLE AT THE TIME OF THE APPROVAL OF THE TENTATIVE MAP HAVE BEEN COMPLIED WITH; THAT I AM SATISFIED THAT THE MAP IS TECHNICALLY CORRECT; THAT THE PLANS FOR THE DRAINS, DRAINAGE WORKS AND SEWERS SUFFICIENT TO PROTECT ALL LOTS IN THE SUBDIVISION FROM FLOODS HAVE BEEN APPROVED; THAT A COMPLETE SET OF PLANS FOR THE CONSTRUCTION OF ALL REQUIRED IMPROVEMENTS HAS BEEN FILED WITH THE COMMUNITY DEVELOPMENT DEPARTMENT AND THAT THE SAME HAVE BEEN CHECKED AND APPROVED; AND THAT ALL IMPROVEMENTS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS OR THAT THE SUBDIVIDER HAS ENTERED INTO AGREEMENT WITH THE CITY OF BEAUMONT COVERING COMPLETION OF ALL IMPROVEMENTS AND SPECIFYING THE TIME FOR COMPLETING THE SAME.

FOR: DEEPAK MOORJANI, R.C.E. 51047
CITY ENGINEER, CITY OF BEAUMONT

DATED: 24 APRIL, 2002

BY: Dennis W Janda
DENNIS W. JANDA, L.S. 6359
(LIC. EXPIRES 12/31/2002)

CITY ACCEPTANCE CERTIFICATE

THE CITY OF BEAUMONT, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, BY AND THROUGH ITS DULY AUTHORIZED OFFICERS, HEREBY APPROVES THE PARCEL MAP 28348 AND ACCEPTS THE OFFERS OF DEDICATION MADE HEREON OF LOTS "A" THROUGH "I", INCLUSIVE, FOR PUBLIC ROAD AND PUBLIC UTILITY PURPOSES, SUBJECT TO COMPLETION OF ALL IMPROVEMENTS AND OTHER REQUIREMENTS.

MAYOR: Brian Lee DATED: 5-2-02

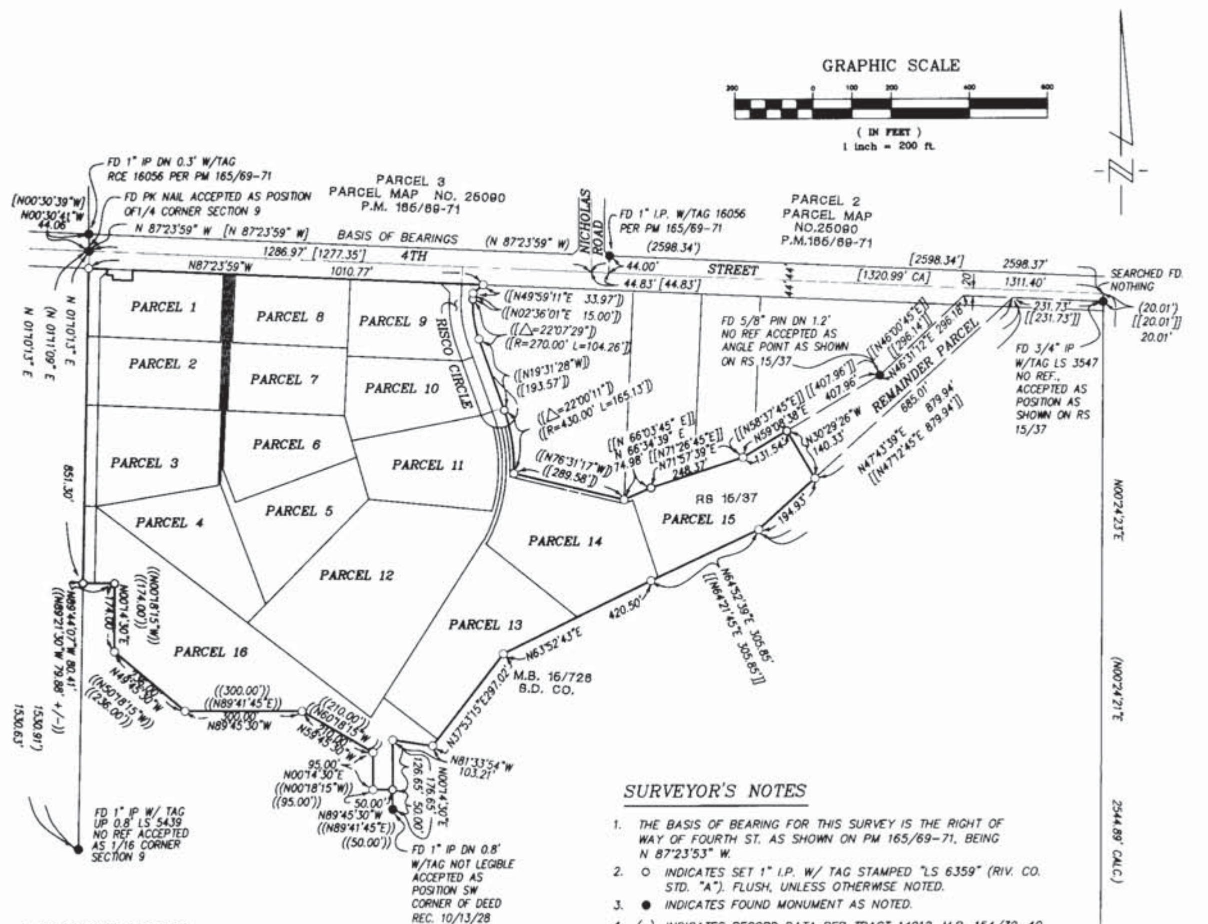
ATTEST: Shelley Hanna RESOL. NO.: _____

IN THE CITY OF BEAUMONT, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

PARCEL MAP NO. 28348

BEING A SUBDIVISION OF A PORTION OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 9, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN.

URBAN LOGIC CONSULTANTS FEBRUARY, 2001



SURVEYOR'S NOTES

1. THE BASIS OF BEARING FOR THIS SURVEY IS THE RIGHT OF WAY OF FOURTH ST. AS SHOWN ON PM 165/69-71, BEING N 87°23'53" W.
2. O INDICATES SET 1" I.P. W/ TAG STAMPED "LS 6359" (RIV. CO. STD. "A"). FLUSH, UNLESS OTHERWISE NOTED.
3. ● INDICATES FOUND MONUMENT AS NOTED.
4. ( ) INDICATES RECORD DATA PER TRACT 14912, M.B. 154/39-40.
5. [ ] INDICATES RECORD DATA PER P.M. NO. 25090, P.M. 165/69-71.
6. (( )) INDICATES RECORD DATA PER GRANT OF EASEMENT INSTRUMENT #126991 RECORDED DECEMBER 18, 1970.
7. [[ ]] INDICATES RECORD DATA PER RS 15/37.
8. [( )] INDICATES RECORD DATA PER GRANT DEED INSTRUMENT NO. 134482, RECORDED APRIL 28, 1995.
9. ([ ]) INDICATES RECORD AND MEASURED DATA UNLESS OTHERWISE NOTED PER GRANT DEED INSTRUMENT NO. 2000-432946, RECORDED OCTOBER 31, 2000.
10. (([ ])) INDICATES RECORD DATA PER GRANT DEED INSTRUMENT NO. 2000-228984, RECORDED JUNE 14, 2000.
11. ([[ ]]) INDICATES RECORD DATA PER GRANT DEED INSTRUMENT NO. 084941, RECORDED MARCH 2, 1999.
12. ▨ INDICATES EASEMENT VACATED HEREON.
13. TOTAL GROSS AREA = 31.35 ACRES.

(50.00')
50.00'
FD 1" IP W/TAG LS 4343 AS SHOWN ON MB159/39-40

EASEMENT NOTES

△1 EASEMENT AND RIGHT-OF-WAY FOR PIPELINES AND INCIDENTAL PURPOSES IN FAVOR OF THE CITY OF BEAUMONT PER INSTRUMENT NO. 487051 RECORDED NOVEMBER 9, 1998, O.R.

△2 A PIPELINE EASEMENT IN FAVOR OF SOUTHERN PACIFIC PIPELINES, INC., RECORDED JUNE 16, 1955, BOOK 1752, PAGE 394 AS INSTRUMENT NO. 39400 O.R. BLANKET EASEMENT, APPROXIMATE LOCATION BASED ON QUESTAR SOUTHERN TRAILS PIPELINE NO. B-4362 SHEET NO. 48.

△3 RECIPROCAL ACCESS, PUBLIC UTILITY, DRAINAGE AND GRADING EASEMENT RESERVED HEREON. AFFECTS PARCELS 1 THROUGH 8 INCLUSIVE.

△4 20' ACCESS EASEMENT DEDICATED HEREON

△5 AN ACCESS EASEMENT RECORDED JUNE 17, 1931 IN BOOK 28, PAGE 562 AS INSTRUMENT NO. 1110 O.R.

△6 AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON RECORDED SEPTEMBER 10, 1948, BOOK 1009, PAGE 478 AS INSTRUMENT NO. 917 O.R. FACILITIES CANNOT BE PLOTTED BY RECORD. AFFECTS PARCELS 12 THROUGH 16 INCLUSIVE.

△7 AN EASEMENT IN FAVOR OF FOUR CORNERS PIPELINE COMPANY, RECORDED SEPTEMBER 24, 1957, BOOK 2152, PAGE 73 O.R. FACILITIES CANNOT BE PLOTTED BY RECORD. AFFECTS PARCELS 1 THROUGH 16 INCLUSIVE.

△8 AN EASEMENT IN FAVOR OF FOUR CORNERS PIPELINE COMPANY, RECORDED FEBRUARY 17, 1958, BOOK 2224, PAGE 32 AS INSTRUMENT NO. 11852 O.R.

△9 AN EASEMENT FOR FACILITIES IN FAVOR OF SOUTHERN CALIFORNIA GAS COMPANY, RECORDED MARCH 4, 1971, AS INSTRUMENT NO. 21609 O.R.

△10 AN EASEMENT FOR FACILITIES IN FAVOR OF SOUTHERN CALIFORNIA GAS COMPANY, RECORDED MARCH 18, 1971, AS INSTRUMENT NO. 27244 O.R.

△11 AN EASEMENT FOR FACILITIES IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY, RECORDED SEPTEMBER 7, 1971 AS INSTRUMENT NO. 101420 O.R.

△12 AN EASEMENT FOR UTILITES IN FAVOR OF CITY OF BEAUMONT, RECORDED JULY 29, 1981 AS INSTRUMENT NO. 143383 O.R.

2001-240047
ORIGINAL

IN THE CITY OF BEAUMONT, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

SHEET 3 OF 3

PARCEL MAP NO. 28348

BEING A SUBDIVISION OF A PORTION OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 9, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN.

URBAN LOGIC CONSULTANTS — FEBRUARY, 2001

EASEMENT NOTES

SEE SHEET 2

SURVEYOR'S NOTES

SEE SHEET 2

NOTE

PURSUANT TO SECTION 66426(C) OF THE SUBDIVISION MAP ACT THIS MAP IS EXCLUDED FROM BEING DEFINED AS A FINAL MAP IN THAT THE LAND IS ZONED COMMERCIAL OR INDUSTRIAL.

GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft.

VICINITY MAP

NOT TO SCALE

CURVE TABLE

NO	DELTA	RADIUS	LENGTH
C1	22°07'29"	270.00'	104.26'
C2	22°07'29"	300.00'	115.84'
C3	22°07'29"	330.00'	127.43'
C4	13°18'19"	48.00'	11.15'
C5	52°28'54"	48.00'	43.97'
C6	5°15'46"	400.00'	36.74'
C7	05°18'52"	430.00'	39.88'
C8	16°41'19"	430.00'	125.25'
C9	17°47'33"	390.00'	121.11'
C10	102°12'35"	48.00'	85.63'
C11	12°15'27"	48.00'	10.27'
C12	11°57'51"	48.00'	10.02'
C13	121°27'24"	48.00'	10.23'
C14	42°01'18"	400.00'	293.37'
C15	41°49'53"	410.00'	299.30'
C16	17°32'07"	420.00'	128.54'

LINE TABLE

L1	N 70°28'32" E	18.00'
L2	N 19°31'28" W	7.09'
L3	N 37°39'45" E	8.60'

Beaumont-Cherry Valley Water District

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March 27, 2017

Ed Bonadiman
Joseph E. Bonadiman & Associates
234 N. Arrowhead Avenue
San Bernardino, CA 92408

Subject: Annexation and "Will Serve Letter"
For a Commercial Development Associated with Parcel Map No. (PM) 28348 located on Riverside County Assessor's (APN) Parcel No. 417-220-009

Dear Mr. Bonadiman,

At the Regular Meeting of the Board of Directors held on March 8, 2017, your request for annexation and "Will Serve Letter" for the above referenced property (APN) 417-220-009 was approved for domestic and non-potable (recycled) water service as set forth in the attached Staff Report dated March 8, 2017.

This particular property presents a unique issue in that the underlying Parcel Map (PM) 28348 was not previously annexed (in completion) into the District's Service Area Boundary as part of the original parcel map preparation. District staff identifies that the Riverside Local Agency Formation Commission may require the entire Parcel Map 28348 to be processed as part of the Annexation process. The Applicant shall be responsible to coordinate this activity with all affected Districts and Agencies.

The Beaumont-Cherry Valley Water District will provide water service to the subject property assuming the annexation process is completed and all obligations to provide service are met including but not limited to, the Rules and Regulations Governing Water Service as amended by the Board of Directors from time to time.

As identified in the March 8, 2017 Staff Report, and as also clarified below, the following conditions must be met prior to final project development:

1. The Applicant shall enter into an annexation agreement and a subsequent water facilities extension agreement in accordance with requirements set forth in Part 8 of the District's Rules and Regulations and pay all fees associated with said annexation process as well as the domestic and non-potable (recycled) water services for the proposed development.

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2. The Applicant shall also pay all fees related to new fire service facilities including any facilities improvements that may be necessary to meet the current City of Beaumont fire protection conditions and/or fire flow requirements.

3. The Applicant shall prepare project required CEQA documentation which the District will review and approve and act as the lead agency.

4. The Applicant shall prepare Riverside County Local Agency Formation Commission application package which the District will review and approve. The Applicant shall pay all applicable LAFCO processing and review fees and deposits and shall provide processing coordination on behalf of the project.

5. The Applicant will be required to connect to the non-potable water system for irrigation supply. To minimize the use of potable water, the District requires the applicant to conform to the City of Beaumont and/or the County of Riverside Landscaping Ordinances and Zoning Requirements as applicable, of which pertains to water efficient landscape requirements and the following:

   a. Landscaped areas which have turf, shall have "smart irrigation controllers" which use Evapotranspiration (ET) data to automatically control the watering. Systems shall have an automatic rain sensor to prevent watering during and shortly after rainfall and automatically determine watering schedule based on weather conditions, and not require seasonal monitoring changes. Orchard areas, if any, shall have drip irrigation.

   b. Landscaping in non-turf areas should be drought tolerant consisting of planting materials. Irrigation systems for these areas should be drip or bubbler type.

6. The Applicant shall prepare plans (as determined by District Staff) in accordance with current District Standards showing all required domestic water system and non-potable water system improvements. Said plans shall be approved by the District prior to construction.

7. The Applicant shall conform to all District requirements, City of Beaumont, and as applicable County of Riverside requirements.

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We look forward to working with you in the coming months and please feel free to contact the office should you have any questions.

This letter will expire 12 months from the date of issue.

Sincerely,

Eric Fraser
BCVWD
General Manager

Attachments: 1. March 8, 2017 Staff Report Considering Request for Annexation and Will Serve Letter" for a proposed Office and Warehouse Commercial Development located on Riverside County Assessor's Parcel Nos. (APN) 417-220-009 and Parcel Map No. (PM) 28348.

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DKJ//dkj

Beaumont-Cherry Valley Water District
Regular Board Meeting
June 10, 2020

Item 1**1**

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Resolution 2020-__ Amending Part 11 of the District's Rules and Regulations Governing Water Service Relating to Cross Connections *and***

Resolution 2020-__ Adopting a Cross-Connection Control Program

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Staff Recommendation

1. Adopt Resolution 2020-__ Amending Part 11 of the District's Rules and Regulations Governing Water Service Relating to Cross Connections
2. Adopt Resolution 2020-__ Adopting a Cross-Connection Control Program

Background

Via the District's Rules and Regulations Governing Water Service, the Board of Directors established general policies for the control of backflow and cross-connections with the intent of complying Title 17, Division 1, Chapter 5, subchapter 1, Group 4, Articles 1 and 2 of the California Code of Regulations. This portion of the Code specifically requires the water supplier to protect the public water system from contamination by implementing a cross-connection control program.

At its meeting of June 12, 2019, the Board of Directors approved a Memorandum of Understanding with the City of Beaumont for the Recycled Water Program. As part of the District's participation in the Recycled Water Project, the Department of Water Resources Division of Drinking Water (DDW) offered guidance to the District regarding revision of the District's Cross-Connection Control Program (CCCP).

The State Water Resources Control Board (State) provides regulations (Title 17 California Code of Regulations) for water agencies, including Beaumont-Cherry Valley Water District, to implement a CCCP. Said document is an integral part of the District's ability to protect the public water system from potential backflow conditions by identifying specific requirements for cross-connection inspection, approved backflow device selection, installation, testing, record keeping, and enforcement of the program. Further, the CCCP identifies the roles and responsibilities for both District staff and the consumer.

Summary

Currently, Part 11 of the Rules and Regulations Governing Water Service provides a simple overview of the District's CCCP. It is outdated and does not identify all the aspects of the program. An update is needed in order to be consistent with the requirements of Title 17 and current District practices that have been in place for many years. An updated Ordinance 2020 would replace the outdated regulation and incorporate updates to the Code.

The amendment as stated in the Resolution has been vetted and approved by District legal counsel.

A supplemental policy is also necessary to provide detailed procedures. The proposed Cross-Connection Control Program is herewith as Attachment 2, and upon adoption, will be included in the District's Policies and Procedures Manual.

Fiscal Impact

Costs of compliance with the program are borne by the affected customer.

Any potential costs to the District as a result of adoption of this Resolution are anticipated to be minor and part of the normal cost of doing business. Staff will continue to review associated costs and identify any substantive components to the Board of Directors as necessary.

Attachment(s)

- Attachment 1 - Proposed Resolution 2020-__ Amending Part 11 of the District's Rules and Regulations Governing Water Service Relating to Cross Connections
- BCVWD Rules and Regulations Governing Water Service – Part 11 (current)
- Attachment 2 - Proposed Resolution 2020-__ Adopting a Cross-Connection Control Program

Staff Report prepared by James Bean, Erica Gonzales and Lynda Kerney

(Version 6/3/20 LJK)

RESOLUTION NO. 2020-__

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE BEAUMONT-CHERRY VALLEY WATER DISTRICT TO AMEND PART 11 OF THE DISTRICT'S REGULATIONS GOVERNING WATER SERVICE RELATING TO CROSS CONNECTIONS

THE BOARD OF DIRECTORS OF THE BEAUMONT-CHERRY VALLEY WATER DISTRICT, RIVERSIDE COUNTY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Purpose. This Resolution is adopted to amend the District's rules and regulations relating to cross connections and to ensure that the District maintains a cross connection program as required by Title 17, Section 7584, of the California Code of Regulations.

Section 2. Amendment to Regulations Governing Water Service. Part 11 of the District's Regulations Governing Water Service ("Cross Connections") is hereby repealed and replaced by the version attached hereto as Exhibit "A" and incorporated herein by reference. The Recording Secretary is hereby directed to make corresponding changes to the District's Regulations Governing Water Service to incorporate Exhibit "A."

Section 3. Effective Date. The foregoing amendments to the District's Regulations Governing Water Service shall take effect immediately upon adoption of this Resolution.

ADOPTED this _____ day of _____, 2020, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST:

_____
Director John Covington, President of the Board of Directors of the Beaumont-Cherry Valley Water District

_____
Director Lona Williams, Secretary to the Board of Directors of the Beaumont-Cherry Valley Water District

EXHIBIT A

REGULATIONS GOVERNING WATER SERVICE
PART 11 CROSS CONNECTIONS

11-1 GENERAL PROVISIONS – No connection or arrangement, physical or otherwise, between the water system and any plumbing fixture or any tank, receptacle, equipment or device through which it may be possible for non-potable, used, unclean, polluted, or contaminated water or other substances, to enter into any part of the water system under any condition.

The District may discontinue service to the premises where such a connection exists.

11-2 REQUIREMENTS – Service connections shall be protected from the hazards of cross connection in accordance with the regulations of the Department of Health Services, State of California, and ordinances of the County of Riverside. Backflow preventative devices shall be installed in accordance with this Regulation unless a greater degree of hazard is present.

Should the District determine a greater degree of hazard for cross connection exists, or is anticipated, the degree of protection shall be determined by the District's Certified Backflow Specialist with the approval of the General Manager.

11-3 INSTALLATION AND MAINTENANCE OF DEVICES – Backflow preventative devices shall be installed and maintained by the consumer in accordance with the "District Standards for Cross Connection Control" where the District has determined that a cross connection or a potential for a cross connection exists. The District Standards for Cross Connection Control are set forth in the District's Cross-Connection Control Program and shall be approved and may be amended from time to time by the General Manager. A copy of the District Standards for Cross-Connection Control Program (CCCP) is available at the District's offices.

11-3.1 INSTALLATION OF CROSS CONNECTION CONTROL DEVICE – The consumer shall have a device installed by a District approved, certified installer pursuant to Article 17 of the California Administrative Code. The District will maintain a list of District approved installer/testers in the area for the convenience of the consumer. The District will also maintain an approved list of State Certified cross connection control devices. The consumer will only install a device as shown on the approved list.

The consumer will have a District approved certified installer install and test an approved cross connection control device, at the consumer expense, within 30 days of notification by the District that a cross connection control device is necessary. The consumer will provide the District with a certified copy of the installation test results no later than 10 days following the installation/test.

If the District determines that the degree of hazard is critical, the District's General Manager may, at the consumer's expense, require the immediate installation of a device.

11-3.2 MAINTENANCE AND TESTING OF A CROSS CONNECTION CONTROL DEVICE – The consumer will be responsible for the testing of a device. The District will notify the consumer when the District determines that a test of the device is necessary. Under normal circumstances tests will be completed on an annual basis unless the District has determined that additional testing is necessary.

11-3.3 INSPECTION BY THE DISTRICT – The District, at the consumer's expense, will inspect a premises where the District determines that the possibility of a cross connection may exist. The District will provide notice to the customer prior to entering the premises, unless an urgent threat to the water system is created by the cross connection or suspected cross connection.

11-3.4 RE-INSPECTION OF PROPERTY – The District will re-inspect the property of a consumer, at the consumer's expense, that has a previously installed device, as required by the "District Standards For Cross Connection Control (CCCP)" or whenever the District determines that there is a need for additional inspection.

11-4 DISCONTINUANCE OF SERVICE – In addition to any other available remedies, a service connection may be discontinued immediately, if an unprotected cross connection exists on the premises in violation of Subsection 11-1, or if a backflow preventative device has been removed or bypassed without written permission from the District. Service will not be restored until such conditions or defects are corrected. A charge will be made for the restoration of service as provided for in Subsection 5-6.

RESOLUTION 2020-__

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE BEAUMONT-CHERRY VALLEY WATER DISTRICT ADOPTING A CROSS-CONNECTION CONTROL PROGRAM

WHEREAS, via the District's Rules and Regulations Governing Water Service, Part 11, the Board of Directors established general policies for the control of backflow and cross-connections with the intent of complying Title 17, Division 1, Chapter 5, subchapter 1, Group 4, Articles 1 and 2 of the California Code of Regulations; and

WHEREAS, this portion of the Code requires the water supplier to protect the public water system from contamination by implementing a cross-connection control program (CCCP); and

WHEREAS, the State Water Resources Control Board provides regulations (Title 17 California Code of Regulations) for water agencies to implement a CCCP. The CCCP is an integral part of the District's ability to protect the public water system from potential backflow conditions by identifying specific requirements for cross-connection inspection, approved backflow device selection, installation, testing, record keeping, and enforcement of the program.

NOW THEREFORE, BE IT RESOLVED by the Board of Directors of the Beaumont-Cherry Valley Water District that:

1. The content of Exhibit A, the Cross Connection Control Program, attached hereto, is adopted in its entirety.
2. Nonsubstantive amendments to the Cross Connection Control Program may be made without Board review and / or approval when the change will not have a regulatory effect.
3. If any provision contained in Exhibit A to this Resolution is in conflict with then current state or federal legislative or case law, that legislative or case law shall prevail and shall be followed.

ADOPTED this _____ day of _____, _____, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST:

_____	_____
Director John Covington, President of the Board of Directors of the Beaumont-Cherry Valley Water District	Director Lona Williams, Secretary to the Board of Directors of the Beaumont-Cherry Valley Water District

Attachment: EXHIBIT A - Cross Connection Control Program

PURPOSE

11.1.1 The purpose of the Cross-Connection Control Program is to protect the public water supply system from contamination due to potential and actual cross-connections. This shall be accomplished by the establishment of a cross-connection control program (CCCP) as required by State regulations.

11.2 AUTHORITY

11.2.1.1 This program is adopted pursuant to Title 17, Section 7583 – 7605, inclusive, of the California Code of Regulations, entitled "Regulations Relating to Cross-Connections."

11.3 DEFINITIONS

11.3.1 ***Air Gap*** – A physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel. An "approved air gap" shall be at least twice the diameter of the supply pipe measured vertically above the overflow rim of the receiving vessel; in no case less than 1 inch.

11.2.2 ***Approved Backflow Prevention Assembly*** – An assembly that has been investigated and approved by the administrative authority having jurisdiction. The approval of backflow prevention assemblies by the administrative authority shall be on the basis of a favorable laboratory and field evaluation report by an approved testing laboratory recommending such approval.

11.2.3 ***Approved Testing Laboratory*** – The Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California (USCFCCCHR) or other laboratory having equivalent capabilities for both the laboratory and field evaluation of backflow prevention assemblies.

11.2.4 ***Approved Water Supply*** – The public water system consisting of water produced, maintained and delivered to the rate payers by the Beaumont-Cherry Valley Water District, tested and approved by the California Department of Water Resources.

11.2.5 ***Atmospheric Vacuum Breaker Backsiphonage Prevention Assembly (AVB)*** – An assembly containing an air inlet valve, a check seat and an air inlet port(s). The flow of water into the body causes the air inlet valve to close the air inlet port(s). When the flow of water stops the air inlet valve falls and forms a check valve against backsiphonage. At the same time it opens the air inlet port(s) allowing air to enter and satisfy the vacuum. A shutoff valve immediately upstream may be an integral part of the assembly, but there shall be no shutoff valves or obstructions downstream. The assembly shall not be subjected to operating pressure for more than twelve (12) hours in any twenty-four (24) hour period. An AVB is designed to protect against a non-health hazard or a health hazard under a backsiphonage condition only.

11.2.6 ***Auxiliary Water Supply*** – Any water supply on or available to the premises other than the water provided by the Beaumont-Cherry Valley Water District's approved public potable water supply.

11.2.7 ***Backflow*** – The undesirable reversal of flow of water or mixtures of water and other liquids, gases or other substances into the distribution pipes of the potable supply of water from any source or sources.

11.2.8 ***Backflow Prevention Assembly*** – Any effective assembly used to prevent backflow into a potable water system. The type of assembly used shall be based on the existing or potential degree of hazard and backflow condition and/or as further identified in this CCCP under recommendation of the District Cross-Connection Control Specialist. The types of backflow prevention assemblies are:

11.2.8.1 Atmospheric Vacuum Breaker Backsiphonage Prevention Assembly (AVB)

11.2.8.2 Pressure Vacuum Breaker Backsiphonage Prevention Assembly Type I and II (PVB)

11.2.8.3 Spill-Resistant Pressure Vacuum Breaker Backsiphonage Prevention Assembly (SVB)

11.2.8.4 Double Check Valve Backflow Prevention Assembly (DC)

11.2.8.5 Double Check Detector Backflow Prevention Assembly Type I and II (DCDA)

11.2.8.6 Reduced Pressure Principle Backflow Prevention Assembly (RP)

11.2.8.7 Reduced Pressure Principle Detector Backflow Prevention Assembly Type I and II (RPDA)

11.2.9 ***Backpressure*** – Any elevation of pressure in the downstream piping system (by pump, elevation of piping, steam pressure, air pressure, etc…) above the supply pressure at the point of consideration, which would cause or rend to cause a reversal of the normal direction of flow.

11.2.10 ***Backsiphonage*** – A form of backflow due to a reduction in system pressure, which causes a sub-atmospheric pressure to exist in the water system.

11.2.11 ***Certified Backflow Prevention Assembly Tester*** – A person who has proven ability in field testing backflow prevention assemblies to the satisfaction of the administrative authority having jurisdiction (i.e. American Water Works Association or Riverside County Department of Environmental Health). Each person who is certified to perform field tests and prepare reports on backflow assemblies shall be conversant in applicable laws rules and regulations in the opinion of the administrative authority having jurisdiction.

11.2.12 ***Consumer (Customer)*** – The owner or operator of an on-site water system(s) having a service from the Beaumont-Cherry Valley Water District. Within this document, the terms Consumer and Customer are used interchangeably.

11.2.13 ***Contaminant*** – Any substance that shall impair the quality of water, in such a way as to create an actual hazard to the public health through poisoning, the spread of disease, etc.

11.2.14 ***Critical Service*** – A water service that can never be interrupted due to the critical nature of facility involved.

11.2.15 ***Cross-Connection*** – Any actual or potential connection or structural arrangement between a public or a consumer's potable water system and any other source or system through which it is possible to introduce into any part of the potable water any used water, industrial fluid, gas, or substance other than the intended potable water with which the system is supplied. Bypass arrangements, jumper connections, removable sections, swivel or change-over devices and other temporary or permanent devices through which or because of which backflow can occur are considered to be cross-connections.

11.2.15.1 *Direct Cross-Connection* – is a cross-connection which is subject to both backpressure and backsiphonage.

11.2.15.2 *Indirect Cross-Connection* – is a cross-connection which is subject to backsiphonage only.

11.2.16 ***Double Check Valve Backflow Prevention Assembly (DC)*** – An assembly composed of two independently acting, approved check valves, including tightly closing resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks. This device shall only be used to protect against a non-health hazard.

11.2.17 ***Double Check Detector Backflow Prevention Assembly (DCDA)*** – A specially designed assembly composed of a line-size approved double check valve assembly with a bypass containing a specific water meter and an approved double check valve assembly. The meter shall register accurately for rates of flow up to 2 gallons per minute (gpm) and shall show a registration for all rates of flow. This assembly shall only be used to protect against a non-health hazard.

11.2.18 ***Health Hazard/Non-Health Hazard*** *– A Health Hazard or (Contaminant)* is any substance that shall impair the quality of water, in such a way as to create an actual hazard to the public health through poisoning, the spread of disease, etc. *A Non-Health Hazard or (Pollutant)* is an impairment of the quality of the water to a degree which does not create a hazard to the public health but which does adversely and unreasonably affect the aesthetic qualities of such waters for domestic use.

11.2.19 ***Industrial Fluids*** – Any fluid or solution, which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration, which would constitute a hazard if introduced into an approved water supply.

11.2.20 ***Internal Protection*** – The appropriate type or method of backflow prevention within the consumer's potable water system at the point of use, commensurate with the degree of hazard.

11.2.21 ***Manifold Assembly*** – An assembly comprised of backflow prevention assemblies (DC or RP) of the same manufacturer, model and size. Manifold adaptor fittings on both the inlet and outlet of the manifold assembly are considered integral components. The size of the manifold assembly is determined by the inlet and outlet connections of the manifold adaptor fittings.

11.2.22 ***Plumbing Hazard*** – An internal or plumbing type cross-connection in a consumer's potable water system with either a pollutant or contaminant.

11.2.23 ***Pollution –*** An impairment of the quality of the water to a degree which does not create a hazard to the public health but which does adversely and unreasonably affect the aesthetic qualities of such waters for domestic use.

11.2.24 ***Potable Water –*** Water from any source which has been investigated by the health agency having jurisdiction, and which has been approved for human consumption.

11.2.25 ***Pressure –*** A uniform force applied over a surface, measured as a force per unit area. Typically water is measured in pounds per square inch (psi).

11.2.26 ***Pressure Vacuum Breaker Backsiphonage Prevention Assembly (PVB) –*** An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly is to be equipped with properly located resilient seated test cocks and tightly closing resilient seated shutoff valves attached at each end of the assembly. This assembly is designed to protect against a non-health hazard under a backsiphonage condition only.

11.2.27 ***Public Potable Water System –*** Any publicly or privately-owned water system operated as a public utility under a valid health permit to supply water for domestic purposes. This system will include all sources, facilities and appurtenances between the source and the point of delivery such as valves, pumps, pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to produce, convey, treat or store potable water for public consumption or use.

11.2.28 ***Readily Accessible –*** Capable of being reached for testing and/or maintenance, without the need of removing any access panel, door, or similar obstruction.

11.2.29 ***Reclaimed Water –*** Water which, as a result of treatment of wastewater, is suitable for a direct beneficial use or a controlled use that would not otherwise occur. Reclaimed water is not safe for human consumption.

11.2.30 ***Reduced Pressure Principle Backflow Prevention Assembly (RP) –*** An assembly containing two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves and at the same time below the first check valve. The unit shall include properly located resilient seated test

cocks and tightly closing resilient seated shutoff valves at each end of the assembly. This assembly is designed to protect against a non-health hazard or a health hazard.

11.2.30 ***Reduced Pressure Principle Detector Backflow Prevention Assembly (RPDA) –*** A specifically designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a specific bypass containing a specific water meter and an approved reduced pressure principle backflow prevention assembly. The meter shall register accurately for rates of flow up to 2 gallons per minute (gpm) and shall be used to protect against a non-health hazard or a health hazard.

11.2.31 ***Sanitary Sewer –*** The pipe that carries sewage.

11.2.32 ***Service Connection –*** The terminal end of a service connection from the public potable water system (i.e. where the water supplier may lose jurisdiction and sanitary control of the water at its point of delivery to the consumer's water system).

11.2.33 ***Service Protection –*** The appropriate type or method of backflow protection at the service connection, commensurate with the degree of hazard of the consumer's potable water system.

11.2.34 ***Spill-Resistant Pressure Vacuum Breaker Backsiphonage Prevention Assembly (SVB) –*** An assembly containing an independently operating internally loaded check valve and independently operating loaded air inlet valve located on the discharge side of the check valve. The assembly is to be equipped with a properly located resilient seated test cock, a properly located bleed/vent port, and tightly closing resilient seated shutoff valves attached at each end of the assembly. This assembly is designed to protect against a non-health hazard under a backsiphonage condition only.

11.2.35 ***System Hazard –*** An actual or potential threat of severe danger to the physical properties of the public or the consumer's potable water system or of a pollution or contamination, which would have a protracted effect on the quality of the potable water in the system.

11.2.36 ***Used Water*** – Any water supplied by a water purveyor from a public potable water system to a consumer's water system after it has passed through the service connection and is no longer under the control of the Beaumont-Cherry Valley Water District.

11.2.37 ***Site Supervisor*** – The consumer or a person on the premises appointed by the consumer charged with the responsibility of maintaining the consumer's water system(s) on the property free from unprotected cross-connections and other sanitary defects, as required by regulations and laws.

11.2.38 ***Water Supplier*** – The Beaumont-Cherry Valley Water District.

11.2.39 11.5 ABBREVIATIONS

AG	Air Gap Separation
ANSI	American National Standards Institute
AVB	Atmospheric Vacuum Breaker Backflow Prevention Assembly
AWWA	American Water Works Association
BAT	Backflow Assembly Tester(s)
BCVWD	Beaumont-Cherry Valley Water District (District)
BPA	Backflow Prevention Assembly
CA/NV AWWA	California Nevada Section of the American Water Works Association
CCCM	Cross-Connection Control Manual (University of Southern California Foundation for Cross-Connection Control and Hydraulic Research)
CCCP	Cross-Connection Control Program
CCCS	Cross-Connection Control Specialist
CCR	California Code of Regulations
DC	Double Check Valve Backflow Prevention Assembly
DCDA	Double Check Detector Backflow Prevention Assembly
DCDA-II	Double Check Detector Backflow Prevention Assembly Type-II
GPM	Gallons per Minute
IPC	International Plumbing Code
LAA	Local Administrative Authority
NFPA	National Fire Prevention Association
NFSA	National Fire Sprinkler Association
OEM	Original Equipment Manufacturer
PSI	Pounds per Square Inch
PSIA	Pounds per Square Inch Absolute
PSIG	Pounds per Square Inch Gauge
PVB	Pressure Vacuum Breaker Backflow Prevention Assembly
RP	Reduced Pressure Principle Backflow Prevention Assembly
RPDA	Reduced Pressure Principle Detector Backflow Prevention Assembly
RPDA-II	Reduced Pressure Principle Detector Backflow Prevention Assembly Type-II
RV	Relief Valve
SOV	Shut Off Valve
SVB	Spill Resistant Vacuum Breaker Backflow Prevention Assembly
SWRCB	State Water Resources Control Board
TC	Test Cock
UPC	Uniform Plumbing Code
USCFCCCHR	University of Southern California Foundation for Cross-Connection Control and Hydraulic Research

11.6 PROGRAM OBJECTIVES

The objective of the CCCP is to reasonably reduce the risk of contamination of the public water system by isolating within the consumer's internal distribution system(s) or the consumer's private water system(s) such contaminants or pollutants which could backflow into the public water system; and to promote the elimination or control of existing cross-connections, actual or potential, between the consumer's internal potable water system(s) and non-potable water system(s), plumbing fixtures and industrial piping systems; and, to provide for the maintenance of a continuing Cross-Connection Control Program which will systematically and effectively prevent the contamination or pollution of the potable water system.

11.4.1 General Provisions

11.4.1.1 No connections shall be installed, located, maintained or operated between the water system and any supply system which might cause contamination or pollution of water and physical parts of the water system.

11.4.1.1.1 The District may discontinue service to the premises where such a connection exists.

11.5 REQUIREMENTS AND SCHEDULES FOR CROSS-CONNECTION SURVEYS AND BACKFLOW PREVENTION DEVICES

11.5.1 The primary method for protecting the public water system shall be the installation of a backflow prevention device by the customer, at the customer's expense.

11.5.2 Service connections shall be protected from the hazards of cross-connection in accordance with the regulations of the Department of Health Services, State of California, and ordinances of the County of Riverside. Backflow preventative devices shall be installed in accordance with these Regulations unless a greater degree of hazard is present.

11.5.2.1 Should the District determine a greater degree of hazard for cross-connection exists, or is anticipated, the degree of protection shall be determined by the District's Cross-Connection Control Specialist.

11.5.3 The District shall terminate water service to customers who do not comply with the requirements set forth in this Cross-Connection Control Program and/or requirements contained in the California Code of Regulations, Title 17, Sections 7583-7605 "Regulations Relating to Cross-Connections"

11.5.4 The procedures for evaluating the backflow prevention requirements for new and existing customers are as follows:

11.5.4.1 For all ***new non-residential services***, the District shall require that the customer submit with the application for water service a "Preliminary Cross-Connection Control Hazard Assessment Form".

This form shall be used for preliminary assessment only. The District may require a more thorough assessment at a later date if the questionnaire indicates special plumbing, hazardous water use or the potential for hazardous water use on the premises. The customer shall permit the District's Cross-Connection Control Specialist (CCCS) to conduct a cross-connection survey to determine the potential backflow and the degree of hazard on the premises. The District CCCS shall have full access to all plumbing on and within said premises. For those facilities and activities listed under section 11.6 of the CCCP, the backflow prevention devices prescribed shall be the minimum level of backflow protection installed. The District may require a higher level of backflow protection if the CCCS identifies that the premises has the potential for a change in cross-connection conditions.

11.5.4.2 For all ***new residential services***, the District shall require that the customer submit with the application for water service a completed "Water Use Questionnaire". If the customer's questionnaire indicates special plumbing, including an irrigation sprinkler system without vacuum breakers, hazardous water use on the premises, or a fire sprinkler system without internal plumbing that allows for periodic circulation of water within the fire sprinkler system, the customer shall permit the District CCCS to conduct a cross-connection survey to determine if the customer's water system poses a hazard to the public water system. The District CCCS shall determine the appropriate backflow prevention device if required.

11.5.4.3 For all ***existing non-residential services***, when deemed necessary by the District CCCS, the customer shall permit the District CCCS to conduct a cross-connection survey to determine if the customer's water system poses a hazard to the public water system. For those facilities and activities listed under section 11.6 of the CCCP, the backflow prevention devices prescribed shall be the minimum level of backflow protection installed. The District may require a higher level of backflow protection if the CCCS identifies that the premises has the potential for a change in cross-connection conditions.

11.5.4.4 For all ***existing residential services***, when deemed necessary by the District CCCS, the customer shall permit the District CCCS to conduct a cross-connection survey to determine if the customer's water system poses a hazard to the public water system. The District CCCS shall determine the appropriate backflow prevention device if required.

11.5.4.5 The District CCCS may use discretion and require a cross-connection survey on the premises of any District customer, where the District CCCS reasonably identifies that a cross-connection may exist, and where the District CCCS identifies a water system that could pose a hazard to the public water system. The District CCCS shall have full access to all plumbing on and within said premises.

11.5.4.5 As an alternative to the above requirements for a cross-connection survey, the District CCCS may use discretion and specify that a backflow prevention device be installed as a condition of service.

11.6 BACKFLOW PREVENTION DEVICE REQUIREMENTS

11.6.1 The following policy shall apply to all new and existing customers:

11.6.1.1 When a backflow prevention assembly is required to protect public health, said backflow prevention device shall be purchased and installed by the customer (at the customer's expense) as close as practical to the discharge of the water meter or point-of-connection of the fire service, in accordance with BCVWD Standard Construction Specifications and Standard Detail Drawings; and maintained, tested, and inspected in accordance with BCVWD standards.

11.6.1.1 For new customers, BCVWD will not turn on water (except for testing purposes) at the meter until the customer complies with the above requirements for installation, testing and maintenance.

11.6.1.2 Failure of the customer to comply with BCVWD's installation standards, testing and maintenance requirements may result in termination of water service. Any charges associated with the disconnection of service will apply.

11.6.1.3 Minimum level of backflow protection for specific facilities and activities. The following list includes those facilities and activities requiring backflow protection with the minimum level indicated. This list may be subject to change based on the findings of the District's cross-connection survey of the premises. This is a non-exclusive list and any facility or activity not shown may be required to install backflow prevention devices as determined by the CCCS.

MINIMUM LEVEL OF BACKFLOW PROTECTION:

1. Automotive Repair and Service Facilities – RP
2. Autopsy Facilities – RP
3. Auxiliary Water Systems (residential and non-residential) – RP
4. Bars – RP
5. Beverage Bottling Plant – RP
6. Breweries – RP
7. Buildings
    A. Any building with sewage pumps or ejectors – AG
    B. Any building containing non-potable water reuse systems – RP
    C. Any building containing mechanical equipment using chemicals with a potable water makeup line connected to the mechanical equipment – RP
    D. Any building containing carbonator (soft drink dispenser) – RP
    E. Any non-residential or non-single family residential with an ornamental fountain – RP
    F. Any non-residential or non-single family residential multi-storied building – RP
    G. Any commercial structure in which the specific business activity cannot be ascertained or is subject to change without a building permit – RP
8. Fire Protection Services
    A. Serving Commercial Fire Sprinkler Systems and/or Private Fire Hydrants
        I. Systems utilizing only BCVWD water supply through a combination service connection – DCDA
        II. Systems utilizing BCVWD water supply which also contain chemical additives, on site water storage, auxiliary water supplies or fire booster pumps – RPDA
    B. Serving Residential Fire Sprinkler Systems
        I. Systems utilizing only BCVWD water supply through a combination service connection (domestic and fire), without internal plumbing that allows for periodic circulation of water within the fire sprinkler system – DC
        II. Systems utilizing only BCVWD water supply through a separate service connection (fire only) – DC
        III. Systems utilizing only BCVWD water supply through a combination service connection (domestic and fire) and that also contain chemical additives, on site water storage, auxiliary water supplies or fire boosters pumps – RP
        IV. Systems utilizing only BCVWD water supply through a separate service connection (fire only) and that also contain chemical additives, on site water storage, auxiliary water supplies or fire boosters pumps – RP
        V. Systems utilizing only BCVWD water supply that are constructed using a passive purge system where potable water flows completely through the piping (no dead ends) to prevent stagnant water – no backflow protection is required
9. Chemical Plants – Any premises, where the manufacturing, storing, compounding, or processing of chemicals occurs. Where chemicals are used as additives in the processing of products – RP
10. Commercial Kitchens of Food Preparation Facilities – RP
11. Convalescent Homes – RP

12. Dairy Processing Plant – RP
13. Dental Clinics – RP
14. Dry Cleaning Facilities – RP
15. Fuel Storage or Dispensing Facilities – RP
16. Film Processing Facilities – RP
17. Florists – RP
18. Grocery Stores – RP
19. Hazardous or potentially hazardous treatment processes with pumping equipment – RP
20. Hospitals – RP
21. Ice Manufacturing Plant – RP
22. Indoor Fitness facilities with or without Spa or Pool – RP
23. Irrigation systems with capabilities for injecting fertilizers, or hazardous chemicals – RP
24. Irrigation systems without pumps, injectors, fertilizers, or hazardous chemicals, subjected to backsiphonage only – PVB
25. Laboratories – including, but not limited to, teaching institutions, biological and analytical facilities – RP
26. Laundries (commercial) – RP
27. Lawn irrigation systems – Vacuum Breaker
28. Massage Therapy Clinics and Spas – RP
29. Medical Building and Clinics – RP
30. Metal manufacturing, Cleaning, Processing or Fabricating Plant – RP
31. Morgues – RP
32. Mortuaries – RP
33. Multiple Services: Including two or more interconnected services provided by one water supplier to a single owner and/or Operator – RP
34. Multi-residential or multi-family services (served by a single meter) – RP
35. Nursing Homes – RP
36. Oil/Gas Production, Storage or Transmission premises – RP
37. Paper and Paper Products Manufacturing Plants – RP
38. Pet Stores – RP
39. Plastic Manufacturing, Extruding and Injection Molding – RP
40. Plating Plants – RP
41. Public or Commercial Swimming Pools – RP
42. Portable Spray or Cleaning Equipment which can be connected to the BCVWD water system – RP
43. Radioactive Materials or Substances Processing or Storage – AG
44. Recycled Water – This includes premises where recycled water is used, or has the potential to be used, with no interconnection to the BCVWD water system – RP
45. Restaurant – RP
46. Restricted, Classified, or Other Closed Facilities – RP
47. Rubber Manufacturing Facilities – RP
48. Salon, Hair and/or Nails, and Barber Shops – RP
49. Sand and Gravel Plants – RP
50. Sanitariums – RP
51. Schools, Colleges and University – RP
52. Sewer Lift Stations – AG
53. Sewer Treatment Facilities – AG
54. Solar Heating
    A. Solar collection systems that contain any hazardous materials and have a direct connection to the BCVWD water system – RP

B. Solar system that is once through such as domestic hot water systems do not require protection.

55. Tank Trucks – AG
56. Vehicle Washing Facilities – RP
57. Veterinary Facilities, Kennels, Animal Boarding – RP

11.7 FACILITIES WITH SPECIAL CONSIDERATIONS

11.7.1 Although the air gap is a very effective means of preventing backflow; it is not practical in every case. Under special consideration and approval from the State Water Resources Control Board Division of Drinking Water and District CCCS, an RP or RPDA backflow prevention assembly may be used ONLY for limited on-site potable water and/or fire protection supply. Said water supply shall in no way be physically connected to any equipment, piping, valves, appurtenances, or wastewater treatment process, that are in anyway, in contact with raw sewage, treated wastewater, recycled water, used water, or treated industrial water.

11.7.1.1 Special consideration shall include, at a minimum:

11.7.1.1.1 Submission of facility/premises plot plan showing potable water service connection location or proposed potable water service connection location and any on-site non-potable plumbing that may be, or has potential to be, in close proximity to the potable water system.

11.7.1.1.2 Submission of plans prior to any change in plumbing on the premises (both potable and non-potable).

11.7.1.1.2.1 Said plan changes must be approved by the District CCCS prior to the commencement of work to assure physical separation from the public water system and/or on-site potable water system.

11.7.1.1.3 Testing of the RP or RPDA backflow prevention assembly every six (6) months by a District approved Backflow Assembly Tester (BAT).

11.7.1.1.4 Annual cross-connection survey of the facility/premises by the District CCCS. The District CCCS shall have full access to all plumbing on and within said facility/premises.

11.7.1.2 Additional on-site backflow protection may be required, in addition to, BCVWD meter protection, as identified during cross-connection surveys and upon District CCCS recommendation, when a significant risk, or potential risk, to public health is identified.

11.8 APPROVED BACKFLOW PREVENTION DEVICES INSTALLATION

11.8.1 BCVWD shall make every reasonable effort to ensure that approved backflow prevention devices protect the public water system from contamination. Any backflow prevention device required herein shall be of a type, make, model and size approved by University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USCFCCCHR). The term "Approved Backflow Prevention Device" shall mean a device that has been manufactured in full conformance with standards established by the American Water Works Association (AWWA) titled:

AWWA/ANSI C510 07 Standard for Double Check Valve Backflow Prevention Device; AWWA/ANSI C511 07 Standard for Reduced Pressure Principle Backflow Prevention Device; and, have met completely the laboratory and field performance specifications of USCFCCCHR established in the most current edition of the Manual of Cross-Connection Control (i.e. 10th edition)

11.8.2 Said AWWA and USCFCCCHR standards and specifications have been adopted by BCVWD. Final approval shall be evidenced by a "Certificate of Compliance" for the said AWWA standards and a "Certificate of Approval" for the said USCFCCCHR Specifications, issued by an approved testing laboratory.

11.8.3 The following testing laboratory has been qualified by the SWRCB to test and approve backflow prevention devices and said qualification is adopted by BCVWD:

Foundation for Cross-Connection Control and Hydraulic Research
University of Southern California Research Annex 219
3716 South Hope Street
Los Angeles, California 90089-7700

11.8.4 All backflow prevention devices shall be installed accordingly:

11.8.4.1 As close as practical to the discharge of the water meter or point-of-connection of the fire service.

11.8.4.1.1 In no case shall a cut, tee, or tap be made between the customer's point of connection to the public water system and the backflow prevention device.

11.8.4.1.2 Backflow prevention devices shall be installed 12 to 36 inches above finished grade and with at least 12 to 24 inches of horizontal side clearance.

11.8.4.1.3 The orientation for which they are approved; no post manufacture modifications to backflow prevention devices shall be accepted.

11.8.4.1.4 In a manner that protects them from flooding and freezing.

11.8.4.1.4.1 A backflow security freeze blanket (or comparable product), sized to properly fit, shall be installed over the backflow prevention device.

11.8.4.1.5 In accordance with the installation standards outlined in the most recently published edition of the USCFCCCHR *Manual of Cross-Connection Control* (i.e. 10th edition), unless the manufacturer's requirements are more stringent.

11.8.4.1.6 All backflow prevention device installations shall be inspected by BCVWD prior to backfill, to ensure compliance with these requirements.

11.8.4.1.7 All air gap separations shall be installed in conformance with the State adopted UPC.

11.8.4.1.8 Installations shall conform to the most current version of BCVWD Standards.

11.8.4.1.9 All presently installed backflow prevention devices which do not meet the requirements of this section but were approved devices for the purposes described herein at the time of installation shall be excluded from the requirements of these rules if approved by the District CCCS. However, when the existing device is moved from the present location, or when the BCVWD identifies that the device constitutes a hazard to health, the unit shall be replaced by an approved backflow prevention device meeting the current requirements of BCVWD.

11.8.4.1.10 Improper installations such as installations in a confined space or in an unapproved orientation shall be retrofitted with an approved method of backflow prevention installed in accordance with BCVWD installation requirements, at the expense of the customer, when repair of the device is required to pass a functional backflow test.

11.8.4.1.11 BCVWD has no regulatory responsibility or authority over the installation and operation of the customer's plumbing system. The customer is solely responsible for compliance with all applicable regulations and for prevention of contamination of the plumbing system from sources within their premises. Any action taken by BCVWD to survey plumbing, inspect or test backflow prevention devices, or to require premises isolation is solely for the purposes of reducing the risk of contamination of BCVWD's public water system.

11.9 SCHEDULE FOR INSTALLATION OF BACKFLOW PREVENTION DEVICES

11.9.1 The following table shows the schedule that BCVWD will follow for installation of backflow prevention devices when they are required (based on the cross-connection survey)

Type of Service	Schedule
New Connections with cross-connection hazards	Before service is initiated
Existing connections with CCR Title 17 Table 1-type hazards and other contaminant cross-connection hazards	Within 45 days after notification
Existing connections other than CCR Title 17 Table 1-type hazards or pollutant cross-connection hazards	Within 45 days after notification
Existing fire protections systems using chemicals or supplies by unapproved auxiliary water source	Within 30 days after notification
Existing fire protection systems not using chemicals and supplied by BCVWD's water	Within 90 days after notification

*BCVWD may consider granting an extension of time for installation of a backflow prevention device for an existing service connection if requested by the customer with a justification of their request. Failure to install a backflow prevention device by the notification deadline, without an extension, may result in a disconnection of service until the installation requirements are met.

11.10 PROGRAM ADMINISTRATION

11.10.1 The General Manger or designee (CCCS) shall be responsible for implementing and enforcing the cross-connection control program. An appropriate backflow prevention assembly shall be installed by and at the expense of the water user at each user connection where required to prevent backflow from the water user's premises to h domestic water system. It shall be the water user's responsibility to comply with the BCVWD's requirements.

11.10.2 The BCVWD CCCS shall implement the CCCP.

11.10.3 The following cross-connection related tasks shall be performed by or under the direction of the BCVWD CCCS:

11.10.3.1 Recommendations regarding changes to the CCCP;

11.10.3.2 Performance of cross-connection control surveys;

11.10.3.3 Determination on the type of backflow prevention device to be installed;

11.10.3.4 Inspections of backflow prevention device for proper application and installation;

11.10.3.5 Reviews of backflow prevention device inspection and test reports;

11.10.3.6 Recommendations and/or the granting of exceptions to mandatory requirement of backflow prevention device;

11.10.3.7 Investigations of backflow incidents or water quality problems related to cross-connection;

11.10.3.8 Completion of Backflow Incident Reports; and

11.10.3.9 Completion of the Cross-Connection Control Section of the Annual Report to the Drinking Water Program required by the State Water Resources Control Board.

11.10.4 The General Manager may delegate other CCCP activities to other personnel who are not certified CCCSs, including clerical support staff. These activities include, but are not limited to the following:

11.10.4.1 Administration of paperwork related to the CCCP;

11.10.4.2 Mailing, collecting, and initial screening of Preliminary Cross-Connection Control Hazard Assessments;

11.10.4.3 Mailing, collecting, and initial screening of Water Use Questionnaires;

11.10.4.4 Mailing of device testing notices;

11.10.4.5 Receiving and screening of device testing reports;

11.10.4.6 CCCP database administration and record keeping; and

11.10.4.7 Dissemination of Public education material.

11.10.5 The following table identifies the current CCCS employed by BCVWD

Current Cross-Connection Control Specialist Contact Information	
Names of CCCS	James Bean
Address	560 Magnolia Avenue
City, State, Zip	Beaumont, CA 92223
Telephone Number	(951) 845-9581 ext. 263
Email Address	backflow@bcvwd.org
AWWA CCCS Certification number	03017

11.11 BACKFLOW PREVENTION DEVICE INSPECTIONS AND TESTING

11.11.1 Inspection and Testing of Backflow Prevention Devices

11.11.1.1 All backflow prevention devices that BCVWD relies upon for protection of the public water system shall be subject to inspection and testing.

11.11.1.2 Inspection of the backflow prevention devices shall be as follows:

11.11.1.2.1 BCVWD's CCCS shall inspect backflow prevention devices for proper application (i.e. to ensure that the device installed is commensurate with the assessed degree of hazard).

11.11.1.2.2 The CCCS, CA/NV AWWA certified Backflow Assembly Tester (BAT), or Riverside County Department of Environmental Health certified Backflow Assembly Tester (BAT) pre-approved by BCVWD shall inspect backflow prevention devices for correct installation.

11.11.1.3 Customers with a backflow prevention device on their premise shall have the device inspected and tested at least annually by an approved BAT. Customers with a backflow prevention device approved with special considerations as identified in this CCCP may be required to have the backflow prevention device inspected and tested on a more frequent basis.

11.11.1.4 When backflow prevention devices are determined to be defective, they shall be repaired or replace by the customer within (14) calendar days or service will be discontinued.

11.11.2 Frequency of Inspection and Testing

11.11.2.1 Inspection and testing of backflow prevention devices shall be conducted:

11.11.2.1.1 At the Time of installation;

11.11.2.1.2 Annually after installation;

11.11.2.1.3 After a backflow incident; and

11.11.2.1.4 After repair, reinstallation, relocation, or re-plumbing; or

11.11.2.1.5 Any time the device is found to not be in good repair.

11.11.2.2 All air gap separations shall be inspected annually and after modifications to the installation.

11.11.2.3 BCVWD may require a backflow prevention device to be inspected and/or tested more frequently than once a year, when it protects against a high-health hazard or when it repeatedly fails test or inspections.

11.11.3 Responsibility for Inspection, Testing and Repairs

11.11.3.1 The customer shall be responsible for inspection, testing and repair of backflow prevention devices and air gaps owned by the customer. The customer shall employ, at the customer's expense, a CA/NV AWWA certified BAT or Riverside County Department of Environmental Health certified BAT, pre-approved by BCVWD to conduct the inspection and test within the time period specified in the testing notice sent by BCVWD. The original test report shall be completed and signed by the BAT, and returned to BCVWD, before the due date specified by BCVWD.

11.11.3.2 The customer may request an extension of the due date for returning a test report by submitting a written request to BCVWD. Failure to return a test report by the due date, without an extension, may result in a disconnection of service until a passing report is received.

11.11.4 Notification of Inspection and/or Testing

11.11.4.1 BCVWD will notify in writing all customers who own backflow prevention devices that are relied upon to protect the public water system to have their backflow prevention device(s) tested. Notices will also specify the date by which the test report must be received by BCVWD a minimum of 45 days from notification. If the District has not received a passed test report in the designated time frame, the enforcement policies in section 11.11.8 shall be applied.

11.11.5 Approved Test Procedures

11.11.5.1 BCVWD will require that all devices relied upon to protect the public water system be tested in accordance with CA/NV AWWA approved test procedures as specified by the USCFCCCHR established in "Field Test Procedures" in the most current edition (i.e. 10th edition) of the Manual of Cross Connection Control.

11.11.6 Backflow Prevention Device Test Reports

11.11.6.1 Test results shall be submitted within ten (10) calendar days of the test date. Test results may be submitted electronically in PDF format, by mail, or in person in original hard-copy format to:

Beaumont-Cherry Valley Water District
Attention: Cross-Connection Control Program
560 Magnolia Avenue
Beaumont, CA, 92223
backflow@bcvwd.org

11.11.7 Repairs

11.11.7.1 Any device that fails routine testing shall be repaired within fourteen (14) days of the initial test date.

11.11.7.2 The customer must notify BCVWD if repairs cannot be made within the specified period.

11.11.7.3 Only Original Equipment Manufacturer (OEM) parts shall be used to repair backflow prevention devices. If OEM replacement parts are not available, then an approved new backflow prevention device must be installed to replace the existing device.

11.11.7.4 “Pursuant to section 116875 of California Health and Safety Code, any failed device that is not “lead free”, that is not specifically exempted by section 116875, must be replaced with an approved “lead free” device rather than being repaired.”

11.11.8 Enforcement

11.11.8.1 To enforce the CCCP, it may become necessary to discontinue water service to a customer. Conditions that warrant discontinuance of service include but are not limited to the following:

11.11.8.1.1 When BCVWD identifies a customer’s water use that represents a clear and immediate hazard to the public water system that cannot be immediately abated.

11.11.8.1.2 Direct or indirect connection between the customer’s water system and a sewer line.

11.11.8.1.3 Unprotected direct or indirect connection between the public water system and an auxiliary water system.

11.11.8.1.4 Refusal to inspect an air gap separation

11.11.8.1.5 Refusal to install a required backflow prevention device.

11.11.8.1.6 Refusal to test a backflow prevention device.

11.11.8.1.7 Refusal to repair or replace a faulty backflow prevention device.

11.11.8.1.8 Refusal to upgrade a backflow prevention device to the necessary level of protection as identified by the District CCCS.

11.11.8.1.9 Any refusal to comply with the regulations set forth in this CCCP.

11.11.8.2 Prior to any discontinuance of water service, BCVWD shall notify the customer in writing, specifying the corrective action needed and the time period in which it must be done. If no action is taken within the allowed time periods, water service shall be discontinued and the customer's water system may be physically separated from the public water system. The water service shall remain inactive until correction of violation has been approved by the District's CCCS.

11.11.8.2.1 To protect the public water system, BCVWD reserves the right to immediately and without prior customer notification discontinue water service to a customer's premises by providing a physical break in the service line until the customer has corrected the condition(s) that warranted the discontinuance of service.

11.11.8.2.2 Any fees associated with the disconnection of water service are the responsibility of the customer.

11.11.8.3 When a customer fails to send in the test report by the due date specified, and BCVWD has not approved an extension to the due date, the District shall take the following enforcement action:

11.11.8.3.1 BCVWD will send a second notice by mail giving the customer an additional fourteen (14) days to send in the test report.

11.11.8.3.2 If the customer has not sent in the test report within 14 days of the due date given in the second notice, the District will send a third notice by mail and hang a third notice tag at the physical address (a 10-day shutoff notice) in a conspicuous location of the property where the backflow prevention device is located giving the customer an additional ten (10) days to send the report. The notice will also inform the customer that failure to satisfactorily respond to this notice will result in the discontinuance of water service.

11.11.8.3.3 If the owner and/or occupants have not responded satisfactorily to the District within 10 days of the due date specified in the third notice, the District shall implement water service shut-off procedures. If the customer's water service is discontinued due to any violation of the CCCP, the customer shall be subject to any shut-off fees for the discontinuance of water service. Upon seeking renewed service from the District, the backflow prevention device

being returned to service must be tested and the resulting test report submitted to the District.

11.11.8.4 In addition to the grounds for water service termination set forth in this section, BCVWD may terminate water service to any premises if a required backflow prevention device or air gap is removed by the customer, or if BCVWD finds evidence that an installed backflow prevention device or air gap has been bypassed or rendered ineffective.

11.11.8.5 If BCVWD decides that termination of water service is either too difficult or may pose a health issue, BCVWD may use BCVWD work forces, or use a contractor, to make the necessary repairs, replacements, or installations required to protect the public water system. The cost for such services shall be passed on to the customer. The customer will be notified in writing specifying the corrective action(s) taken and the time period in which it will be done prior to the commencement of work. If no action is taken by the customer then work shall begin. If the customer fails to pay the cost within 30 days of notification, BCVWD may cause a lien to be placed against the property in accordance with the procedures set forth in Title 14 of the California Civil Code.

11.11.9 Fees and Charges

11.11.9.1 Administration of this program requires the collection of fees as appropriate that can be assigned to the customer and services performed that are not considered an appropriate charge under BCVWD's Water Rates. Fees for the Backflow Testing Program Annual Backflow Testing shall be governed by BCVWD Rules and Regulations Governing Water Service Part 5-3 Backflow Administrative Charge as may be amended or superseded.

11.11.10 General Requirements of Approved Backflow Testers

11.11.10.1 Certified Backflow Prevention Assembly Testers shall be responsible for ensuring that all backflow prevention devices at the customer's service connection are identified and tested.

11.11.10.2 If a BAT finds a device that has been modified or incorrectly installed, they must immediately report the situation to BCVWD and ***not test the device.*** To report the situation, call the BCVWD administration office at (951) 845-9581 and/or email the CCCS at backflow@bcvwd.org. All devices must be on the "Approved Backflow Prevention Assemblies" list developed by the USCFCCCHR. Any modification of a device, such as relocation of valves, bypass arrangements, and jumper connections, whether temporary or permanent, invalidates the USDFCCCHR approval and is not permitted. Likewise, a device that has been installed in an

orientation for which it was not designed or approved is also not permitted.

11.11.10.3 If a BAT finds a cross-connection hazard that is unprotected, that is, with no backflow prevention device or the wrong type of device, the tester must inform the customer of the hazard and potential health risk associated with it. The tester must also report the situation to BCVWD immediately by calling BCVWD administration office at (951) 845-9581 and/or emailing the CCCS at backflow @bcvwd.org. A device that is the wrong type for the hazard should not be tested.

11.11.10.4 If a BAT finds an existing backflow prevention device that is not tagged or is out of compliance with its test date, the tester must inform the customer of the need to test the device and must report the device to BCVWD immediately.

11.11.11 List of Approved Backflow Assembly Testers (BATs)

11.11.11.1 BCVWD shall maintain a list of local, CA/NV AWWA certified BATs and Riverside County Department of Environmental Health certified BATs that are approved by BCVWD to perform the following activities;

11.11.11.1.1 Backflow preventer inspection for proper installation; and

11.11.11.1.2 Backflow device testing.

11.11.11.2 The list will be revised annually or more frequently if necessary.

11.11.12 BAT Approval Qualifications

11.11.12.1 BATs who wish to be included on the BCVWD approved list and/or provide testing in the BCVWD service area must apply to the District and furnish the following information:

11.11.12.1.1 Evidence of current CA,NV AWWA certification or Riverside County Department of Environmental Health certification in good standing;

11.11.12.1.2 Make, model, and serial number of testing equipment;

11.11.12.1.3 Evidence of test equipment verification of accuracy and/or calibration within the past 12 months.

11.11.13 Denial, Suspension or Revocation of Tester from BCVWD Approved List

11.11.13.1 Tester Approval by BCVWD may be denied, suspended or revoked upon any of the following grounds:

11.11.13.1.1 A BAT is no longer in possession of a current and valid certificate as a Backflow Prevention Assembly Tester

Certification by either CA/NV AWWA or the Riverside County Department of Environmental Health.

11.11.13.1.2 A BAT is no longer in possession of a current and valid test kit calibration certificate.

11.11.13.1.3 BCVWD determines that a material misrepresentation was included or omitted by the BAT on the initial or renewal application for BAT approval by BCVWD.

11.11.13.1.4 BCVWD determines that the BAT, in the performance of a test or repair required by the BCVWD, commits an act that may pose a threat to public health and safety.

11.11.13.1.5 A BAT fails to submit backflow assembly test report forms within ten (10) days of performing a backflow device test required by BCVWD.

11.11.13.1.6 A BAT repeatedly submits incomplete or incorrect test reports to BCVWD.

11.11.13.1.7 A BAT fails to report a device that has been modified or incorrectly installed.

11.11.13.1.8 A BAT performs a backflow prevention device repair with parts other than OEM parts.

11.11.13.1.9 A BAT performs a backflow assembly test using testing procedures other that those accepted by BCVWD.

11.11.13.1.10 A BAT fails to report a cross-connection hazard that is unprotected (i.e. with no backflow prevention device or with the wrong type of device).

11.11.13.1.11 A BAT fails to report the removal or replacement of a backflow prevention device on a Backflow Prevention Assembly Test Report.

11.11.13.1.12 A BAT performs a repair upon a backflow prevention device which has been required to be replaced by BCVWD.

11.11.13.1.13 If a BAT has unresolved customer complaints or complaints from multiple customers.

11.11.13.1.14 Fraud or gross negligence in performing of their duties.

11.11.13.1.15 Written notice of denial, suspension or revocation of a BCVWD approved BAT shall be served to the BAT by certified mail with a description of the violation and supporting facts.

11.11.13.1.15.1 The notice shall contain a statement of the right to request as appeal hearing before the BCVWD General Manager, or their designee.

11.11.13.1.15.2 The notice shall contain a statement of the time period of denial, suspension or revocation.

11.11.14 BAT Appeals

11.11.14.1 The decision of the BCVWD CCCS is appealable to the BCVWD General Manager

11.11.14.1.1 An appeal must be in writing, and be hand-delivered or mailed to the BCVWD General Manager.

11.11.14.1.2 The filing of a timely appeal will stay in suspension or revocation pending a decision on the appeal by the BCVWD General Manager or their designee.

11.11.14.1.3 A hearing shall be scheduled within thirty (30) days unless an extension is authorized by the appellant.

11.11.14.1.4 No reapplication will be accepted within two (2) years after a BCVWD BAT certification is revoked.

11.11.14.2 The decision of the BCVWD General Manager or their designee shall be a final administrative order, with no further administrative right of appeal.

11.11.15 Quality Assurance Backflow Incident Response Plan

11.11.15.1 BCVWD's CCCS will review within thirty (30) days of receipt the backflow preventer test report forms submitted by pre-approved BATs.

11.11.15.2 BCVWD's CCCS shall provide follow up on backflow devices and /or test reports that are deficient in any way.

11.11.15.3 BCVWD's CCCS may conduct follow up tests on backflow devices tested by a BAT at the discretion of the District.

11.11.16 Record Keeping

11.11.16.1 Types of Records and Data to be maintained

11.11.16.1.1 BCVWD will maintain records of the following types on information required by CCR Title 17 Section 7605:

11.11.16.1.1.1 Service connections/customer premises information including:

11.11.16.1.1.1.1 Assessed degree of hazard; and

11.11.16.1.1.1.2 Required backflow preventer to protect the public water system.

11.11.16.1.1.2 Backflow preventer inventory and information including:

11.11.16.1.1.2.1 Air Gap (AG) location, installation and inspection dates, inspection results and person conducting inspection;

11.11.16.1.1.2.2 Backflow device location, device description (type, manufacturer, make, model, size, and serial number, meter number if applicable), installation, inspection and test dates, test results and data, and person performing test.

11.11.16.1.1.3 BCVWD will maintain records on all devices that protect the public water system from contamination. At a minimum, BCVWD will maintain test reports on all backflow prevention devices required to protect the public water system for a minimum of five (5) years.

11.11.17 Recycled/Reclaimed Water

11.11.17.1 Recycled water shall be distributed and used in a manner that meets all State, County, and District requirements and shall achieve the following:

11.11.17.1.1 Prevent direct human contact of recycled water through adherence to all applicable rules and regulations and laws.

11.11.17.1.2 Prevent cross-connection between recycled and potable water systems which include the strict policies set forth in this CCCP. For all dual plumbed locations (where potable and recycled water exist on the premises), the following requirements shall be in enforced:

11.11.17.1.2.1 An approved backflow prevention device shall be installed on both the potable and recycled water lines commensurate with the degree of hazard (i.e. RP).

11.11.17.1.2.2 Backflow preventer devices shall be installed in accordance with Section 11.8 of the CCCP.

11.11.17.1.2.3 BCVWD's CCCS shall conduct cross-connection control inspections of all dual plumbed premises at least annually.

11.11.18 Prohibition of Return of Used Water

11.11.18.1 BCVWD must prohibit the intentional return of used water to the distribution system per CCR, Title 17 Sections 7583-7605.

11.11.18.2 Used Water is defined as water that has left the control of BCVWD. This includes all water after it has passed through the meter and water that may flow back into the distribution system from customers with multiple connections.

11.11.18.3 It is the policy of the BCVWD water system to:

11.11.18.3.1 Prohibit the intentional return of used water to the distribution system by any customer served by the public water system; and

11.11.18.3.2 Require that all customers with multiple connections, where the hydraulics permit the potential return of used water, to install a backflow preventer (RP) at each point of connection.

11.11.19 Unapproved Auxiliary Supplies

11.11.19.1 All water supplies other than those owned by BCVWD are considered unapproved auxiliary supplies as defined in CCR Title 17 Section 7583. BCVWD shall require backflow protection for customers with auxiliary supplies on their premises as follows:

11.11.19.1.1 Per Table 1 of CCR Title 17, BCVWD shall require the installation of an RP for premises isolation at the service connection to any customer having an unapproved auxiliary supply on the premises where a water service from BCVWD's public water system exists, whether or not there is a physical connection between the unapproved auxiliary supply and BCVWD's public water system.

11.11.20 Tanker Trucks

11.11.20.1 BCVWD may allow tanker trucks to obtain water from BCVWD's system under the following conditions:

11.11.20.1.1 The tanker truck is equipped with an approved AG

11.11.20.1.2 The tanker truck will obtain water from BCVWD designated watering points only. These watering points are equipped with an RP backflow preventer. Said RP backflow preventer shall be provided and tested at the customers expense with a passing test submitted to BCVWD prior to receiving water service.

11.11.21 Temporary Water Connections

11.11.21.1 BCVWD shall not supply water through temporary connections, such as those used for construction projects or main disinfection, except through an approved, tested RP backflow preventer supplied at the customer's expense.

Beaumont-Cherry Valley Water District
Regular Board Meeting
June 10, 2020

Item 12

STAFF REPORT

TO: Board of Directors

FROM: Dan Jaggers, General Manager

SUBJECT: **Resolution 2020-____: Approval of Water Supply Assessment for Water Service for Legacy Highlands Development Project located south of State Highway 60 and west of Beaumont Avenue (Highway 79) (Tentative Tract Map No. 31570)**

Staff Recommendation

Consider the following actions for the Legacy Highlands Development Project (Tentative Tract Map 31570).

1. Approve the "Draft" Water Supply Assessment for TTM 31570 – The Legacy Highlands.

2. Adopt Resolution 2020-___, Acknowledging the Review, Receipt and Acceptance of the Water Supply Assessment for TTM 31570 – The Legacy Highlands.

Background

District Staff has received a request for an Update to the "Will Serve Letter" for a project known as the Legacy Highlands Development Project (formerly Willow Springs Development "The Preserve") which encompasses approximately 1,600 acres of land (see Figure 1 – Legacy Highlands Project Location).

Further, this project was provided a "Will Serve Letter" from the District in 2009 and project annexation through LAFCO was initiated in the same year. The City of Beaumont approved the Environmental Impact Report (EIR) and filed a Notice of Determination, however local opponents to the project sought court review of the EIR, including among other elements, water supply adequacy. A court ruling subsequently occurred which indicated that the EIR did not adequately show a sufficient 20-year water supply to support the Legacy Highlands Development Project.

At the end of 2018, the Developer requested that the District prepare a new Water Supply Assessment (WSA) and that said assessment, together with a request for a "Will Serve Letter," be presented to the Board. At the April 10, 2019 Regular Meeting of the Board of Directors, two (2) Board members were not in attendance, therefore this item was brought before the Board for further discussion at the April 25, 2019 Engineering Workshop to allow the entire Board the opportunity to fully review, provide comment and discussion of the Draft WSA. This item, however, was pulled from the agenda at the request of the Developer.

After the April 25, 2019 Engineering Workshop, the Developer indicated to District staff that they wanted to further evaluate the water supply opportunities within the project's limits and prepare and provide supplemental information to the WSA which was prepared by District staff.

On January 23, 2020, District staff presented information as provided by the Developer pertaining to existing wells, infiltration basins, stormwater capture & recharge, and the potential of establishing a mutual water company. District staff identified the concerns with the propositions for the Developer providing its own proposed water supplies, to the Board. Subsequent to the January 23, 2020 Board Meeting, District staff continued to work with the Developer in reviewing the various options for water supply and around late May 2020, District staff began an update to the previously prepared WSA for the Project, which included considerations for the water supplies presented by the Developer.

The estimated water demand for the Proposed Project has been established based on discussion with District staff and the Developer. The estimated potable water demand for said Project (at build-out) would be 1,343.4 acre-ft. per year (AFY). Said potable and non-potable water system usage is summarized as follows:

	Acre Feet Per Year (AFY)	Gallons Per Day (GPD)
Potable Water Demand	1,343.4 AFY	1,199,228 GPD
Non-Potable Water Demand*	178.2 AFY	159,076 GPD
TOTAL WATER DEMAND:	**1,521.6 AFY**	**1,358,304 GPD**

* Non-Potable Water Demand is proposed to be supplied by the Developer's existing on-site wells until such time as recycled water is available from the City of Beaumont through BCVWD. A supplemental technical memorandum was provided by the Developer which indicates that the existing on-site wells can supply the demand of 178.2 AFY.

The total new potable water demand required by the project is estimated to be 1,343.4 AFY (2,067.63 EDUs) and is further discussed in the WSA (see Attachment 3 - "Draft" Water Supply Assessment).

District staff understand that the WSA is intended to provide a link between Water Supply and Land Use Planning and believes that this WSA provides an accurate assessment of the state of the Water Supply for the District's Service Area and Sphere of Influence. In fact, the WSA and associated review actually encompasses District staff's current understanding of the greater regional area serviced by the State Water Contractor and encompasses a review of regional supply activities.

Staff further understands that ultimately, the goal of a WSA is to evaluate whether the water agency's total projected water supplies available during normal, single-dry and multiple-dry water years during a 20-year projection are sufficient to meet the projected water demand associated with the proposed project, in addition to the water agency's existing and planned future uses, including agricultural and manufacturing uses. Upon approval by the District, the WSA is normally submitted to the lead agency (City of Beaumont) for inclusion in the CEQA document being prepared for the proposed project, wherein the lead agency must determine based upon the entire record whether the projected water supplies will be sufficient for the project in addition to existing and planned future uses.

A project of this magnitude will impose a relatively large demand on the District's water supply and infrastructure as it moves toward completion.

At this time, District staff identifies that the current Water Supply Assessment prepared for the Legacy Highlands Development Project fairly represents secured and planned water supply activities necessary to support this project. Said WSA further sets forth secured and

unsecured planned water supply opportunities associated with water supply necessary to meet both the District's Service Area and Sphere of Influence, together with regional area needs and therefore recommends that the District Board of Directors consider adoption of the attached Resolution 2020-__ approving the Water Supply Assessment (Revised) for TTM 31570 – The Legacy Highlands.

Finally, as the project moves forward, there will be items that require further attention by District staff, including preparation of an updated Plan of Service which sets forth final District development requirements (outlined in the District's current master plan and as described further herein) and the attached WSA. Staff has further identified some preliminary proposed development conditions which are general in nature hereafter.

BCVWD Preliminary Proposed Development Conditions are as Follows:

Prior to final project development, the following conditions must be met:

1. The Applicant shall enter into a water facilities extension agreement and pay all fees associated with the domestic, non-potable water services and main line pipeline extensions. The Applicant shall also pay all fees related to new fire service facilities including any facilities improvements that may be necessary to meet the fire flow requirements.
2. The Applicant shall be required to extend all master plan water and recycled water pipeline facilities to the property in question and along all property frontages in accordance with a Plan of Service for said property which will be updated from the preliminary plan of service and fire flow analysis.
3. The Applicant shall be required to pay front footage fees along all property frontages where facilities are currently installed.
4. The Applicant shall connect to the recycled water system for irrigation supply. To minimize the use of potable water, the District requires the applicant conform to the City of Beaumont Landscaping Ordinances and Zoning Requirements and/or County of Riverside Landscaping Ordinances (as applicable) which pertains to water efficient landscape requirements and the following:
    a. Landscaped areas which have turf, shall have "smart irrigation controllers" which use Evapotranspiration (ET) data to automatically control the watering. Systems shall have an automatic rain sensor to prevent watering during and shortly after rainfall and automatically determine watering schedule based on weather conditions, and not require seasonal monitoring changes. Orchard areas, if any, shall have drip irrigation.
    b. Landscaping in non-turf areas should be drought tolerant consisting of planting materials native to the region. Irrigation systems for these areas should be drip or bubbler type.
5. The Applicant shall prepare plans in accordance with District Standards showing all required domestic water system and non-potable water system improvements. Said plans shall be approved by the District prior to construction.
6. The Applicant shall conform to all District requirements and all City of Beaumont requirements.
7. The Applicant may be required to provide water line purge systems (flush system) and return flow pump system or pressure reducing system as part of their development

conditions due to interim service conditions resulting from end of development conditions related to the proposed development due to the fact that it is at the edge of the District Service Area Boundaries.

8. Applicant will be required to provide a District well site and associated facilities easements within development footprint.

Fiscal Impact

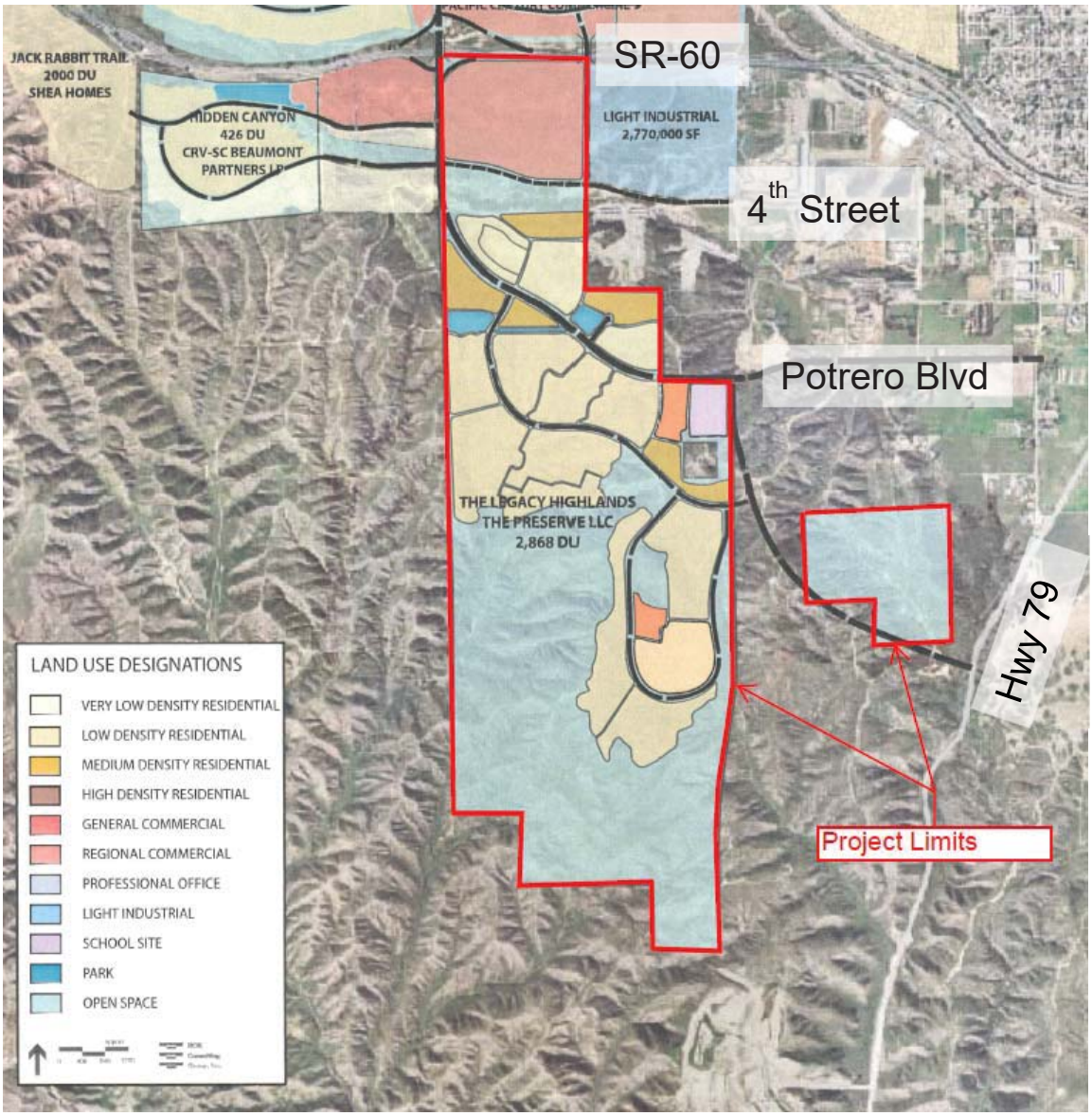
There will be no fiscal impact to the District as all fees and facility installation costs will be paid for by the Developer.

Attachment(s)

Attachment 1 – Figure 1 – Legacy Highlands Project Location
Attachment 2 – Developer Response Letter to Board Questions from May 28, 2020 Engineering Workshop; dated June 1, 2020
Attachment 3 – "Draft" Water Supply Assessment
Attachment 4 – Resolution 2020-__

Prepared by Daniel K. Jaggers, General Manager and Mark Swanson, Senior Engineer

Figure 1 – TTM 31570 Legacy Highlands Project Location



SRD Design Studio, Inc.

Civil Engineering - Environmental Consulting

June1, 2020,

Beaumont Cherry Valley Water District
560 Magnolia Avenue
Beaumont, Ca. 92223

RE: Legacy Highlands WSA

Dear Mr. Jaggers

Thank you and your staff to preparing the comprehensive WSA for the project and bring it before your board on May 28, 2020 engineering workshop meeting.

We are providing additional information on questions and/ or comments brought up by board members during the discussion on our project item:

1. **Director William** indicated correctly that water quality data reports which were part of the agenda package were indecipherable. If district staff needs water quality reports, we will be happy to provide them again. There were field well development reports prepared by independent well drillers were legible and was included in the agenda showing that water quality is good for outside non-potable use of the project for irrigation needs. Please let us know if you need copies of water quality lab reports conducted by Babcock Laboratories.

2. **Director Ramirez** asked a question if our supplemental water system proposed for irrigation needs of the project will enhance district ground water ?

As we have provide to the district that legally we can only use our water for our own project needs and therefore it will indirectly make more district water available for other projects.

We have, however, pointed out that we plan to comply with the City water distribution and use standards as necessary.

3. **President Covington** asked a question if we planned to have our irrigation water use distribution system.

We have already developed water wells capable of supplying non-potable water, of suitable quality, far in excess of the non-potable water demands of our project. We will construct reservoir and non-potable water distribution infrastructure needed to serve our project. We will use the wells and non-potable infrastructure, on an interim basis, to meet all irrigation demands of Legacy Highlands. When BCVWD is able to deliver recycled water to meet the irrigation demands of our project, we will dedicate the reservoir and non-potable irrigation water distribution infrastructure to be owned and operated by BCVWD.

We are agreeable to dedicate water infra-structure to BCVWD, according to conditions stated in the City of Beaumont letter to BCVWD, dated May 21, 2020, to the extent that BVCWD requires those dedications as roughly proportional to meet essential water needs of Legacy Highlands.

We fully and completely understand that and commit to abiding by the project development conditions contained in the staff report as described in more detail:

We will work with the City and District to provide all necessary information as required for supplemental water.

In summary we restate that that we are requesting the water district for potable use supply for our project which district staff had already determined to be sufficient to meet our project needs. We are not requesting or asking the water district to supply non- potable water until such time as the District is able to deliver non-potable irrigation water to our Project.

We appreciate the time and efforts district staff have extended to us to take the project WSA to conclusion and approval by its board on June 10, 2020

Please feel free to contact us should have any questions or require additional information for the next board meeting.

We look forward to your concurrence in this approach to allow BCVWD to issue a favorable WSA for Legacy Highlands.

Sincerely,

David Golkar

David Golkar, PE.

P.O Box 5147 Beverly Hills, Ca. 90209

BEAUMONT-CHERRY VALLEY WATER DISTRICT

560 MAGNOLIA AVENUE

BEAUMONT, CALIFORNIA 92223

www.bcvwd.org

WATER SUPPLY ASSESSMENT
(REVISED)

for

TTM 31570 - THE LEGACY HIGHLANDS

City of Beaumont, CA

APRIL 2019, REVISED JUNE 2020

Prepared by

BEAUMONT-CHERRY VALLEY WATER DISTRICT

560 MAGNOLIA AVENUE

BEAUMONT, CALIFORNIA 92223

(951) 845-9581

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1. INTRODUCTION

The Legacy Highlands development (Legacy Highlands or "Project") is proposed to be constructed in the City of Beaumont (City), CA on an approximately 1,600 gross acre site, south of Highway 60 and west of Beaumont Ave (Highway 79). The project is a mixed use development consisting of commercial-industrial development, single family residential, and a gated, active adult residential community. A total of 2,868 dwelling units are proposed, consisting of 1,107 single family residential, 1.2 million sq. ft. of commercial/industrial, and 1,761 active adult, low density residential. A 20-acre school site, several neighborhood parks, and open space are planned. The project is anticipated to be constructed in six phases:

- Phase 1 – 897 single family residential lots with 16.9 acres of "active" parks and 3.5 acres of "passive" parks.
- Phase 2 – 1.2 million sq. ft. of commercial/industrial which is anticipated to consist of warehouse space.
- Phase 3 – 424 Equivalent Dwelling Units (EDUs), active adult residences, in a gated community.
- Phase 4 – 343 EDUs, active adult residences, and 4.4 acres of "active" parks in a gated community.
- Phase 5 – 994 EDUs, active adult residences, in a gated community with 638.9 acres of natural open space
- Phase 6 – 20 acre school, 210 single family residential lots with 111.2 acres of natural open space

In the above phasing, "active" parks are assumed to be turfed and irrigated with non-potable water; "passive" parks are assumed to have low water using planting irrigated with non-potable water. The "open" space will not be irrigated. The developer anticipates constructing about 200 dwelling units per year and projects a 15-year build-out period.

Fourth St., west of Beaumont Ave., extends through the Project on the north side and connects to Potrero Blvd. Potrero Blvd. extends north to Oak Valley Parkway. The commercial/industrial portion of the Project will be between 4th St. and State Route 60 – an extension of the existing commercial-industrial area westerly along 4th St. The Project site is within the Beaumont Cherry Valley Water District (BCVWD) sphere of influence but not within BCVWD's service boundary.

The original project, proposed as Willow Springs with the name changed later to Legacy Highlands, started in 2003 with 3,000 proposed single family residential lots, 40 acres of commercial, two school sites totaling 60 acres, and 50 acres of parks and open space. The project site requested to be annexed to the City and BCVWD. **Currently, the Project has not been annexed to the City or BCVWD.** An EIR, to comply with the California Environmental Quality Act (CEQA) was completed in March 2008. A plan of service was prepared by BCVWD. The economic downturn

that began in 2007 along with EIR litigation stalled the project. The project was subsequently modified to the current plan.

2. WATER SUPPLY ASSESSMENT (WSA) LEGISLATIVE REQUIREMENTS

There were two Senate Bills, passed in 2001, to advance water supply planning efforts in California and provide the foundation for developing comprehensive water policies to meet future water needs by integrating water supply and land use planning. These were Senate Bill 221 and Senate Bill 610, (SB 221 and SB 610, respectively). The intent was to provide additional assurance that new projects could have a reliable water supply and the impact of the new developments on existing water users, i.e., those relying on common water sources, and decision makers, were adequately informed of the proposed project's water use, the impacts, and plans to maintain supplies.

2.1 Senate Bill 221 (SB 221)

SB 221 applies to residential subdivisions and is chaptered in Government Code §65867.5 *et seq.* which states:

> *(c) A development agreement that includes a subdivision, as defined in Government Code §666473.7, shall not be approved unless the agreement provides that any tentative map prepared for the subdivision will comply with the provisions of §666473.7.*

Government Code §666473.7 states:

> *(a)(1) For purposes of this section, the following definitions apply:*
> *"Subdivision" means a proposed residential development of more than 500 dwelling units, except that for a public water agency that has fewer than 5,000 service connections, "subdivision" means any proposed residential development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections.*
>
> *(b)(1) The legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove the tentative map, shall include as a condition in any tentative map that includes a subdivision, a requirement that a sufficient water supply shall be available. Proof of the availability of a sufficient water supply shall be requested by the subdivision applicant or local agency, and shall be based on written verification from the applicable water supply system within 90 days of a request.*
>
> *(i) Government Code §666473.7 shall not apply to any residential project proposed for a site that is within an urbanized area and has previously been developed for urban uses, or where the immediate contiguous properties surrounding the residential project site area, or previously have been, developed for urban uses, or housing projects that are exclusively for very low and low-income households.*
>
> *(a)(2) "Sufficient water supply" means the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that will meet the*

projected demand associated with the proposed subdivision, in addition to existing and planned future uses, including but not limited to agricultural and industrial uses.

This does not mean that 100 percent of the development's unrestricted water demand must be met 100 percent of the time, nor does it mean the new development may not have an impact on the service level of existing customers. A "sufficient water supply" may be found to exist for a proposed subdivision and for existing customers, even where a drought-induced shortage will be known to occur, as long as a minimum water supply can be estimated and planned for during a record drought.

2.2 Senate Bill (SB 610)

SB 610, chaptered in Water Code §10910 *et seq.*, requires a city or county that determines a "Project," as defined in Water Code §10912, is subject to the California Environmental Quality Act (CEQA), the city or county must identify any public water system that may supply water for the project and to request those public water systems to prepare a specified water supply assessment (WSA), except as otherwise specified. Water Code §10912 defines a "Project" as any of the following:

(1) A proposed residential development of more than 500 dwelling units.

(2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (sq. ft.) of floor space.

(3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 sq. ft. of floor space.

(4) A proposed hotel or motel, or both having more than 500 rooms.

(5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sq. ft. of floor area.

(6) A mixed-use project that includes one or more of the projects specified in this subdivision.

(7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.[1]

The basic question to be answered in the WSA is:

Will the water supplier's total projected water supplies during normal, dry, and multiple dry years during a 20-year projection meet the projected water demand of the proposed project, in addition to the water supplier's existing and planned future uses, including agricultural and manufacturing uses?

The WSA, under SB 610, is to include the following, if applicable to the supply conditions:

[1] The water use for one dwelling unit depends on regional climate and varies from agency to agency

1. Discussion regarding whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses.
2. Identification of existing water supply entitlements, water rights, or water service contracts secured by the purveying agency and water received in prior years pursuant to those entitlements, rights, and contracts.
3. Description of the quantities of water received in prior years by the public water system under the existing water supply entitlements, water rights or water service contracts.
4. Water supply entitlements, water rights or water service contracts shall be demonstrated by supporting documentation such as the following:
    a. Written contracts or other proof of entitlement to an identified water supply.
    b. Copies of capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.
    c. Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.
    d. Any necessary regulatory approvals that are required to be able to convey or deliver the water supply.
5. Identification of other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system.
6. If groundwater is included for the supply of a proposed project, the following additional information is required:

    a. Description of groundwater basin(s) from which the proposed project will be supplied. Adjudicated basins must have a copy of the court order or decree adopted and a description of the amount of groundwater the public water system has the legal right to pump. For non-adjudicated basins, information on whether the California Department of Water Resources has identified the basin as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current bulletin of the Department of Water Resources that characterizes the condition of the basin, and a detailed description of the efforts being undertaken in the basin to eliminate the long-term overdraft.
    b. Description and analysis of the amount and location of groundwater pumped by the public water system for the past five (5) years from any groundwater basin from which the proposed project will be supplied. Analysis should be based on information that is reasonably available, including, but not limited to, historic use records.
    c. Description and analysis of the amount and location of groundwater projected to be pumped by the public water system from any groundwater basin from which the proposed project will be supplied. Analysis should be based on information that is reasonably available, including, but not limited to, historic use records.

d. Analysis of sufficiency of the groundwater from the basin(s) from which the proposed project will be supplied.

7. The water supply assessment shall be included in any environmental document prepared for the project.

SB 610 prescribes a timeframe within which a public water system is required to submit the assessment to the city or county and authorizes the city or county to seek a writ of mandamus to compel the public water system to comply with requirements relating to the submission of the assessment.

SB 610 requires the public water system, or the city or county, as applicable, if that entity concludes that water supplies are, or will be, insufficient, to submit the plans for acquiring additional water supplies.

SB 610 requires the city or county to include the water supply assessment and certain other information in any environmental document prepared for the project pursuant to the act.

2.3 Summary

The Senate bills are quite similar; SB 221 applies to proposed residential subdivisions over 500 dwelling units or a subdivision project that proposes 10 percent of the number of existing agency water connections whichever is smaller; SB 610 to other types of large projects or mixed use projects. Both require documentation of water supply and demand under normal, dry and multiple dry year scenarios to accommodate the project plus existing and known planned projects. Both rely on the agency's Urban Water Management Plan (UWMP) for support.

Based on the description in the introduction, the proposed Legacy Highlands Project **requires a water supply assessment pursuant to both SB 221 under Government Code §65867.5 *et seq.* and SB 610 under Section 10912 (a) (2)**. The Project includes a residential subdivision greater than 500 dwelling units and a proposed business establishment having more than 500,000 square feet of floor space. For the Project, the water purveyor is the Beaumont-Cherry Valley Water District (BCVWD).

3. URBAN WATER MANAGEMENT PLANNING ACT

3.1 Background

The California Water Code requires that all urban water suppliers within the state, serving over 3,000 acre-feet (AF) of water annually (1 AF = 325,829 gallons) or having at least 3,000 service connections, to prepare Urban Water Management plans (UWMPs) on a five-year, ongoing basis demonstrating their continued ability to provide water supplies for current and future expected development under normal, single dry, and multiple dry year scenarios. The Urban Water Management Planning Act was enacted in 1983 and amendments were made periodically since then. The Act also requires imported water suppliers to prepare UWMPs. Water Code sections §10610 through §10656 detail the information that must be included in the plans. These plans also require the assessment of urban water conservation measures and wastewater recycling. They also require, pursuant to §10632, a water shortage contingency plan, outlining how the

municipal water provider will manage water shortages of up to 50 percent of their normal supplies in a given year.

An UWMP is a planning tool that provides general guidance to water management agencies. It provides managers and the public with high altitude overview on a number of water supply issues facing the agency. It is not a substitute for project-specific planning documents, nor was it intended to be when mandated by the State Legislature. When specific projects are chosen to be implemented, detailed project plans are prepared, environmental analysis, if required, is prepared, and financial and operational plans are developed.

"A plan is intended to function as a planning tool to guide broad-perspective decision making" by water agency managers and directors.[2] It should not be viewed as an exact blueprint for supply and demand management. Water management in California is not a matter of certainty and planning projections may change in response to a number of factors. "Long-term water planning involves expectations and not certainties. The State Supreme Court has recognized the uncertainties inherent in long-term land use and water planning and observed that the generalized information required …in the early stages of the planning process are replaced by firm assurances of water supplies at later stages."[3] It is appropriate to look at the UWMP as a general planning framework, not a specific action plan. It is an effort to generally answer a series of planning questions including:

- What are the potential sources of supply and what is the reasonable probable yield from them?
- What is the probable demand, given a reasonable set of assumptions about growth and implementation of good water management practices?
- How well do supply and demand figures match up, assuming that the various probable supplies will be pursued by the implementing agency?

Based on the answers to these questions, the implementing agency will pursue feasible and cost-effective options and opportunities to meet demands.

Overall, the demands for the Project have been refined herein based upon a specific water demand projection based upon the most recent proposed land uses of the development.

The Urban Water Management Planning Act requires the supplier to document water supplies available during normal, single dry, and multiple dry water years over a 20-year projection and the existing and projected future water demand during a 20-year projection. The Act requires that the projected supplies and demands be presented in 5-year increments for the 20-year projection period.

Like SB 221 and SB 610, specific levels of supply reliability are not mandated (i.e., whether a specific level of demand can be met over a designated frequency); rather, the law provides that it

[2] Sonoma County Water *Coalition v. Sonoma County Water Agency* (2010) 189 Cal. App. 4th 33, 39, taken from SGPWA 2015 UWMP.
[3] Ibid.

is a local policy decision of the water provider as part of the planning process. As provided for in the law, this WSA can rely on the data in the latest UWMP in assessing the water demand of the proposed project relative to the overall increase in demands expected by BCVWD. The Legacy Highlands Project, (at 3,412 housing units at the time), was included in Table 3-6 of BCVWD's 2015 UWMP as well as the 2013 UWMP. (The Project has since been reduced to 2,868 residential units as part of this WSA.) In late 2017 and 2018, BCVWD prepared a set of "White Papers" that evaluated the growth in demand within the San Gorgonio Pass Water Agency (SGPWA) and the current and future water supply from the SGPWA on a regional basis. The result of this evaluation is a reduction in the rate of growth and a refinement in the imported water supply. This is discussed later in this WSA.

3.2 San Gorgonio Pass Water Agency 2015 UWMP

The Legacy Highlands Project is located within the service area of the SGPWA service area. BCVWD provided data to SGPWA on BCVWD's projected demands so the SGPWA could prepare their UWMP. Because the California Department of Water Resources (DWR) required the imported water suppliers to submit their UWMPs earlier than the retail agencies, BCVWD made some preliminary estimates of their demand over the 20-year projection period and provided the projections to SGPWA. These preliminary estimates deviated slightly from the actual demands in BCVWD's 2015 UWMP. Table 2-4, extracted from SGPWA's 2015 UWMP, is shown below. SGPWA's 2015 UWMP states the "retail purveyor demands that reflect reasonably anticipated demands on SGPWA through the planning periods" and take into account non-SGPWA supplies available to the retail purveyors, such as local groundwater, recycled water, etc.

TABLE 2-4
PROJECTED WATER DEMANDS ON SGPWA (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD[a]	10,860	12,476	14,087	15,886	17,334
City of Banning[b]	-	501	1,344	2,237	2,718
YVWD[c]	1,809	1,967	2,162	2,391	2,644
Other[d]	500	1,600	2,800	3,900	5,000
Total Water Demands	**13,169**	**16,544**	**20,393**	**24,414**	**27,696**

The "other" demands in Table 2-4 reflect the demand from other agencies in SGPWA service area not currently receiving imported water from SGPWA.

Since the Legacy Highlands development project was included in the demands in BCVWD's 2015 UWMP and supplied to SGPWA for their UWMP, it is considered included in the 2015 SGPWA UWMP, adopted by SGPWA Board of Directors as Resolution No. 2017-03, on March 20, 2017.

In the introductory section of the SGPWA's 2015 UWMP, the SGPWA reviewed the water supply and demand requirements on a regional basis and did not focus on specific conditions within the service area of the retail water agencies.

"It is the stated goal of SGPWA to import supplemental water and to protect and enhance local water supplies for use by present and future water users and to sell imported water at wholesale to local retail water purveyors within its service area. Based on conservative water supply and

demand assumptions over the next 25 years in combination with conservation of non-essential demand during certain dry years, the [Urban Water Management] Plan successfully achieves this goal. It is important to note that this document has been completed to address regional resource management and does not address the particular conditions of any specific retail water agency or entity within the SGPWA service area. The retail urban water suppliers within SGPWA service area are preparing their own separate UWMPs, but SGPWA has coordinated with the retailers during development of this Plan to ensure a level of consistency with the retailers to the extent possible.[4] [Emphasis added]

BCVWD recognizes and acknowledges the disclaimer statement within the 2015 Urban Water Management Plan prepared by the SGPWA related to regional planning. While the UWMP prepared by the SGPWA "…does not address the particular conditions of any specific retail water agency…," BCVWD relies upon the policies and practices of the SGPWA as a foundation for regional water supply solutions. In other words, while the SGPWA's regional planning document does not address local water conditions, BCVWD does rely upon the policies of the SGPWA to provide comprehensive regional solutions related to the use of imported water in the Pass area. An example of the policies and practices adopted by the SGPWA and relied upon by BCVWD include, but are not limited to the following:

- San Gorgonio Pass Water Agency, Ordinance No. 8, An Ordinance Establishing Rules and Regulations for SGPWA Water Service, February 7, 2005;
- San Gorgonio Pass Water Agency Strategic Plan, May 2012;
- San Gorgonio Pass Water Agency, Resolution No. 2014-02, A Resolution of the San Gorgonio Pass Water Agency Establishing a Policy for Meeting Future Water Demands, February 18, 2014;
- San Gorgonio Pass Water Agency, Ordinance No. 10, Ordinance Establishing Water Shortage Plan, July 21, 2014;
- San Gorgonio Pass Water Agency, Resolution No. 2015-05, Resolution of the Board of Directors of the San Gorgonio Pass Water Agency to Adopt Facility Capacity Fees for Facilities and Water, July 27, 2015;
- San Gorgonio Pass Water Agency, State of the Supply PowerPoint Presentation, September 30, 2016;
- San Gorgonio Pass Water Agency, Ordinance No. 13, An Ordinance Amending Rules and Regulations Regarding Authorization for Service, June 5, 2017.
- San Gorgonio Pass Water Agency Resolution 2019-03, A Resolution of the San Gorgonio Pass Water Agency Establishing a Policy for the Sale of Water which Agency may have in Groundwater Storage, May 6, 2019.

[4] SGPWA 2015 UWMP

3.3 BCVWD's 2015 UWMP

There were some minor differences between the projections in BCVWD's 2015 UWMP and the projections provided to SGPWA for their 2015 UWMP. These differences stemmed from the need for BCVWD to provide preliminary demand projections early-on so the SGPWA could meet their prescribed deadline.

BCVWD's demands for imported water are presented in Table 6-26 of BCVWD's 2015 UWMP and are repeated in Table 1 below. Table 1 shows the actual imported water demand to meet the potable water demand plus the banking water demand to ensure drought-proofing of future development. If imported water is not available in a given year, no banking will occur. But when imported water is available, any deficiencies from previous years would be "carried over" and "made up." As can be seen, there is a slight difference between the demands in Table 1 versus those shown above (Table 2-4) from SGPWA's 2015 UWMP.

Table 1
BCVWD Imported Water Needs from BCVWD 2015 UWMP (Table 6-26)*

	2020	2025	2030	2035	2040
BCVWD Drinking Water Demand, AFY	10,313**	11,407**	12,503	13,843	15.362
Banking Demands, AFY	1,000	1,500	2,000	2,500	2,500
Total BCVWD Imported Water Demand, AFY	11,313	12,907	14,503	16,343	17,862

*Taken from BCVWD 2015 UWMP, Table 6-26 and is equal to purchased imported water for recharge plus make-up to not-potable system plus water for banking
** included imported water to non-potable water system since non-potable water system supplied with potable groundwater.

4. LEGACY HIGHLANDS DEVELOPMENT PROJECT DESCRIPTION

The Legacy Highlands development is a mixed use single family and active adult residential and commercial/industrial project located in the City of Beaumont on approximately 1,600 gross acres, south of Highway 60 and west of Beaumont Ave (Highway 79). The project is primarily in Sections 8, 16, 17, 20 and 21, T3S, R1W, SBB&M.

4.1 Project Description

A total of 2,868 dwelling units are proposed, consisting of 1,107 single family residential, 1.2 million sq. ft. of commercial/industrial, and 1,761 active adult, low density residential. A 20-acre school site, several neighborhood parks, and open space are planned. The Legacy Highlands will be accessed from 4th Street, Potrero Blvd., and State Route 60 on the north and a connector road to Highway 79 (Lamb Canyon Rd./Beaumont Ave.) on the east.

Figure 1 shows the general location of the Legacy Highlands development; Figure 2 is a preliminary layout showing main streets and development plan.

The project is required to adhere to the landscaping standards in "Guide to California Friendly Landscaping" and the City Landscaping Ordinance (Chapter 17.06 Landscaping Standards, latest edition) which requires water efficient landscaping. Landscaping in non-turf areas shall be drought tolerant and irrigated with drip or bubbler type heads (BCVWD requirement).

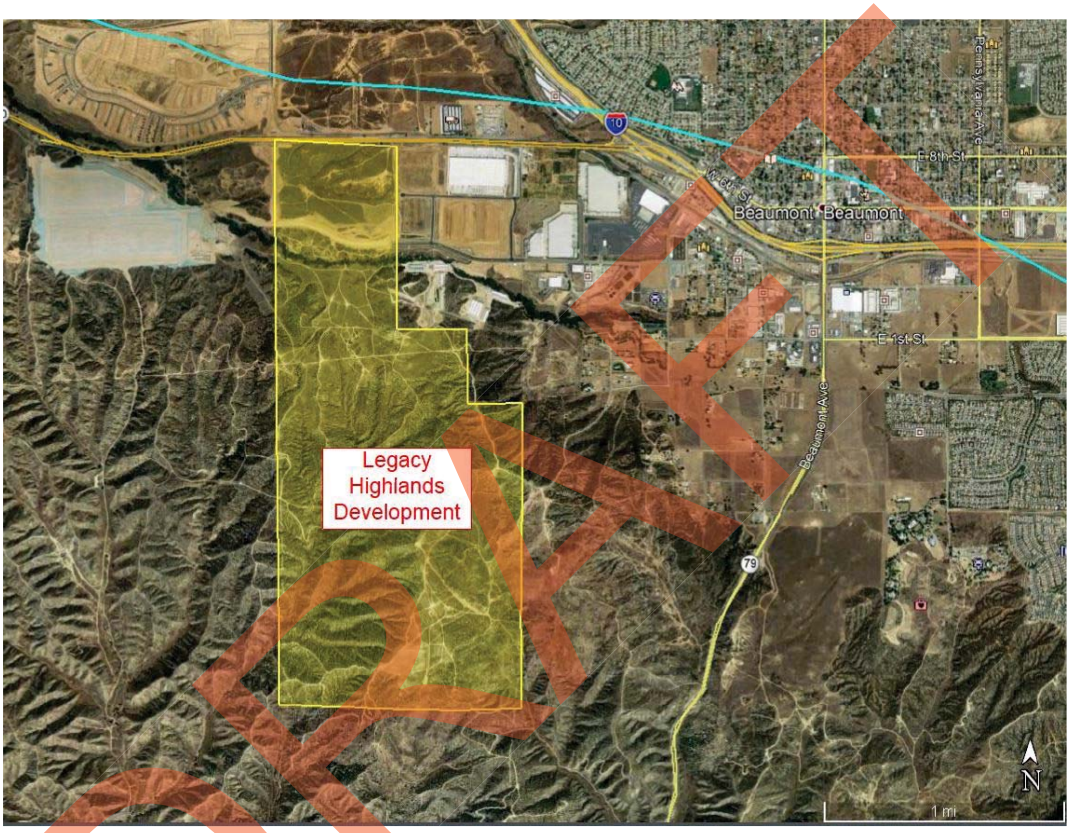

Figure 1
Legacy Highlands Development General Location

4.1.1 Existing On-site Wells

The Project Site has five existing shallow wells, (Wells 1 thorugh 5), constructed along Cooper's Creek in the northerly portion of the site; three of wells have been pump tested and sampled (Wells 1 through 3). The wells were used by the land owner to irrigate crops and trees on the Project Site. The wells are not located in the Adjudicated Beaumont Groundwater Basin but rather the unadjudicated San Timoteo Subbasin. The San Timoteo Sustainable Groundwater Management Agency (San Timoteo SGMA) was been formed in 2017 in response to the 2014 Sustainable Groundwater Management Act.

The Project land is riparian to Cooper's Creek and overlies groundwater which can be pumped regardless of whether the groundwater is part of, or separate from the subsurface flow beneath Cooper's Creek. The groundwater is not adjudicated and the landowner has an overlying right to

produce groundwater to be used for reasonable and beneficial uses on the riparian/overlying land. The key is use on the "overlying land." The "rights" go with the land. These rights are equal in priority among other riparian or overlying owners regardless of date of first use. Overlying and riparian rights are superior to appropriative rights. (BCVWD is an "appropriator" and could not pump and use the water elsewhere.)[5] In summary,the existing wells could be used to supply water to the Project, but with limititations.

Pump tests and water quality analyses were presented in a report prepared by a consultant for Legacy Highlands[6] for Well Nos. 1, 2, and 3. The wells were test pumped for 24 hours at 300, 275, and 80 gallons per minute (gpm), respectively. These production rates are 484, 444, and 129 AFY, respectively. Well drawdown levels stabilized at 45, 160, and 126 ft below ground surface based on the pump data included in the report. Long term water levels from a well about a mile away (State Well No. 03S01W05Q001S) showed a relatively stable water level from the mid 1980s to 2010. It should be noted the area of the wells has numerous faults, so water levels in nearby wells may fluccuate.

Water quality analysis for the wells indicates elevated Total Dissolved Solids (430 to 560 mg/L); very high hardness, some nitrates (but well below the primary Maximum Contaminant Level (MCL), pH about 8, and concentrations of iron and manganese significantly above the secondary MCL. Detailed Title 22 drinking water analysis has not been performed, so it is not known if there are other substances in the water exceeding potable drinking water standards. The iron and manganese are aesthetic concerns. Iron and manganese will form slimes in pipes, potentially clogging irrigation systems and staining sidewalks with a rust color. Iron and manganese will need to be removed prior to even non-potable uses.

Another concern of BCVWD is the blending of potable or recycled water with the well water and the potential for scaling or corrosion since the chemical makeup of the well water and the recycled or potable water is so different. As such, BCVWD does not recommend supplementing the well water with its potable supply or the City's recycled water. The well water could be used on the Project Site by the Home Owners' Association (HOA) or the developer to meet non-potable water needs and construction water, if treated for iron and manganese removal.

4.1.2 Proposed Stormwater Capture and Detention Basins

The Project will have two detention/infiltration basins for stormwater capture, treatment, and infiltration. The basins will be located on the north and south sides of Cooper's Creek to capture, treat, and infiltrate the runoff from the developed areas of the Project. Data on the two basins are:

[5] Personal Communication, Kidman to Golkar (2020). Letter from A. Kidman of Kidman, Gagan Law LLP, to D. Golkar, March 31.
[6] Stetson Engineers, Inc. (2020). Potential Groundwater Production, The Legacy Highlands Development, May 21.

Basin No	Developed Watershed Area, ac	Basin Volume, AF	2-yr Storm Runoff, AF	100-yr Storm Runoff, AF
1	232.9	124	24.2	95.5
2	107.4	58.9	11.2	49.8

The total watershed area is 340 acres; the average annual rainfall in Beaumont is about 18.5 inches, so the rainfall volume is 510 AFY. Typically about 30% or so is runoff on an annual basis, so the amount of stormwater capture is 150 AFY. The developer claims an infiltration rate of 3.48 ft/day, with a factor of safety of 3. Specifics on how the infiltration rates were tested were not provided. BCVWD does not believe that infiltration rate can be maintained without frequent maintenance.

BCVWD cannot get credit for any captured storm runoff since the basins do not overly the adjudicated portion of the Beaumont Groundwater Basin. Since the groundwater basin where the basins are located (San Timoteo Basin), is not adjudicated, the percolated runoff is owned by no one and becomes part of the common pool for the benefit of the overlying parties and cannot be considered to offset any project demands.[7]

4.2 Estimated Water Demand

BCVWD has historically used a water demand of 580 gal/day/EDU, equivalent to 0.65 AFY/EDU, in its "Regulations for Water Service." Recently, BCVWD has analyzed the potable water demand in thirty-two residential tracts constructed in the District from late 2006 through early 2018. The study reviewed the potable water demands, by customer meter, for all of 2016 and 2017 and through summer 2018. The total demand for all of 2018 was projected based on historic consumption. The study encompassed 3,116 services. Tracts which were included in the analysis included Tournament Hills, Fairway Canyon, K-Hov Four- Seasons, Pardee Sundance, and Seneca Springs. The draft analysis included a very preliminary evaluation of potable water demand (AF/EDU) versus pad or lot size (sq ft) and potable water demand (AF/EDU) versus residential density (EDU/Acre) in Pardee Sundance. The analysis indicated that larger lot or pad sizes had greater water demand than smaller lots and, as density increased, the potable water use (AF/EDU) decreased. This was not unexpected. However, the draft data and analysis is limited and more data is needed before any firm correlations can be developed. District staff hopes to improve the draft analysis as part of the District's ongoing 2020 UWMP activities.

[7] Personal Communication, Kidman to Golkar (2020). Letter from A. Kidman of Kidman, Gagan Law LLP, to D. Golkar, March 31.

Figure 2
Legacy Highlands Development Plan

For the purposes of this WSA, and until more definitive data can be developed, the following EDU potable water demands will be used. It is important to understand that these unit potable water

demands are for water demand planning and forecasting and not for determination of connection, impact, or other fees.

The potable and non-potable water demands for Legacy Highlands development are based on the following criteria:

- Single Family Residential Equivalent Dwelling Unit (EDU) on lots or pads 10,000 sq. ft. or larger, potable water demand equal to 0.65 acre-ft/year/EDU (AFY/EDU), same as used in the District's Regulations for Water Service. The unit water demand includes the outdoor demand and incidental demand of the associated commercial and institutional facilities which support the development.
- Single Family Residential Equivalent Dwelling Unit (EDU) on lots less than 10,000 sq. ft., potable water demand equal to 0.546 acre-ft/year/EDU (AFY/EDU). The unit water demand includes the outdoor demand and incidental demand of the associated commercial and institutional facilities which support the development. The commercial, industrial, and institutional (CII) demand is about 13.6% of the daily demand based on the amount of BCVWD reports to the Department of Water Resources, annually. The 0.546 AFY is based on ongoing BCVWD analysis of new residences, as discussed above.
- Active Adult Residential EDU potable water demand equal to 0.470 AFY/EDU. This reduced demand is identical to that used for active adult residential EDUs in other District developments. The unit water demand includes the outdoor demand and incidental demand of the associated commercial and institutional facilities which support the development as stated above.
- Commercial/Industrial demand is based on the total floor area of the building(s) using 1,500 sq. ft of building area per employee and 15 gal/day/employee typical of the types of distribution center, warehousing projects being developed in the City and other Inland Empire areas[8]. The annual demand is based on 260 operating days per year. Data provided by the developer indicated a total of 1 million sq. ft. of industrial buildings and 150,000 sq. ft commercial on the 100 acre site, about or about 26% of the site area. This is lower than similar industrial warehousing buildings in Beaumont on nearby property where the total building area occupies about 38% of the total site area. The landscaped area represented about 23% of the total building area and 9.2% of the total site area. For purposes of calculation water demands, an occupied area of 40% is believed to be more appropriate than the 26% stated by Legacy Highlands
- School potable water demands are included with the residential planning demands. Separate determination of the non-potable water demands is provided.

[8] NAIOP Research Foundation (2010). Logistics Trends and Specific Industries that Will Drive Warehouse and Distribution Growth and Demand for Space, L. Nicolas Ronderos, Director, Urban Development Programs Regional Plan Association, March

- Active Open Space Parks potable water demands are included with the residential planning demands. Separate determination of the non-potable water demands is provided.
- Passive Open Space areas are anticipated to remain natural and will not be irrigated with either potable or non-potable water.

For comparison, the SGPWA, in their Revised Capacity Fee Nexus Study, used a water demand factor of 0.548 AFY/Single Family Home; multi-family was 0.267 AFY/EDU. Slightly larger water use factors were used by SGPWA for the unincorporated County portion of their service area. Commercial and industrial water use equivalents were determined separately.[9]

Table 2 presents a summary of the Legacy Highlands Residential Potable Water Demand. Total Residential Potable Water Demand is projected to be 1,436 AFY at build-out. It is noted that this demand includes the commercial and institutional demands associated with residential development, i.e., schools, shops, malls, etc.

Commercial/Industrial development is proposed for Legacy Highlands Phase 2 and consists of 100 acres of commercial/industrial area and 34.2 acres of passive open space. Water demand calculations for the Commercial/Industrial Area are presented in Table 3.

Table 4 presents a summary of the Non-potable water demands for the industrial/commercial site, active open spaces, the school site, and major street medians and parkways. The landscape demand estimates were developed following the City's, Landscaping Standard, Chapter 17.06 of the City Ordinance. The procedure follows the Riverside County Landscape Ordinance. The analysis uses a CIMIS[10] Zone 9 reference evapotranspiration of 55.1 in/year and recommended irrigation efficiency of 0.71 per the City's Ordinance. The non-potable water use is the Maximum Applied Water Allowance (MAWA) which represents the upper limit of annual applied water allowed for established landscaped area. No data is available relative to the actual landscaping plant mix to develop a more accurate estimate.

For the commercial/industrial area two approaches were used to determine the landscaped areas: 1) City of Beaumont Landscape Ordinance for landscape buffers around the periphery of industrial sites and the requirement for 15% of the parking area to be landscaped. For the site, the landscaped area was determined to be just over 300,000 sq. ft. This was compared to the analysis performed on a neighboring industrial warehousing site, where the total landscaped area was 9.2% of the total site area. Using this percentage, an area of 400,800 sq. ft was determined. For calculation purposes, a landscaped area or 350,000 sq. ft was used. The landscaping was assumed to be all low water using, with no turf. The total non-potable water demand was 36.2 AFY.

[9] SGPWA 2015. Capacity Fee Study for San Gorgonio Pass Water Agency, prepared by David Taussig and Associates, Inc., July 15.
[10] CIMIS (2012). Reference Evapotranspiration Zones, California Irrigation Management Information System, California Department of Water Resources, January.

Table 2
Legacy Highlands Development Projected Residential Potable Water Demand

Planning Area/Neighborhood	Land Use Designation	Zoning	Gross Acres	Minimum Lot sizes, Sq Ft	Number of Lots	Max Density EDU/Acre	Home Sizes	Unit Water Demand, AF/EDU	Projected Water Demand, AFY
Planning Area I									
Neighborhood 1.1	Low Density Residential	R-SF	25.1	10,000	30	1.2	3000-3400	0.65	19.49
Neighborhood 1.2	Low Density Residential	R-SF	31.2	8,000	76	2.4	2250-2800	0.546	41.50
Neighborhood 1.3	Low Density Residential	R-SF	30.5	7,000	64	2.1	2050-2400	0.546	34.94
Neighborhood 1.4	Medium Density Residential	PUD	12.5	PUD	136	10.9	900-1250	0.546	74.26
Neighborhood 1.6	Medium Density Residential	PUD	16.1	PUD	202	12.5	1000-1250	0.546	110.29
Neighborhood 1.8	Medium Density Residential	PUD	19.1	PUD	254	13.3	1000-1300	0.546	138.68
Neighborhood 1.9	High Density Residential	PUD	8.9	PUD	118	13.3	850-1250	0.546	64.43
Neighborhood 1.12	Low Density Residential	R-SF	12	20,000	17	1.4	3200-4000	0.65	11.05
Subtotal Planning Area 1 Residential			155.4		897				494.64
Planning Area 6									
Neighborhood 6.3	Medium Density Residential	PUD	14.8	PUD	210	14.2	1000-1250	0.546	114.66
Subtotal Planning Area 6 Residential			14.8		210				114.66
Subtotal Conventional Housing			170.2		1107				609.3
Planning Area 3									
Neighborhood 3.1	Low Density Residential	R-SF	39	4,000	196	5.0	1850-2200	0.470	92.03
Neighborhood 3.2	Low Density Residential	R-SF	28.3	5,000	112	4.0	1300-2000	0.470	52.59
Neighborhood 3.3	Medium Density Residential	PUD	32.7	6,000	116	3.5	1850-2200	0.470	54.47
Subtotal Planning Area 3 Residential			100		424				199.09
Planning Area 4									
Neighborhood 4.1	Low Density Residential	R-SF	29.9	4,000	82	2.7	900-1200	0.47	38.50
Neighborhood 4.2	Low Density Residential	R-SF	37.5	5,000	147	3.9	1650-2200	0.47	69.03
Neighborhood 4.3	Low Density Residential	R-SF	22	6,000	52	2.4	1850-2200	0.47	24.42
Neighborhood 4.4	High Density Residential	PUD	9.7	PUD	62	6.4	850-1200	0.47	29.11
Subtotal Planning Area 4 Residential			99		343				161.06
Planning Area 5									
Neighborhood 5.1	Low Density Residential	R-SF	31.8	4,000	195	6.1	1100-2200	0.47	91.56
Neighborhood 5.2	Low Density Residential	R-SF	33.8	5,000	197	5.8	1300-2000	0.47	92.50
Neighborhood 5.3	Low Density Residential	R-SF	51.7	7,000	84	1.6	3600-4200	0.47	39.44
Neighborhood 5.4	Low Density Residential	R-SF	72.7	6,000	205	2.8	1850-2200	0.47	96.26
Neighborhood 5.5	High Density Residential	PUD	29	PUD	107	3.7	850-1200	0.47	50.24
Neighborhood 5.6	Open Space	OS	638.9	Natural		9		0.47	0.00
Neighborhood 5.7	Low Density Residential	PUD	8.9	PUD	54	6.1	900-1300	0.47	25.36
Neighborhood 5.8	Low Density Residential	PUD	28.5	PUD	152	5.3	1900-1300	0.47	71.37
Subtotal Planning Area 5 Residential			895		994				466.74
Subtotal Active Adult Housing			1,094		1,761				826.90
Total Residential			1,265		2,868				1,436

Table 3
Legacy Highlands Commercial Industrial Potable Water Demand

Commercial/Industrial Area (Planning Area 2), acres	100
Building Area per Legacy Highlands, sq ft	1,150,000
Building Area/Site Area	0.26
Building Area/Site Area for Planning Purposes	0.40
Total Building Area for Planning Purposes, sq ft	1,742,400
Employees/sq ft of Building Area	1,500
Gal/day/employee for warehouse type facility	15
Operating days/year	260
Projected number of employees	1,162, Round to 1,200
Indoor water demand, gal/day	18,000
Indoor water demand, AFY	14.4

Table 4
Summary of Water Demands at Build-out,
Legacy Highlands Development

	Acre-ft/yr (AFY)
Potable Water Demand	
Residential Conventional Housing	609
Residential Active Adults	827
Commercial/Industrial	14.4
Total Potable Water Demand (rounded)	1,450
Non-potable Water Demand	
Commercial/Industrial	36.2
School Site	21.9
Active Open Space	63.8
Street Medians	56.3
Total Non-potable Water Demand (rounded)	178

The school site was estimated to have a landscaped area of 50% based on an analysis of four recently constructed schools in the City, of which 90% was turf and 10% low water using plantings. The non-potable water demand for the school site was estimated to be 21.9 AFY.

There are five active open spaces (parks) proposed for the Legacy Highlands development, totaling 24.8 acres. These active open spaces are assumed to be 75% turf and 25% low water using landscaping which have a total annual non-potable demand of 63.8 AFY. Other open space is not irrigated and has no recycled or potable water demand.

Low water using landscaping for medians and parkways is assumed to be in place with major streets (Potrero, Collector "A", Collector "C", Ashley Faye Parkway shown on Figure 2 presented previously). For purposes of estimating the non-potable water demands, an irrigated width of 24 ft is assumed based on the City's General Plan Circulation Element street cross-sections. The total estimated length of streets with irrigated parkways and medians is 4.3 miles; the estimated annual non-potable water use is 56.3 AFY

5. BCVWD WATER SYSTEM

BCVWD owns and operates the potable and non-potable water system which would serve the Legacy Highlands Development. BCVWD was first formed in April 1919, to provide domestic and irrigation water to the developing community of Beaumont and the surrounding area. BCVWD was originally named the Beaumont Irrigation District. In 1973, the name was changed to the Beaumont-Cherry Valley Water District. Sometime after that the hyphen was dropped from the name. However, even though the name has changed, the BCVWD's authority comes from the Irrigation District Law of the State of California.

BCVWD owns approximately 1,524 acres of watershed land north of Cherry Valley along the Little San Gorgonio Creek, (also known as Edgar Canyon), and Noble Creek. There are two stream diversion locations within Little San Gorgonio Creek that are in the Department of Water Resources, Division of Water Rights, database. The diversions have pre-1914 recorded water rights amounting to 3,000 miners inch hours (MIH) or approximately 45,000 acre-feet per year (AFY) of right for diversion of water for domestic and irrigation uses. However, BCVWD has never had a demand that requires such large quantities of water supply; and the watersheds may not be capable of supplying such quantities during an average year. The creeks/canyons have been used for water development via diversions for irrigation and domestic service since the latter part of the 1800's. Currently, BCVWD diverts water from Little San Gorgonio Canyon Creek into a series of ponds adjacent to the creek where it percolates and recharges the shallow aquifers in the Canyon. BCVWD's wells located in Edgar Canyon provide about 10.5 percent of BCVWD's water supply.

Figure 3 shows BCVWD's present Service Boundary and Sphere of Influence (SOI). BCVWD's present service area covers approximately 28 square miles, virtually all of which is in Riverside County and includes the City of Beaumont and the community of Cherry Valley. BCVWD-owned watershed land extends across Riverside County line into San Bernardino County where BCVWD operates a number of wells and several reservoirs.

BCVWD's SOI, or ultimate service planning area, encompasses an area of approximately 37.5 square miles (14.3 sq. mi. are in the City of Beaumont). This SOI was established by the Riverside and San Bernardino County Local Agency Formation Commissions (LAFCOs). SOIs are established as a planning tool and help establish agency boundaries and avoid gaps in service, unnecessary duplication of costs, and inefficiencies associated with overlapping service.

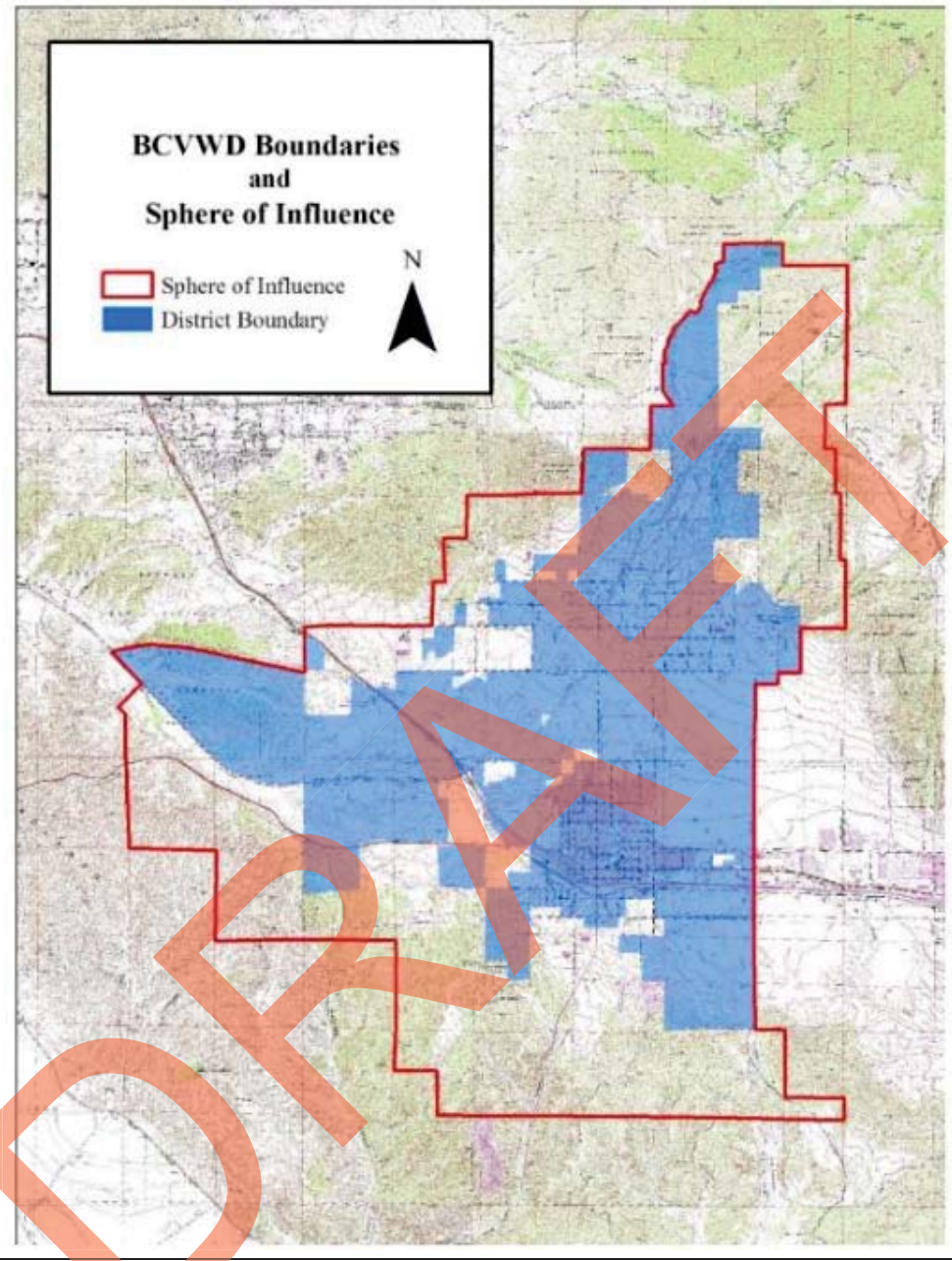

Figure 3
BCVWD Boundary and Sphere Of Influence

BCVWD's SOI is bounded on the west and north by the Yucaipa Valley Water District (YVWD) and on the east by the City of Banning. The northerly boundary of Eastern Municipal Water District (EMWD) is one-mile south of the BCVWD's southerly SOI boundary. The area between EMWD and the BCVWD's SOI is not within any SOI and could be annexed to either BCVWD or EMWD. BCVWD's SOI in Little San Gorgonio Canyon follows Oak Glen Road. The area west of Oak Glen Road is generally within YVWD's SOI; east of Oak Glen Road is generally within BCVWD's SOI.

The service area ranges in elevation from 2,300 feet above mean sea level in Fairway Canyon area of Beaumont on the southwestern boundary, to 2,900 feet in Cherry Valley, and to over 4,000 feet in the upper reaches of the SOI.

The area serves primarily as a "bedroom" community for the Riverside/San Bernardino Area and the communities east of Los Angeles County along the I-10 / State Highway 60 corridor.

5.1 Overview of BCVWD's Water System and Operation

BCVWD owns and operates both a potable and a non-potable water distribution system. BCVWD provides potable water and scheduled irrigation water to users through the potable water system. BCVWD provides non-potable water for landscape irrigation of parks, playgrounds, school yards, street medians and common areas through its non-potable (recycled) water system.

Table 5 presents BCVWD's 2019 potable and non-potable water connections and pumping amounts. The number of connections increased from 5,600 in the year 2000, before the housing boom that encompassed Western Riverside County and particularly, Beaumont.

Table 5
BCVWD Potable and Non-potable Water Connections and Deliveries 2019

	Potable Water	Non-potable Water (Landscape)	Total
Number of Connections	19,339[a]	309	19,648
Water Pumped, AFY	11,447 [b]	1,547	12,994
Average Annual, mgd	10.2	1.4	11.6
Maximum Day, mgd	19.2[c]	4.3	NA

a) 45 of these connections are agricultural water connections on potable water system.
b) 260AF was transferred into Non-potable System for make-up.
c) Historic maximum day demand was 22.1 mgd in 2009.

5.2 Potable Water System

BCVWD's potable water system is supplied by wells in Little San Gorgonio Creek (Edgar Canyon) and the Beaumont Groundwater Basin (sometimes called the Beaumont Storage Unit or the Beaumont Management Zone). BCVWD has a total of 24 wells; 1 well is a standby. Only 20 of the wells are used to any great extent. Twelve of the wells have auxiliary engine drives, a portable generator connection, or an in-place standby generator. BCVWD has 3 portable generators capable of operating 50, 350 and 500 horsepower (HP) motors. The Beaumont Groundwater

Basin is adjudicated and managed by the Beaumont Basin Watermaster[11]. BCVWD augments its groundwater supply with imported State Project Water (SPW) from the SGPWA which is recharged at BCVWD's recharge facility at the northeast intersection of Brookside Ave. and Beaumont Ave. Overall, the water quality from BCVWD's wells is excellent. Total Dissolved Solids (TDS) is usually below 250 mg/L. Nitrates are only a sporadic problem in a few wells at present. BCVWD continues to monitor these wells per State Water Resources Control Board, (SWRCB) Division of Drinking Water (CDDW) requirements. No wells have had to be taken out of service because of water quality concerns.

Wells in Edgar Canyon have limited yield, particularly in dry years, and take water from shallow alluvial and bedrock aquifers; wells in the Beaumont Basin are large capacity and pump from deep aquifers – some as deep as 1,500 ft. below the ground surface. The Edgar Canyon wells are very inexpensive to operate and are the preferred source; however, those wells are not able to meet the average day demand and need to be supplemented with the Beaumont Basin wells. The Edgar Canyon wells pump to a gravity transmission main that extends the full length of the BCVWD-owned properties in Edgar Canyon. The transmission main connects to the distribution system in Cherry Valley. Water from the Edgar Canyon Wells, which is not used in the developed areas adjacent to Edgar Canyon or Cherry Valley, can be released to lower pressure zones, if needed.

During 2019, the Edgar Canyon Wells provided about 10.5 percent of BCVWD's total annual potable water supply; the rest is pumped from wells in the Beaumont Basin. BCVWD's total well capacity (Edgar Canyon and Beaumont Basin) is about 33 million gallons per day (mgd). BCVWD is easily able to meet the maximum day demand (historic maximum about 22 mgd) with the largest well out of service. Wells with auxiliary power can supply up to 21.4 mgd.

Because of the range of topographic elevations in the BCVWD's service area, 11 pressure zones are needed to provide reasonable operating pressures for customers.

BCVWD has 14 reservoirs ranging in size from 0.5 million gallons (MG) to 5 MG. Total storage is approximately 22 MG, slightly more than 2 average days or 1 maximum day. The reservoirs provide gravity supply to their respective pressure zones. BCVWD's system is constructed such that any higher zone reservoir can supply water on an emergency basis to any lower zone reservoir. There are booster pumps in the system that allow water to be pumped up from a lower pressure zone to a higher pressure zone also. This provides great flexibility in system operations. Sufficient reservoir redundancy exists permitting reservoirs to be taken out of service for maintenance.

The backbone transmission system in the main pressure zones is primarily 24-in diameter though there are some 30-in diameter pipelines leading from some reservoirs. The bulk of the backbone transmission and distribution pipe is ductile iron, with cement mortar lining, that was installed in the last 10 to 15 years. There are a number of small, older, distribution lines in the system that

[11] San Timoteo Watershed Management Authority vs. City of Banning et al, Superior Court of the State of California, for the County of Riverside, Riverside Court, Stipulation for Entry of Judgement Adjudicating Groundwater Rights in the Beaumont Basin, RIC 389197, February 4, 2004.

are gradually being replaced with minimum 8-in diameter ductile iron pipe. The BCVWD potable water distribution system is capable of providing over 4,000 gpm fire flow in the industrial/commercial areas of the service area.

5.3 Imported Water and Recharge Facilities

BCVWD imported and storm water recharge facility consists of a 78-acre site on the east side of Beaumont Ave., between Brookside Ave. and Cherry Valley Blvd., where only imported water and incidental storm runoff is currently recharged. The recharge project site was selected after extensive hydrogeologic studies and pilot testing over a multi-year period. Phase 1 of the recharge facility, on the westerly half of the site, went on-line in late summer 2006. Phase 2 of the recharge facility was completed in 2014. This site has excellent recharge capability. Since its operation in 2006 through the end of 2018, BCVWD has recharged a total of 84,242 acre-ft (27.4 billion gallons) of imported water. The capacity of the recharge site is conservatively estimated at 25,000 to 30,000 AFY, based on short term studies. With more aggressive maintenance, the capacity may be as much as 35,000 AFY.

BCVWD and Riverside County Flood Control and Water Conservation District (RCFC&WCD) are jointly in design of Beaumont MDP-Line16, a large diameter storm drain in Grand Ave., which drains a watershed area of 505 acres to BCVWD's recharge site. This project should be operational by 2022 and storm water from the project will be recharged. BCVWD also envisions recharging recycled water, not needed for irrigation, at the recharge site in the future, with appropriate treatment and permits.

The SGPWA imports State Project Water (SPW) through the East Branch Extension (EBX) of the California State Water Project (Governor Edmund G. Brown California Aqueduct). EBX Phase I was completed in 2003; EBX Phase II was completed in 2018. The completion of EBX Phase II improvements brings SGPWA's imported water delivery capacity to the Pass Area to 48 cubic feet per second (cfs) or 34,750 AFY if it was operational continuously all year.

BCVWD takes water from a 20-in diameter turnout and metering station at the current end of the EBX at Orchard Ave. and Noble Creek in Cherry Valley. The turnout was expanded to 34 cfs, (24,600 AFY if operated continuously), which became operational in 2019. Water from the turnout is metered by the Department of Water Resources (DWR) and then enters a 3,500-ft long, 24-in diameter gravity pipeline, constructed by BCVWD, which conveys the water to BCVWD's groundwater recharge site.

The 24-in diameter pipeline was constructed in 2006 and at 34 cfs would have a velocity of 10.8 ft/second – a reasonable velocity for a mortar-lined pipeline. If operated eleven months out of the year at that rate, the pipeline could convey 22,500 acre-ft per year. Higher velocities could be tolerated for short periods of time which would result in increased short-term delivery capacity.

5.4 Non-potable (Recycled) Water System

Currently, BCVWD has over 44 miles of non-potable water transmission and distribution system in place. The backbone transmission system forms a loop around the City and is comprised of

primarily 24-in diameter cement mortar lined, ductile iron pipe, all installed after year 2000. The system includes a 2 million gallon recycled (non-potable) water reservoir which provides gravity storage and pressurization for the system. As shown in Table 5, presented previously, at the end of 2019, there were approximately 309 connections delivering 1,547 AFY of non-potable water. There are three major non-potable water pressure zones (2800 Zone, 2600 Zone and 2520 Zone); potentially there could be two additional pressure zones (3040 Zone, 2370 Zone).

A 2 MG non-potable reservoir, (2800 Zone Non-potable Water Tank), was constructed at the BCVWD Groundwater Recharge Site and is piped to receive potable water or untreated SPW through air gap connections. The non-potable water system can have a blend of recycled water, filtered imported and otherwise untreated SPW, and potable water.

The 2800 Non-potable Water Zone is currently separated from the 2600 and lower pressure zones. The 2800 Non-potable Water Zone is currently supplied with water from Well 26, supplemented by potable groundwater introduced into the system through an air gap at the 2800 Zone Non-potable water tank. The 2600 and lower non-potable water pressure zones are supplied with potable water through interconnections between the potable and non-potable water system. BCVWD has a capital project approved to provide fine screening of SPW prior to entering the 2800 Zone Non-potable Water Reservoir. This project will be implemented when demands increase and/or the non-potable water system is tested and approved for recycled water use.

BCVWD is working with the City to secure recycled water for use in the non-potable water system. The City is under construction with expansion and upgrade of their existing wastewater treatment facility to bring it to 6 mgd capacity and will be installing a new membrane bioreactor (MBR) treatment units followed by reverse osmosis membrane treatment. A brine line from the treatment plant to the Inland Empire Brine Line (IEBL) in San Bernardino is also under construction. A memorandum of understanding (MOU) between BCVWD and the City for recycled water purchase and use was signed in July 2019 and the City and BCVWD are in the process of finalizing an agreement for purchase of recycled water through an ad-hoc committee of City Council members and BCVWD Board Members.

The Regional Water Quality Control Board (RWQCB)[12] has ordered the City to be in compliance with the maximum benefit provisions, which include providing recycled water for beneficial use, by March 1, 2020. Construction completion has been delayed due to wet weather and the Covid-19 virus shutdown.

When the demand for recycled water for landscape irrigation is less than the supply available (winter months), BCVWD may ultimately recharge the surplus recycled water at BCVWD's groundwater recharge facility or some alternative facility with appropriate treatment and permits. Recycled water use and recharge is permitted by the Adjudication.

[12] RWQCB (2015). Waste Discharge Requirements and Master Reclamation Permit for the City of Beaumont, Beaumont Wastewater Treatment Plant, Riverside County, Order No. R8-2015-0026, NPDES No. CA0105376, July 24.

6. UPDATED WATER DEMANDS IN SAN GORGONIO PASS AREA

In 2018, BCVWD developed a series of White Papers (White Papers No. 1 through 7) that evaluated water supply, water demands, current and future water supply costs, funding requirements and funding strategies considering both BCVWD's service area and the SGPWA as a whole. These White Papers were presented at BCVWD Board Meetings and elsewhere. The purpose of the White Papers was to assess the water supply situation vis-à-vis the growth in demand both regionally and within BCVWD's service area. The results of this series of White Papers indicated that the regional imported water demands in BCVWD's 2015 UWMP and the SGPWA 2015 UWMP may be overstated, primarily because of over-aggressive growth in demand, limited consideration of recent state-mandated conservation and indoor water use requirements, etc.

6.1 Regional Water Supply and Demand Spreadsheet Models

BCVWD, in cooperation with the other major retailers, developed a Regional Water Demand Spreadsheet or Workbook which included a separate worksheet for each of the three major retailers in the SGPWA service area: BCVWD, City of Banning, and Yucaipa Valley Water District (YVWD)/City of Calimesa. The other water supply agencies, e.g., Cabazon Water District, High Valleys Water District, etc. that are not currently receiving imported water from SGPWA were also included in the current spreadsheet modeling, based on their demand data in SGPWA's 2015 UWMP.

The spreadsheet model allows the water agency/city to input (and adjust):

- New EDU Water Demand, AFY/EDU
- Existing EDU Water Demand, AFY/EDU
- Infill EDUs/year
- Commercial & Institutional EDUs/yr, as a % of Residential EDUs
- Commercial & Institutional EDUs, Minimum EDUs/yr
- Water Conservation, % Reduction on Existing Demands
- Water Conservation, % Reduction on New Demands going forward
- 2017 Year Ending Potable Water Demand, AF
- Beaumont Basin Groundwater Storage Account Maximum, AF
- Beaumont Basin Groundwater Storage Account 2017 Ending Balance, AF

The demand worksheets included the major development projects in each of the retailer's service area, based on data in specific plans, water supply assessments, regional water resource planning studies, and other sources. The spreadsheets allow the water supply agencies to input their own development rates, on a year by year basis, to adjust anticipated housing startups, build-out years for large developments, and the amount of in-fill development and commercial/institutional

development; adjust unit water demands for new and existing housing, and account for any anticipated conservation for new and existing demands, among other items. Each water supplier could adjust their imported water banking requirements, and evaluate the impact of their strategies on their own Beaumont Basin storage accounts over time.

The spreadsheet provides a graph of the agency's annual groundwater storage account balance which is automatically updated with any input change. The purpose is to allow the agencies to model, on a year by year basis, various imported water purchase and banking strategies vis-à-vis available imported water from SGPWA. Adjustments can be made to water demands using conservation factors on new and existing (older) housing units; water supply sources can include groundwater, recharged recycled water (indirect potable reuse), and captured storm water. Beaumont Basin Watermaster's redistribution of unused overlier rights and forbearance water are included in the model.

The worksheets were reviewed by the retail water agency managers for reasonableness of growth taking into account the housing market and absorption capacity of the Pass Area. These spreadsheets, and the criteria are summarized below but are described in detail in White Paper No. 6.

Separate spreadsheet models have been developed for:

- BCVWD
- City of Banning, including Banning Heights Mutual Water Company, High Valleys Water District
- YVWD (Summerwind Ranch and Mesa Verde Area)
- All combined

6.1.1 City of Banning

Major development projects in the City of Banning which are included in the Regional Spreadsheet Model are shown in Table 6.

Table 6
Major Development Projects in City of Banning

Project Name	Projected EDUs	Estimated Start-up Year	Build-out Years
Butterfield Ranch (Atwell)	4,862	2020	30
Rancho San Gorgonio	3,385	2019	17
Diversified Pacific	98	2021	5
St. Boniface	171	2023	10

The data in Table 6 is taken from the water supply spreadsheets; these and other projects have been delayed. As a result the water supply spreadsheets most likely overestimate the near term water demands.

Butterfield Ranch (now Atwell by Pardee) was projected to start in 2015 and extend for 30 years to buildout in 2045 per the Project's Water Supply Assessment (WSA). The project recently started grading operations and currently is selling homes to be occupied sometime in 2020. There are 4,862 EDUs proposed, or an average of 160 EDUs per year over the 30 year build-out period. Rancho San Gorgonio is planned for 3,385 EDUs and initially projected to start in 2017 and be fully built out by 2034 (17 years) per the Project's WSA (about 200 EDUs per year average over the build-out period). This project has not yet started and probably will not start until sometime in after 2022 or later.

The spreadsheet for Banning included two other projects:

- Diversified Pacific (98 EDUs)
- St. Boniface (171 EDUs)

Specific years when these projects are to begin were not stated, nor were the buildout years. The spreadsheet assumes 2021 and 2023, respectively, for starting and build out years of 5 and 10 years, respectively. This may be optimistic.

In the development of the spreadsheet model for the City of Banning, the San Gorgonio Integrated Regional Water Management Plan (SGIRWMP), May 2, 2018 (Revised August 1, 2018) was analyzed in addition to the City's 2015 UWMP. The SGIRWMP covered the SGPWA service area generally east of Highland Springs Avenue. The SGIRWMP integrated three separate studies:

- Water Supply Reliability Study
- San Gorgonio Region Recycled Water Study
- San Gorgonio Integrated Watershed and Groundwater Model Technical Memorandum

The City of Banning has firm groundwater supplies from the Banning Storage Unit, Banning Bench Storage Unit, Cabazon Storage Unit, and Banning Canyon Storage Unit totaling 9,675 AFY.[13]

[13] Extracted from Table 5-4 in Banning 2015 UWMP.

In addition, in accordance with the Adjudication, the City of Banning is entitled to 31.43% of the unused overlier pumping rights in the Beaumont Storage Unit. Watermaster developed estimates of unused overlier rights for years 2018 through 2022 that are included in the spreadsheet. The amount of unused pumping rights varies from year to year, depending on hydrologic conditions and other factors, and is evaluated by Watermaster, annually. The 2017 Annual Watermaster Report (Final) indicates that Banning's reallocated unused overlier pumping amount for 2020 is 1,450 AFY, slightly more than that reported in the City of Banning's 2015 UWMP. As some of the overlying parties develop their properties, the overlier rights will be used by the potable water and recycled water supplying agency and will no longer be available for reallocation. As a result the total amount subject to reallocation will decrease over time. BCVWD made an estimate of the unused overlier pumping rights under a "developed" or "build-out" condition and estimated the total unused overlier amount would be 1,800 AFY under full buildout. The City of Banning's share (31.43%) would be 560 AFY (rounded) at buildout. The spreadsheet allows for the gradual reduction of the unused overlier pumping rights over time. It is projected by BCVWD to decrease to 560 AFY by 2030 or so as the overlying properties develop.

The City of Banning has 51,961 AF banked in their Beaumont Basin Storage account at the end of 2017 per Watermaster. At year-end 2018, the amount in storage had increased to 52,320 AF. For the period 2008 through 2017, the City of Banning has recharged an average of 1,294 AFY of SPW in BCVWD's recharge facility. The City can store up to 80,000 AF.

Table 7 presents a summary on the Supply-Demand Spreadsheet Model for the City of Banning. The year 2040 data was projected from previous years since the model currently only extends to 2035.

Table 7 was based on the following criteria:

- 2017 Ending Potable Water Demand: 7,500 AFY
- New EDU water demand: 0.52 AFY/EDU
- Existing EDU water demand: 0.62 AFY/EDU
- No demand reduction due to conservation on either existing or new EDUs

This was reviewed by the City of Banning. Table 7 indicates that the City of Banning has adequate local supply until 2035. Note that Banning's Beaumont Basin Groundwater Storage Account is full in 2030. (Per the spreadsheet model it actually fills in 2027). This indicates that the City of Banning has minimal imported water needs from SGPWA until 2040.

Table 7
Summary of Spreadsheet Supply-Demand Model for City of Banning

Demand or Supply	Year					
	2018	2020	2025	2030	2035	2040
Total New EDUs/year		218	388	706	220	220
Potable Water Demand, AFY	7,504	7,678	8,406	9,902	10,832	11,400
Banning/Cabazon Groundwater, AFY	9,675	9,675	9,675	9,675	9,675	9,675
Beaumont Reallocated Overlier Rights, AFY	2,001	1,450	1,100	600	560	560
Total Local Supply, AFY	11,676	11,125	10,775	10,275	10,235	10,235
Surplus/(Deficiency)	4,172	3,447	2,369	373	(597)	(1,165)
Imported Water, AFY						1,000
Groundwater Storage Account, AF	56,133	63,100	77,573	80,000	78,415	76,510

6.1.2 YVWD/City of Calimesa

Major development projects in the YVWD service area within SGPWA (principally the City of Calimesa) which are included in the Regional Spreadsheet Model are shown in Table 8.

Table 8
Major Development Projects in YVWD in SGPWA (City of Calimesa)

Project Name	Projected EDUs	Estimated Start-up Year	Build-out Years
Summerwind Ranch	3,841	2019	20
Mesa Verde	3,650	2022	20
JP Ranch [(a)]	500	2025	10

(a) Per discussions with J. Zoba, General Manager, YVWD.

To develop the spreadsheet for YVWD, several references were reviewed for YVWD's water supply and projected demands within their service area lying within the SGPWA boundaries:

- 2015 SGPWA UWMP
- 2015 San Bernardino Valley Regional UWMP
- Mesa Verde Water Supply Assessment (WSA) – Draft August 11, 2017
- YVWD Strategic Plan For Sustainable Future (Adopted August 20, 2008)

The EDUs for Summerwind Ranch and Mesa Verde were taken from the Specific Plans for these projects. Grading for street and utility work and model construction is underway for Summerwind Ranch, with first homes coming "on-line" sometime in 2019. Mesa Verde is estimated to start in

2022. An estimated 20 year build-out time for Summerwind Ranch and Mesa Verde was assumed, resulting in an average of 192 and 183 EDUs per year, respectively. Per YVWD, future phases of JP Ranch will likely not start until 2025 with a 10-year build-out period (about 50 EDUs per year). It should be noted there will be additional EDUs associated with the developments for related commercial and retail developments, schools, parks, restaurants, etc.

Water supply sources for these projects are:

- Reallocated unused overlier pumping rights in the Beaumont Basin
- Oak Valley Partners' earmarked transfer right
- Banked groundwater from storage
- Imported Water from SGPWA
- Treated potable water from the YVWD's Regional Water Treatment Plant

In accordance with the Adjudication, YVWD's share (13.58%) of the reallocated unused overlier pumping right was determined by Watermaster for 2018 through 2022 and reported in the 2017 Watermaster annual report. To project the amount available under more long term conditions, BCVWD made an evaluation of a fully developed condition of the developable overlier parcels as shown on the worksheet in the spreadsheet. BCVWD believes the total unused overlier right at build-out will be about 1,800 AFY; YVWD's share will be about 240 AFY (rounded).

Both Mesa Verde and Summerwind Ranch are part of the original Oak Valley Development that started with the Landmark Land Company of California in the 1980s. The original Landmark Project was a master planned golf/recreational development. Oak Valley Partners (OVP) took over the project and were involved in the Beaumont Basin Adjudication. OVP has overlying groundwater rights in the Beaumont Basin [originally 1,806 AFY but reduced to 1,398.9 AFY, (round to 1,399 AFY), after the safe yield was reduced in 2014]. These overlier groundwater rights will be transferred to YVWD to serve the Summerwind Ranch development only per YVWD.

YVWD uses 700 gal/day/EDU (0.78 AFY/EDU) for total water demand for existing EDUs; but requires all new development to be dual-plumbed and requires the use of recycled water outside. Potable water demands are estimated by YVWD to be 40% of the total water demand, i.e. 280 gal/day/EDU (0.37 AFY/EDU) with the remainder, i.e., 420 gal/day/EDU to be recycled water. It is BCVWD's opinion that the Adjudication requires OVP to forebear the pumping of their 1,399 AFY overlier pumping right, on an acre-ft by acre-ft basis, for both potable and recycled water received for a project development.

YVWD has groundwater banked in the Beaumont Basin; at the end of 2017, per Watermaster, the amount in storage was 15,776 AF. This had grown to 16,633 AF by the end of 2018. YVWD has a 50,000 AF storage account.

The following Table (Table 9) was extracted from the Mesa Verde WSA. The Mesa Verde WSA indicates 1,200 AFY is proposed to be recharged (banked) by YVWD from 2020 through 2040. YVWD developed a Strategic Plan for a Sustainable Future, The Integration and Preservation of Resources for a Sustainable Future (adopted August 2008) identified a groundwater banking program for future reliability for droughts and disruption in the SPW supply as shown in Table 9.

The Plan indicates a Board Policy of banking of 15 percent of the total water supply used by the YVWD's customers. Data was not available to confirm the 1,200 AFY in Table 9; but 1,200 AFY is used in the spreadsheet model.

The total of the drinking water demands for the Water Filtration Facility plus the Conjunctive Use Demands match with the projected imported water demands in the SGPWA 2015 UWMP as shown in Table 2-4 presented previously.

Table 9
YVWD SGPWA Imported Water Demands

Imported Water Demands from the San Gorgonio Pass Water Agency (Acre-feet)	2015	2020	2025	2030	2035	2040
Drinking Water Demands: Yucaipa Valley Water Filtration Facility	454	609	767	962	1,191	1,444
Conjunctive Use Demands -Local Water Banking	0	1,200	1,200	1,200	1,200	1,200
New Development Long-Term Supply - Sustainability Program	0	2,504	3,040	3,596	4,344	3,407
Purchase from SGPWA	**454**	**4,313**	**5,007**	**5,758**	**6,735**	**6,051**

Source: Mesa Verde Project WSA Draft August 11, 2017, page 25

Table 9 also identified "New Development Long-Term Supply—Sustainability Program which relates to YVWD's Strategic Plan for a Sustainable Future, mentioned above. YVWD requires all new developments to provide funding to secure 7.0 AF of supplemental imported water per EDU. This amount of water is sufficient to meet the drinking water demands generated by each new EDU for a period of 20 years. YVWD also offers a Crystal Status Development Program whereby the developer provides funding for 15.68 AF of supplemental imported water per EDU which is sufficient to meet the potable and non-potable (recycled) water demands of the new EDU for 20 years. The difference between the two programs is that under the standard (7.0 AF/EDU) program, development will be restricted, (i.e., no grading or building permits will be issued), when a Stage 2 water shortage is declared (10% cutback). However, Crystal Status Development can continue through a Stage 4 Shortage (35% cutback). The 7.0 AF/EDU will not need to be replenished for 20 years. For this spreadsheet, the Standard 7.0 AF/EDU imported water purchase and storage was used, since it is difficult to determine how many new developments will purchase Crystal status. This is conservative.

The spreadsheet assumes that 7.0 AF/EDU will be applied to all new developments (Mesa Verde and JP Ranch) in YVWD, except for Summerwind Ranch, which has overlier pumping rights available to meet its projected demands.

Table 10 presents a summary on the Supply-Demand Spreadsheet Model for YVWD in the SGPWA service area, i.e., principally the City of Calimesa. Year 2040 data was projected from previous years since the model currently only extends to 2035.

Table 10 was based on the following criteria:

- 2017 Ending Potable Water Demand: 500 AFY

- New EDU potable water demand: 0.37 AFY/EDU
- Existing EDU water demand: 0.78 AFY/EDU
- Water demand reduction from conservation on new EDUs: 10%
- Water demand reduction from conservation on existing EDUs: none

Table 10 indicates that YVWD, in SGPWA service area, has sufficient local supply to meet demands until 2025, at which time imported water will be needed unless YVWD plans on withdrawing water from their storage account. The YVWD Beaumont Basin Groundwater Storage Account is full in 2030 primarily because of the "Sustainability Water" which is banked. YVWD's total imported water demands reported in the Mesa Verde WSA differs from YVWD's imported water demands in the SGPWA 2015 UWMP presented earlier.

Table 10

Summary of Spreadsheet Supply-Demand Model for YVWD (City of Calimesa)

Demand or Supply	Year					
	2018	2020	2025	2030	2035	2040
Total New EDUs/year		83	464	551	551	500
Potable Water Demand, AFY	503	544	1,065	2,054	3,058	4,062
Oak Valley Partners Earmark Transfer, AFY	3	50	586	1,399	1,399	1,399
Beaumont Reallocated Overlier Rights, AFY	864	627	400	240	240	240
Total Local Supply, AFY	867	677	986	1,639	1,639	1,639
Surplus/(Deficiency)	364	133	(79)	(415)	(1,419)	(2,423)
Imported Water for Regional Filtration Facility, AFY (a)	500	609	767	962	1,191	1,444
Imported Water for Banking, AFY (a)		1,200	1,200	1,200	1,200	1,200
Imported Water for Sustainability, AFY	49	51	1,655	2,260	2,260	2,260
Total Imported Water, AFY	549	1,860	3,622	4,422	4,651	4,880
To (From) Storage, AFY	913	1,993	3,542	4,007	3,232	2,457
Groundwater Storage Account, AF	16,689	19,397	32,825	50,000	50,000	50,000

(a) Source: YVWD's Mesa Verde WSA, pg. 25, SGPWA SPW or equivalent used at Filtration Plant

6.1.3 BCVWD

6.1.3.1 City of Beaumont Development

Major development projects in the BCVWD service area, which are included in the Regional Spreadsheet Model, are shown in Table 11. The projected EDUs planned, or yet to be built, are estimated and may vary slightly from City of Beaumont Project Status Report estimates.

Figure 4 shows the number of single family home building permits issued in the City of Beaumont for the years 2000 through 2019. Although not shown in the Figure, the permit applications started to increase in 1999-2000 and reached their peak in 2005 with 2,300 new home permits issued for that year. The number of permits for new homes declined to a low of 169 in 2011. Over the last 10 years, permits averaged 455 per year, and 577 over the last 5 years. The 19-year average was 684 per year. Future growth will likely be in the range of 450 to 650 permits per year, although some developers have projected slightly higher amounts in their build-out forecasts. It should be noted that not all Single Family Permits in a given year turn in to "occupancy" during that year.

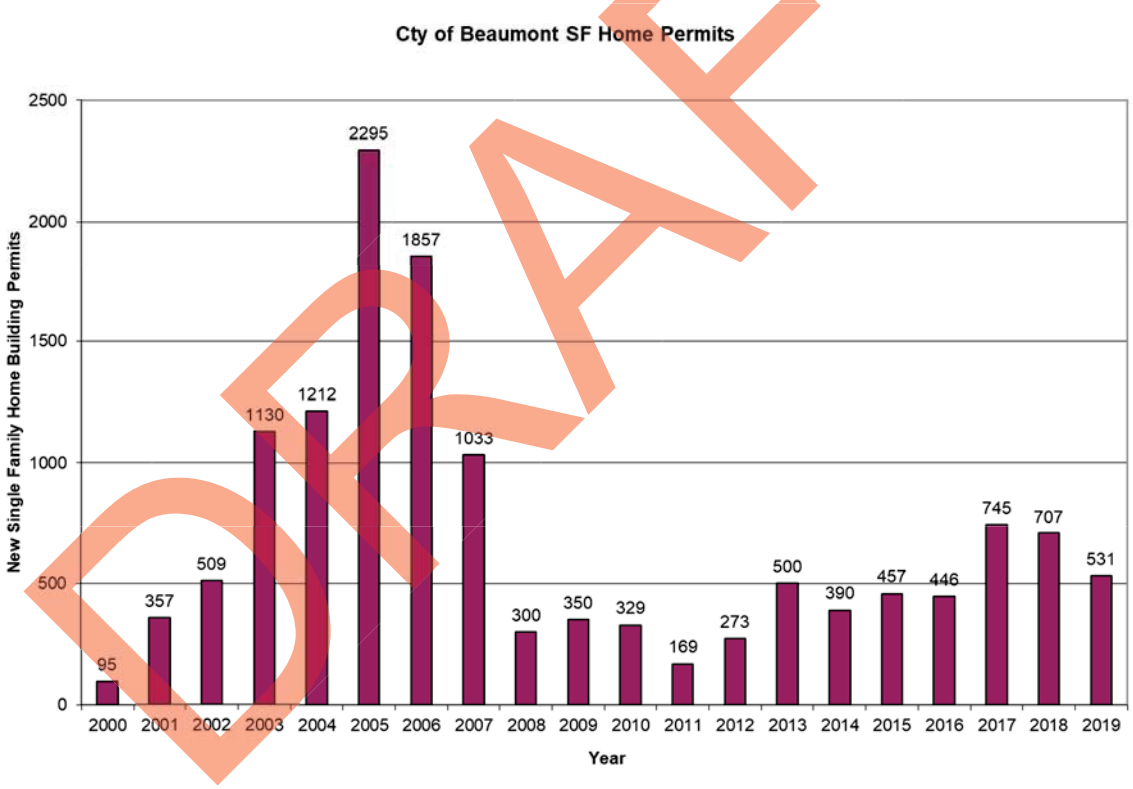

Figure 4
City of Beaumont Single Family Home Permits

The EDUs in Table 11 total 12,545; at the rate of 480 to 500 EDUs/year, it would take about 25 years to construct these units or about 2040 or slightly beyond.

Table 11
Major Development Projects in Planning or Construction Stages
(from BCVWD 2015 UWMP)

Project Name	Projected EDUs (Planned or Yet to be Built End 2017)	Estimated Start-up Year	Build-out Years
Tournament Hills Ph 4	281	2020	4
Sundance[a]	1,262	2018	5
Fairway Canyon[a]	1,810	2019	20
Heartland Olivewood[a]	1,081	2018	20
Four Seasons[b]	203	2018	3
Kirkwood Ranch	391	2022	12
Potrero Creek Estates	700	2025	10
Noble Creek Meadows	648	2021	15
Hidden Canyon Industrial[a]	82	2019	5
Sunny Cal Egg Ranch	529	2019	10
Jack Rabbit Trail	2,000	2030	25
The Preserve/Legacy Highlands	3,218	2025	25
Taurek	244	2022	20
TR 32950 Manzanita	95	2022	10
Other Projects on City of Beaumont's Project Status List (10/18/2018)			
Sundance Corporate Center[a]	---	2018	2019
Rolling Hills Ranch Industrial Ph 2 [b]	---	2020	2021
Centerpointe Commercial[b]	---	2018	2019
San Gorgonio Village Ph 2 [a]	---	2020	2021
Total EDUs	12,545		

(a) Under construction;

(b) Recently completed.

6.1.3.2 Cherry Valley Growth and Development

The ultimate build-out population for that portion of Cherry Valley served by BCVWD, based on the Pass Area Land Use Plan[14] [15] densities, was estimated to be 21,700 people or about 7,750 EDUs. This was BCVWD's estimate in 2009, developed by BCVWD, using GIS land use data from Riverside County and typical development densities for the various land uses in the General Plan. The 21,700 people included 6,736 people in the City of Calimesa. BCVWD will not be serving the City of Calimesa as this is within YVWD's service area. As a result, the 21,700 population estimate, to be served by BCVWD, may be overestimated. BCVWD now believes it to be closer to 15,000 people at build-out, or about 5,350 EDUs. The build-out population is based on an increase from 2.43 persons per EDU, currently, to 2.8 persons per EDU projected at build-out.

There were 2,874 housing units in Cherry Valley in 2010 per the census data, but 26.6% of those are mobile homes. Adjusting for the reduced water use in mobile homes, the 2,874 housing units are equivalent to about 2,485 EDUs. The Sunny Cal Egg Ranch Development, (529 EDUs from Table 11 below), is included with the City of Beaumont's development projects, but is actually within the current Cherry Valley census area. The 529 Sunny Cal EDUs and would have been included in the projected 2,865 EDU increase for Cherry Valley, (5,350 EDUs – 2,485 EDUs). To avoid "double counting EDUs," the Sunny Cal Egg Ranch EDUs were deducted from the 2,865 EDUs, resulting in a net projected 2,336 EDU increase for Cherry Valley to build-out. The buildout population and EDUs will be revised in future updates of the BCVWD Potable Water Master Plan and UWMPs.

BCVWD believes Cherry Valley will be growing at a low rate keeping with its character of residential rural community; growth rate is estimated to be less than 10 EDUs/year until the City of Beaumont's currently planned projects are developed. Once the City of Beaumont has developed, Cherry Valley will likely begin to be developed at a gradually increasing rate, perhaps increasing to 30 to 50 EDUs/year; but this is not expected to occur until after 2040.

Table 11 shows Jack Rabbit Trail as 2,000 EDUs; the current proposed development concept by a developer is to construct major commercial/industrial buildings with a resulting reduction in EDUs. However, this is uncertain and plans could change. For planning purposes for water supply, Jack Rabbit Trail is assumed to be 2000 EDUs until firmed up by the City of Beaumont.

6.1.3.3 Supply Demand Model for BCVWD

Table 12 presents a summary of the spreadsheet model for BCVWD's demand which was based on the following criteria:

- 2017 Ending Potable and Non-potable Water Demand: 12,981AFY
- New EDU water demand: 0.546 AFY/EDU
- Existing EDU water demand: 0.62 AFY/EDU
- Water demand reduction from conservation on new EDUs: 5%

[14] Pass Area Land Use Plan, October 7, 2003, Part of Riverside County General Plan.
[15] The Pass Area Plan, County of Riverside General Plan Amendment 960, Draft March 2014.

- Water demand reduction from conservation on existing EDUs: 5%

BCVWD's source of supply consists of:

- **Edgar Canyon (Little San Gorgonio Creek) Groundwater**. The annual yield for Edgar Canyon is based on 37 years of pumping records. The average annual production for the period 1983 – 2019 was 2,094 AFY, which was rounded to 2,100 AFY in the spreadsheet. However, for 2018, the production was reduced to 1,700 AFY to account for the reduced production in some wells due to reduced pump efficiency. These pumps have been refurbished and are fully operational. They will be refurbished on a regular basis from now on.
- **Beaumont Basin**
    - Reallocated Unused Overlier Pumping Rights – Watermaster provided the amount of reallocated overlier rights in the 2017 Draft Annual Report for each year up to 2022. BCVWD was allocated 2,706 AF in 2018 and 1,962 AF in 2020. Thereafter, BCVWD made an estimate based on production and development of the overliers' property. BCVWD estimated the long-term, fully developed, unused overlying party pumping rights would be about 1,800 AFY. BCVWD gets 42.51% of the unused overlier pool each year. At full development, BCVWD estimates its share is 760 AFY.

Table 12
Summary of Spreadsheet Supply-Demand Model for BCVWD

Demand or Supply	Year					
	2018	2020	2025	2030	2035	2040
Total New EDUs/year	381	580	460	552	458	297
Potable and Non-potable Water Demand, AFY	13,129	13,668	14,841	16,032	17,192	18,100
Edgar Canyon, AFY	1,700	2,100	2,100	2,100	2,100	2,100
Beaumont Reallocated Overlier Rights, AFY	2,706	1,962	1,200	760	760	760
Forbearance Water (Sunny Cal Egg Ranch), AFY	0	50	200	340	340	340
Recycled Water City of Beaumont, AFY (to be realized in 2021)	0	1,556	2,188	2,840	3,487	3,930
Stormwater Capture, AFY	0	0	250	250	250	250
Other Local Water Resource Projects, AFY	0	0	250	250	250	250
Total Local Supply, AFY	4,406	5,668	6,188	6,540	7,187	7,630
Surplus/(Deficiency), AFY	(8,723)	(8,000)	(8,653)	(9,492)	(10,005)	(10,470)
Imported Water for Replenishment, AFY	8,723	8,000	8,653	9,492	10,005	10,470
Imported Water for Drought proofing, AFY	1,000	1,000	2,000	2,500	2,500	2,500
Total Imported Water, AFY	9,723	9,000	10,653	11,992	12,506	12,970
To (From) Storage, AFY	1,000	1,000	2,000	2,500	2,500	2,500
Groundwater Storage Account, AF	33,296*	35,296	41,296	51,796	64,296	76,796

*2018 Groundwater Storage Account Volume in Table 12 is estimated. The actual is 34,794 AF.

- **Forbearance Water** is credited to a water supplier by Watermaster for any potable and/or recycled water provided to an overlier when the overlier's property develops. The overlier forbears pumping the equivalent amount of water supplied. BCVWD will be supplying the Sunny Cal Egg Ranch Development with both potable and recycled water at some point. Sunny Cal Egg Ranch and associated partners are overlying parties and have pumping rights. BCVWD estimates that fully developed demand from recycled and potable water is about 340 AFY. The amount of forbearance water will increase over time from zero AFY to 340 AFY as the project develops to anticipated buildout in 2030.
- **Water from Groundwater Storage** – BCVWD has an 80,000 AF storage account in the Beaumont Basin. As of the end of 2017, there were 32,296 AF in storage per Watermaster's 2017 Annual Report. The amount in storage increased to 34,794

AF at the end of 2018. BCVWD's plan, which is shown in BCVWD's 2015 UWMP, envisions banking from 1,000 AFY to 2,500 AFY to drought proof BCVWD. This is accounted for in the spreadsheet each year. Should there be a year when the projected amount cannot be delivered by SGPWA, any deficiency will be made up in successive years when adequate supply is available. Table 12 shows that for average water supply conditions, banking is anticipated every year and no water will be withdrawn from storage.

- **Recycled Water from the City of Beaumont** – The City is required by Regional Water Quality Control Board (RWQCB) Order No. R8 -2015-0026 to have recycled water put to beneficial reuse by March 1, 2020. The City started the construction of the new wastewater treatment plant, reverse osmosis desalting unit, and the required brine line from the wastewater treatment plant to the Inland Empire Brine Line (IEBL), in San Bernardino. The City has completed Title 22 Engineering Report for the new Treatment Facilities which is under review by the RWQCB and CDDW. BCVWD's water supply is premised on the basis that 1.8 mgd habitat mitigation, previously negotiated with U. S. Fish and Wildlife in 2008 will not change. The City and BCVWD signed a Memorandum of Understanding (MOU) in July 2019 which will form the basis for an agreement on the sale and reuse of recycled water from the new treatment plant. The City and BCVWD are in the process of developing a recycled water purchase agreement. BCVWD and the City are working jointly on coordinating the pumping and storage requirements at the treatment plant. The City will be the recycled water producer; BCVWD the distributor. BCVWD is in process of completing their Title 22 Engineering Report for the Distribution and Reuse Applications. BCVWD has developed draft rules and regulation for recycled water use and developed a cross-connection testing and control plan which has been previously approved by the CDDW. However, that was some time ago and BCVWD will be submitting the draft rules and regulations again, in the event there have been some changes in the requirements. At this time, recycled water is assumed to only be used for non-potable uses and to be available in 2021. In the future, as more recycled water becomes available during the late fall, winter, and early spring, BCVWD anticipates developing, with the City, an advanced treatment facility and secure permits for groundwater recharge of the surplus effluent. BCVWD and City anticipate providing recycled water to the Oak Valley Greens and/or Tukwet Canyon Golf Courses in exchange for forbearance water which would then increase BCVWD's potable water supply.

  The BCVWD spreadsheet model is based on 0.25 AFY wastewater/EDU (225 gallons/day/EDU) connected to the City's wastewater system. The City is obligated to maintain a 1.8 mgd discharge to Cooper's Creek for habitat maintenance; the available recycled water accounts for this 1.8 mgd "loss." A capacity factor 75% is applied to the available wastewater to account for brine discharge, recycled water used on the plant site for maintenance, and water contained in the biosolids which is hauled off-site. This results in a net of 0.20 AFY of recycled water generated per EDU.
- **Storm Water Capture** – BCVWD and Riverside County Flood Control and Water Conservation District (RCFC&WCD) are jointly working on a Santa Ana Watershed Project

Authority (SAWPA) Grant Project to design and construct Beaumont MDP-Line 16 storm water capture project, also known as the Grand Avenue Storm Drain in Cherry Valley. The project is partially funded under the Integrated Regional Water Management Implementation Grant Program under Proposition 84. A detailed analysis of the runoff potential was performed using 77 years of daily rainfall records from the Beaumont Rain Gage with the runoff determined for each storm using the Natural Resources Conservation Service (NRCS) curve number method. An estimated 200 to 230 AFY can be captured with MDP-Line 16 project. Other projects, in and around the BCVWD recharge facility, will capture excess flow in both Brookside Ave and Beaumont Ave to increase the annual capture (long term average) to 250 AFY, perhaps more. The MDP-Line 16 is in the final stages of design with construction to start in 2021.

- **Other Local Water Resource Projects** – BCVWD has several other local water resource projects which can be implemented including:
    - High nitrate groundwater at the mouth of Edgar Canyon. This groundwater can supplement the recycled water/non-potable water system flow in the summer, high demand months, making well water available for potable water use. BCVWD believes as much as 300 AFY can be captured and reused.
    - San Timoteo Canyon Extraction Wells to capture groundwater from the Beaumont Basin flowing into San Timoteo Canyon and also to capture City's wastewater flow discharged to Cooper's Creek once the water has percolated and is no longer available for habitat maintenance. It is estimated that 400 to 800 AFY can be captured and put into the recycled water/non-potable water system to help meet summertime demands. High groundwater has been observed along Oak Valley Parkway in the vicinity of Palmer Drive and was encountered in the construction of the City's brine line. This water can be captured and used to supplement the recycled water during the high demand summer time.
    - For purposes of this WSA, 250 AFY are assumed to be available with the initial phases of these projects.
- **Imported Water from SGPWA** -- The amount of imported water which BCVWD is able to purchase and recharge is the amount left over after YVWD, the City of Banning, and others have purchased the amount each needs to meet their demands and banking. The amount available from the SGPWA collectively is discussed later in this WSA. BCVWD has entered into an agreement, and participated financially, with the SGPWA for a share of the yield from the Sites Reservoir Project. This is discussed later in this WSA.

6.2 Summary of Member Agency Imported Water Demands on SGPWA

Table 13 presents a consolidated summary of the spreadsheet model demands for the City of Banning, YVWD/Calimesa, and BCVWD from Tables 7, 10, and 12 presented previously. The imported water demands include from 4,792 to 7,912 AFY for banking and drought proofing. Table 13 also includes a projected amount of imported water for member agencies in SGPWA that are not currently taking SPW. These amounts were taken from SGPWA's 2015 UWMP. BCVWD believes these amounts are very conservative considering the growth rates in the Pass Area.

Table 13
Regional Summary of Spreadsheet Supply-Demand Model for SGPWA

Demand or Supply	Year					
	2018	2020	2025	2030	2035	2040
Potable Water Demand, Banning YVWD/Calimesa, BCVWD (Potable and Non-potable), AFY	21,135	21,890	24,312	27,987	31,083	33,562
Local Supply, Banning YVWD/Calimesa, BCVWD, AFY	16,949	17,470	17,949	18,454	19,061	19,404
Imported Water Demand, incl. drought proofing, etc., AFY	10,272	10,860	14,274	16,414	17,157	18,950
Total Imported and Local Supply, AFY	27,221	28,330	32,223	34,868	36,218	38,354
Total to (from) Regional Groundwater Storage, AF	6,085	6,440	7,912	6,881	5,135	4,792
Regional Groundwater Storage, not incl. SGPWA, AF	106,118	117,793	151,694	181,796	192,711	217,529
SGPWA Imported Water Demands for those agencies not currently taking imported water, from SGPWA 2015 UWMP, AFY		500	1,600	2,800	3,900	5,000
Total Imported Water Demand, AFY	10,272	11,360	15,874	19,214	21,057	23,950
Total Imported Water Demand, without banking or drought proofing, AFY	9,223	9,109	11,019	13,254	15,097	17,914

7. SGPWA AVAILABLE IMPORTED WATER

At the present time (2019) the "firm" supplies of imported water available to SGPWA, (or in the final stages of being finalized), between now (2019) and 2040 are:

- Table A
- Yuba Accord Water
- SBVMWD Surplus Water
- AVEK (Nickel Water)
- Ventura/Casitas Water Lease/Purchase (exchange agreements currently being executed on a year by year basis)

Other sources which are in various stages of implementation are:

- Delta Conveyance Project (DCP) [formerly California Water Fix (CWF)]
- Sites Reservoir (Sites)
- Purchase of State Water Project Contractors Incremental Delta Conveyance Facility Reliability Benefits

- Purchase or Leasing of Metropolitan's Delta Conveyance Project Phase 2 Water, if available.
- Other Sources Available through SWP such as Article 21 Water and Turn-back Pool Water

These are discussed in White Paper No. 6, but reiterated here.

7.1 State Water Project (SWP) Table A

SGPWA's contract with the Department of Water Resources (DWR) states a Table A amount of 17,300 AFY. Table A is the maximum amount of water the SGPWA can convey through the SWP facilities. This amount of water is not available consistently every year. In fall of each year, DWR provides an initial delivery allocation as a percent of Table A depending on amount of water in reservoir storage and anticipated hydrologic conditions. The allocation can be increased or decreased depending on the precipitation during the winter; a final allocation is usually issued in spring and sets the amount of water available, as a percentage of Table A, from the SWP. Since 1992, the allocation has averaged about 65%. DWR has prepared a reliability study[16] which indicated the SWP can deliver only about 62% of Table A (10,726 AF to SGPWA) in any one year. Table B-5B, in DWR's Bulletin 132-17, forecasts the amount of SPW delivered to SGPWA in future years at 10,380 AFY (60% reliability). For consistency purposes 10,380 AFY is the amount which SGPWA can rely on at the present time.

In the discussions over the Delta Conveyance Project (DCP) [formerly California Water Fix (CWF)], experts believe the current SWP reliability of about 62% will decrease over time to 48%, or possibly even lower, due to anticipated additional regulatory constraints to protect threatened and endangered fish within the Delta. The length of time over which this decline in reliability will occur is not certain, but to be conservative, it is assumed that by 2035, the SWP reliability will decrease to 48%. Implementation of DCP by 2030 to 2035 will restore reliability to the current 60% to 62% reliability.

For planning purposes in this WSA, the SWP delivery reliability is assumed to decline at rate of linearly from 2018 to 2035. So by the year 2035, with a delivery reliability of 48%, the SGPWA can expect only about 8,300 AFY from the SWP. Once the CWF is in place, the reliability will be restored.

7.2 Yuba Accord Water

Through the Yuba Dry Year Transfer Program, the official name for Yuba Accord Water, SGPWA can purchase additional supplemental water from Yuba County Water District under an agreement.[17] The amount of water available from the Yuba Accord varies year to year depending on hydrologic conditions. Yuba Accord Water has only been available, for purchase by State Water

[16] DWR (2012). State Water Project Delivery Reliability Report 2011. State of California Dept. of Water Resources, June.
[17] DWR (2008). Agreement for the Supply and Conveyance of Water by the Department of Water Resources for the state of California to the Participating State Water Contractors under the Dry Year Water Purchase Program, March 31.

Contractors (SWCs) since about 2009. There are delivery "losses," (termed "carriage cost" in DWR's Bulletin 132 series), in the Delta. The amount is typically assumed by DWR to be 20% of the delivered amount, adjusted as needed based on water quality considerations, plus another 2 to 3% Delta Conveyance "loss." Records in the Bulletin 132 series indicate that SGPWA purchased Yuba Accord Water in four years since 2009 although Yuba Accord Water was available every year from 2009 through 2015 except 2011. Purchases by SGPWA averaged 374 AFY, with deliveries averaging 280 AFY (factoring in the 25% loss).

The amount of Yuba Accord Water available depends on the calculated Sacramento Valley Water Year Index. Between 75,000 AFY (Dry Years) and 140,000 AFY may be available depending on the Water Year Index. If all 22 SWCs who elected to participate, decide to participate in a given year, SGPWA's share of the Accord Water is 0.21%, based on the proportion of SGPWA's Table A and the Total Table A of all 22 participants. If some SWCs do not want to participate in a given year, the allocation to each SWC is adjusted upward. SGPWA would normally get 158 AFY during a dry year and a maximum of about 294 AFY

The SGPWA estimates that about 300 AFY, on the average, of Yuba Accord Water can be obtained.[18] For purposes of this WSA, a conservative 30% total loss is assumed, which will reduce the amount than can be actually delivered to the Pass Area to 200 AFY. This is reasonable considering the past experience.

7.3 San Bernardino Valley Municipal Water District (SBVMWD Water)

The SGPWA Board of Directors authorized the General Manager to sign the Surplus Water Sale agreement with SBVMWD to purchase up to 5,000 AFY of SBVMWD's Table A water in years that SBVMWD's Board of Directors declares a surplus[19]. The availability of SBVMWD surplus water depends on hydrologic and groundwater conditions within SBVMWD's service area per SBVMWD Ordinance 79. SGPWA has the right of first refusal on the first 5,000 AFY of surplus water. Assuming SGPWA exercises the right, the agreement states that SBVMWD must first offer 50% of the available supply to one or both agencies that are in both SBVMWD and SGPWA, i.e., YVWD and South Mesa Water Company. Fifty percent of the water and any additional water "left over," can be offered to other SGPWA retailers. The agreement is for a term of 15 years from the date of execution (terminates in 2033), but SGPWA intends to renegotiate the terms and extend to some point in the future.

SGPWA estimates, based on past hydrologic conditions, this is likely to occur about two years out of every five, or 40% of the time. This is equivalent to 2,000 AFY in any one year. The term of this agreement will be at least 15 years from now or until about 2032.[20] For purposes of this WSA, the amount of water available from SBVMWD is 2,000 AFY until 2032.

[18] Refer to Table 3-1 of SGPWA 2015 UWMP
[19] SGPWA Regular Board Meeting Minutes, October 16, 2017, page 4.
[20] SGPWA 2015 UWMP

7.4 AVEK-Nickel Water

In June 2017, SGPWA Board of Directors approved an agreement with the Antelope Valley-East Kern Water Agency (AVEK) for 1,700 AFY for 20 years (to 2037) with the right of first refusal to extend it for a second 20 years. The water rights on the Kern River originally belonged to the Nickel Family, LLC that were sold to Kern County Water Agency (KCWA) and subsequently leased to other parties in various amounts. One portion (1,700 AFY) is under the control of AVEK, which offered the water to SGPWA. This water is not subject to the reliability issues of the SWP. Per the agreement, SGPWA must take all of the 1,700 AF each year or pay for 1,700 AF if the SGPWA does not take all of it in any one year.

7.5 City of Ventura and Casitas Municipal Water District (Ventura Water) and Other Exchanges

The Ventura County Watershed Protection District is one of 29 State Water Contractors, but the agency lacks the infrastructure at present to be able to take its 20,000 AFY of Table A water. The County's Table A is allocated to three entities: City of Ventura (10,000 AFY), United Water Conservation District (5,000 AFY), and Casitas Municipal Water District (5,000 AFY). Up until 2018, these agencies sold their Table A water back to the "Turn-back Pool" (discussed later in this WSA). In 2018, the City of Ventura (Ventura) and Casitas Municipal Water District (Casitas MWD) entered into an agreement to exchanging Table A water with SGPWA. BCVWD understands the SGPWA is also negotiating to enact an exchange of Table A water with the City of Ventura (and Possibly Casitas MWD) for 2020, also.

The SGPWA appears to be considering extending it to a more long-term arrangement. The SGPWA Board of Directors, at the May 4, 2020 meeting, authorized the General Manager to sign the draft agreement presented at the board meeting authorized staff to complete any and all action required to document the CEQA exemption, including the filing of the Notice of Exemption, develop and execute any agreements or documentation with DWR for the one year deal.

Under the terms of the 2018 agreement, SGPWA received all of Ventura's and Casitas MWD's Table A water allocation for 2018, or 5,250 AF considering the Department of Water Resources' year 2018, final 35% allocation, (up from the original 30% in the draft agreement). SGPWA paid all of the Transportation Capital, Transportation Minimum, Conservation Capital and Conservation minimum charges. Finally, each party to the agreement would be responsible for paying the variable costs for pumping the water to their respective service areas.

The SGPWA is obligated to return 40 percent of the Table A water taken from Ventura and Casitas MWD within 10-years, no later than the end of calendar year 2028. This amount would be from SGPWA's future Table A allocation, presumably during a "wet year." Ventura and Casitas MWD must initiate the request for return of the 40%, except they may not request return in any year that DWR has a Table A allocation of 30% or less. If the Table A allocation is between 30 and 50%, the two agencies will negotiate the delivery amount for that year. If there is any "balance" remaining after the 10-year period, the two agencies and SGPWA will negotiate alternative delivery methods which could include extension of the 10-year period by five years, rolling the balance into a long-term exchange, should that develop.

The SGPWA is also considering a more long-term water transfer with a State Water Contractor for a portion of their unused SWP Table A as identified in the SGPWA's September 2018 Board discussion related to imported water demands. Based upon information published by SGPWA, it appears that supply would potentially start at approximately 6,000 AF on an average year in 2020 and might decline to 3,500 AF in 2040 as that partner Agency utilizes more of their Table A supplies.

There is a one-year "deal" in process at present, and it is believed that the SGPWA is still pursuing a longer term arrangement, but for purposes of this WSA, a conservative approach will be taken and no long term arrangement will be in place.

7.6 Delta Conveyance [formerly California Water Fix (CWF)]

The SWP was authorized in the Burns-Porter Act, also known as the California Water Resources Development Bond Act, passed by vote of the people in November, 1960 (Proposition 1). Construction on most of the basic facilities of the SWP was completed by 1975. Due to cost considerations, and the fact that initial project water demands lower than design capacity, a number of the originally planned facilities were "scaled down" or deferred. Many have not been constructed to date for various reasons. One of those projects was the Cross-delta Facility known as the Peripheral Canal. As a result of the scaling down and facility deferments/cancelations, the SWP is not able to live up to its original delivery capacity. A number of other facilities were scaled down, deferred, or not constructed.

The Sacramento-San Joaquin Delta levees are vulnerable to seismic shaking; the Delta ecosystem continues to decline; flooding and saline water intrusion into the Delta impacts the water quality delivered to municipal and agricultural users during dry years; climate change, whether short-term (50 or 100 years) or long term (500 or more years), will cause increased water levels in the Delta further stressing vulnerable levees. The SWP dams and reservoirs were designed about 50 years ago with the hydrology of the times. Climate change will impact the operation of the SWP. Precipitation, which used to fall as snow and be stored in snowpack and slowly released into streams and reservoirs, will be in the form of rain which the reservoirs were not designed to accommodate. More water will be lost to the ocean in future years because of increased runoff and less storage.

The Delta Conveyance Project (DCP), intended to address some of these issues, proposed a dual, gravity tunnel conveyance system from north of the Delta extending south to the Clifton Court Forebay. This project has been scaled back by the current governor to a single tunnel. At the southerly end of the tunnel, a new Clifton Court Pumping Facility would lift water from the tunnels into Clifton Court Forebay. The water would be pumped from Clifton Court Forebay by the State and Federal Central Valley Project pumps as they now do. Water, ranging from 3,500 to 7,500 cfs, would be diverted from the Sacramento River into the tunnel and around (below) the Delta improving water supply reliability and export water quality TDS. The cost for the DCP was anticipated to be shared 55% by the State Water Contractors and 45% by federal Central Valley Project Contractors. This allocation share may change depending on the number of State and Central Valley Project Contractor participants.

Governor Newsom has stated his support for a "one-tunnel" (DCP) in his "State of the State" address, February 12, 2019, originally planned as Phase I of CWF.

The Delta Conveyance Project (DCP) is moving forward; on January 15, 2020 DWR issued a Notice of Preparation (NOP) for the environmental work on the reduced-size project which started the scoping comment phase. The scoping comment period ended on April 17, 2020; DWR will be considering the comments when the Environmental Impact Report (EIR) is prepared. The draft EIR is expected to be out for review and comment in early 2021.

A Delta Conveyance Project Authority has been established for the design and construction of the DCP; a Delta Conveyance Financing Authority has been established to develop the financing. The DCP is anticipated to be funded by revenue bonds issued by the State or a Joint Powers Financing Agency with payment by State Water Contractors south of the Delta through their existing contracts with the DWR – extended as needed into the future. In addition to other federal, State, and local permits, DCP requires changes to the water rights permits for the SWP and Federal Central Valley Project to authorize the proposed new points of diversion and their recombination. The DCP would most likely be funded by SGPWA through their State Water Project (SWP) Debt Service taxes. White Papers No. 3 and 6 provide more details on the funding etc. The DCP is not expected to be operational until about 2035. From now till 2035, the reliability of the SWP would gradually degrade over time to 48% without the Delta Conveyance Project due to a variety of reasons as described previously in this WSA.

The original CWF with its two tunnel approach was projected to increase the future reliability of the SWP by 14% (DWR study) to 17.62% (Metropolitan study) resulting in an increase of the overall reliability to 62% or, in the best case, 65.62%. This is about or slightly above the current reliability. It is not known to what amount of reliability increase will result from the new DCP but to be conservative, it is assumed the reliability will be restored to the current 60 to 62%.

Without CWF, SGPWA's reliable Table A would be 8,300 AFY (rounded, based on 48% of 17,300 AFY). The reliable Table A supply for SGPWA would increase to 10,380 AFY to 10,726 AFY at 60% and 62% reliability, respectively.

7.7 Sites Reservoir

Sites Reservoir is a proposed reservoir that would be located at the site of a cattle ranch in the eastern foothills of the Central Valley about 78 miles northwest of Sacramento and north of the Sacramento-San Joaquin Delta near the town of Maxwell, CA. Sites Reservoir is not on any major stream; all water must be pumped into the reservoir. Sites Reservoir was part of the original California Water Project, but was deferred. The reservoir in the original project proposal would have a surface area of about 14,000 acres and store between 1.27 and 1.81 million acre-feet. The estimated water yield would be between 470,000 to 640,000 acre-feet per year, depending on yearly rainfall and environmental regulations, according to DWR. The original project cost was over $5 billion.

The Sites Project Authority, a Joint Powers Agency, was formed in 2010 to be a proponent and facilitator, to design and potentially acquire, construct, manage, govern, and operate Sites

Reservoir and related facilities. Flood flows in the Sacramento River, over and above that needed to meet the demands of existing water rights holders, would be captured and pumped into Sites Reservoir. The Authority undertook a "Value Planning Study in October 2019 to identify alternatives which would make the project more affordable to the project participants. The Value Planning Report was completed in April 2020 and the original project was scaled down.

A very preliminary analysis indicated that reservoir sizes of 1.3 to 1.5 million acre-ft (MAF) with assumed diversion criteria would be able to provide enough water to meet current participant demands. The Tehama-Colusa Canal and the Colusa Basin Drain would be used as the conveyance systems. A recommended project with 1.5 MAF of storage, with 1,000 cfs of release into the Sacramento River or to the Colusa Basin Drain at Dunnigan. The cost in 2019 dollars is estimated to be $3.0 billion and 243,000 AFY long term yield.

The Project Authority stated that 21 agencies put up $27 million for planning and studies with another $19 million due this October to continue the process. Sites Reservoir was approved by the California Water Commission (CWC) for $816 million of Proposition 1 funding on July 24, 2018; the CWC also agreed to provide $40.8 million in early funding to assist in completing the needed environmental analyses and to obtain permits.

SGPWA has made a financial commitment of 10,000 AF and BCVWD committed to 4,000 AF (total 14,000 AF) to the Sites Project Authority to fund Phase 1 of the Sites Reservoir Study. Reliability is between 65% (worst case) to 100%[21]. The result is, 9,100 AFY at 65% reliability as a worst case.

Sites Reservoir will not produce water until about 2030 or so; however, there will be costs incurred by project participants moving forward. For purposes of this analysis it is assumed that water would not be available until 2035. The Sites Project Authority's current plan will finance Phase 2 costs on a year-by-year basis.

The Sites Authority is working closely with the federal Bureau of Reclamation to secure Bureau participation and funding which will reduce the cost to the current participants. It is believed the Sites Project Authority would be responsible for 60% of the project cost with the rest from the State and federal agencies. This may change since the Sites Authority anticipated slightly more Proposition 1 funding than the $816 million.

It is important to understand that although Sites Reservoir will not be delivering water for another 15 years, at this time the project is moving forward and is named in the Governors Water Resiliency Plan. The project has been awarded a substantial CWC Proposition 1 grant. The Sites Project Authority is continuing to refine its financing plan to fund the follow-on phases. The reservoir is an "off-stream" reservoir and so has a reduced environmental footprint. Although there is some risk in the implementation, with each step forward, the risk becomes less and the project is more certain.

[21] See White Paper No.1, Table 3

7.8 Sale of State Water Project Contractors Restoration of DCP Reliability Benefits

All south of the Delta, SWP Contractors pay their proportionate share of the DCP costs. With the implementation of the DCP, there will be restoration of SWP reliability. Although all of the "South of the Delta" SWP Contractors will be paying their proportionate share of the DCP, for various reasons, a few SWP Contractors may not need the benefits of the increased yield and may be interested in transferring (selling) their incremental yield to other interested SWP Contractors, such as SGPWA. At this point in time, not enough is known about the sale of incremental reliability yield and this will not be considered further until it is better defined.

7.9 Purchase or Leasing of Metropolitan's Original CWF Phase 2 Water

With original CWF 2-tunnel, 2-phase concept, the Metropolitan Water District of Southern California (Metropolitan) Board of Directors voted to fund their share of the original CWF plus agreeing to fund the second phase of the CWF (second tunnel), i.e., the Central Valley Project share. This would have made water available for Metropolitan to sell/lease to other interested parties, e.g., SGPWA. With the DCP scaled down to one tunnel, this does not appear to be an option any longer.

7.10 Other Sources of Imported Water

There are other sources of water available through the SWP which include:

7.10.1 Article 21 Water

Article 21 Water is water that is offered for purchase by DWR resulting from reservoir releases needed to accommodate impending storm or snowmelt runoff when water is still available after operational requirements for SWP water deliveries, water quality and Sacramento-San Joaquin Delta requirements are met. This water is available only on short notice and must be taken immediately. The cost for Article 21 Water is the variable transportation cost. BCVWD has capacity in its groundwater recharge facility to accommodate Article 21 Water. SGPWA constructed their own Fiesta Recharge Facility which can be used for Article 21 Water. Article 21 Water is in addition to the State Water Contractor's Table A amount.

An analysis of Article 21 Water availability indicated the amount available is highly variable and there is competition for the water. If the requests for purchase are greater than the available amount, it is typically allocated proportional to the requestors' Table A. A review of recent purchases from 2002 to 2015, with up to 17 "buyers," indicated that if SGPWA were a purchaser, their share would be about 0.5% of the total available. (The large agencies tend to dominate the purchases.) Table 14 presents an analysis of Article 21 Water availability to SGPWA based on DWR records from 1967 – 2015. Two periods of time were analyzed: total record and recent record.

The results in Table 14 indicate that 800 AFY, on the average of Article 21 could be obtained by SGPWA.

Table 14
Estimated Amount of Article 21 Water Available to SGPWA
Based on 0.5% of Total Available AF

	1969-2015	2001- 2015
Average, AFY	939	824
Median, AFY	362	216
Maximum, AFY	4,542	3,655
75th Percentile, AFY	1,544	1,550

Article 21 water was available during the heavy snowfall year, 2018-19 although the SGPWA was not able to take advantage of this since the BCVWD connection was out of service due to construction of the expanded turnout and the SGPWA's Fiesta Recharge Facility was not operational.

7.10.2 Turn-back Pool Water

Turn-back Pool Water is water that other State Water Contractors have ordered from DWR as part of their Table A, but decided they did not need the water that particular year and sold it back to DWR. DWR in-turn offers it for purchase at a set price, (quite inexpensive), to other State Water Contractors. Turn-back Pool Water has only been available since 1996 or so – after the Monterey Amendments to the State Water Contracts. Analysis of the data from 1997 through 2015, shows SWCs sold an average of 59,000 AFY of water back to the "pool" for purchase by other interested SWCs. (The median value was 29,770 AFY). Purchase of Turn-back pool water is also competitive, depending on hydrologic conditions. Assuming SGPWA's share is 0.5% based on the analysis of Article 21 Water, 295 AFY on the average could be purchased, (149 AFY median). It would be reasonable that SGPWA could rely on about 200 AFY of Turn-back pool water.

7.10.3 Short-term or Long-term Water Transfers or Exchanges

Short-term or Long-term Water Transfers or Exchanges is water that can be obtained through exchanges and transfers from other State Water Contractors who do not need all of their Table A water in a given year or years. There are opportunities almost every year. The City of Ventura/Casitas MWD exchange described previously is an example of such an exchange.

7.10.4 Recommendations for SGPWA

There is considerable competition for the Turn-back Pool and Article 21 Water and its availability is uncertain from year to year. SGPWA should take advantage of this water whenever it is available, and should be looking at short term transfers whenever water is available. It must be pointed out that transfers of SWC Table A is subject to the delivery SWP reliability.

7.11 Summary of Available Imported Water Supplies

Table 15 summarizes the range of available imported water supplies available to SGPWA based on the current and potential sources presented above. Agreements are in place for Ventura-Casitas (for 2018, 2019 and possibly 2020), AVEK-Nickel Water, and SBVMWD Surplus Water.

Per Staff reports presented to the Board of Directors of the SGPWA, SGPWA appears to be in discussions with Ventura-Casitas and other agencies for future exchanges. SGPWA is one of the 22 SWCs that has signed on to the Yuba Accord. Their share of the Yuba Accord Water is 0.21% of the available water. In addition, through their State Water Contract, SGPWA can purchase Article 21 Water and Turn-back Pool Water.

The Agency Board has agreed to support and participate in the original CWF; it is assumed the Agency will support the DCP. BCVWD and SGPWA have made financial commitments to Sites Reservoir, and currently planning to contribute to future phases of the Sites Project.

Table 16 presents a summary of current and projected SGPWA imported water supplies through 2040 in 5-year increments based on the yields in Table 15.

Table 15
SGPWA Current and Projected Available Imported Water Supply through 2040

Source	Low Yield Case, Annual Amount, AFY	High Yield Case, Annual Amount, AFY	Comment
Existing Table A	8,300	10,380	17,300 AFY but only 60% reliable (10,380 AFY) per Bulletin 132; to degrade to approximately 48% (8,300 AFY) without Delta Conveyance Project by 2035
Yuba Accord	200	200	When available, represents average per year
San Bernardino Valley MWD Surplus Table A Water (SBVMWD Water)	2,000	2,000	Up to 5,000 AFY available estimated 2 out of every 5 years (40%) of time = 2,000 AFY; agreement terminates in 2032, but can be extended.
Antelope Valley East Kern Water Agency (AVEK) Nickel Water, (AVEK Nickel Water)	1,700	1,700	20 year agreement terminates in 2037 with option for a 20 year extension
Additional Table A SGPWA Partner Agency	500	3,000	Looking at extended exchange agreement with Additional Table A SGPWA Partner Agency to utilize unused Table A. Estimated to be net 3,000 AFY initially to 500 AFY by 2040.
Article 21 Water Purchase	800	800	Variable, represents average per year
Turn-back Pool Purchases	200	200	Variable, represents average per year
Delta Conveyance Project (DCP)	0	0	Will increase reliability of State Water Project (SWP) back to 60 to 62%
Sites Reservoir	9,100	14,000	Worst case with 65% assumed reliability. (BCVWD has committed to 4,000 AFY of the 14,000 AFY)
Total Imported Water Potentially Available	22,800	32,280	

Table 16
Regional Summary of SGPWA Imported Water Supply, AFY

Source	Year					
	2018	2020	2025	2030	2035	2040
Imported Water Demand Table 13	10,272	11,360	15,874	19,214	21,057	23,950
Imported Water Demand, Table 13, without banking or drought proofing	9,223	9,109	11,019	13,254	15,097	17,914
Table A	10,380	10,135	9,524	8,912	8,300	8,300
Yuba Accord	200	200	200	200	200	200
AVEK Nickel	1,700	1,700	1,700	1,700	1,700	
SBVMWD	2,000	2,000	2,000	2,000		
Ventura-Casitas	5,250		(2,100)			
Subtotal	19,530	14,035	11,324	12,812	10,200	8,500
Extension of SBVMWD Agreement (Potential Extension)					2,000	2,000
Extension of AVEK Nickel Agreement						1,700
Article 21 Water Purchases		800	800	800	800	800
Turn-back Pool Water Purchases		200	200	200	200	200
Additional Table A SGPWA Partner Agency Side Deal (Potential Water Supply)		3,000	2,500	2,000	1,500	500
Subtotal	19,530	18,035	14,824	15,812	14,700	13,700
Delta Conveyance Project Reliability Recovery to 60% (worst case)					2,080	2,080
Sites Reservoir (worst case)					9,100	9,100
Total Potential Imported Water Supply	19,530	18,035	14,824	15,812	25,880	24,880

In Table 16, it was assumed the agreement with SBVMWD and AVEK Nickel would be extended due to the uncertainties in the yield of the Sites Reservoir and the Delta Conveyance Project. It was further assumed that there would continue to be Table A transfers and exchanges among SWCs; however, the potential amount is assumed to decrease over time as more of the SWCs require more of their Table A for their own use. Table 16 includes an amount for Article 21 and Turnback Pool purchases by SGPWA. It is also possible that a longer term arrangement can be worked out with Ventura-Casitas which would make more imported water available in the critical 2025 to 2035 period.

Figure 5 shows the SGPWA imported water demands, with and without banking, along with the amount of imported water potentially available taken from Table 16.

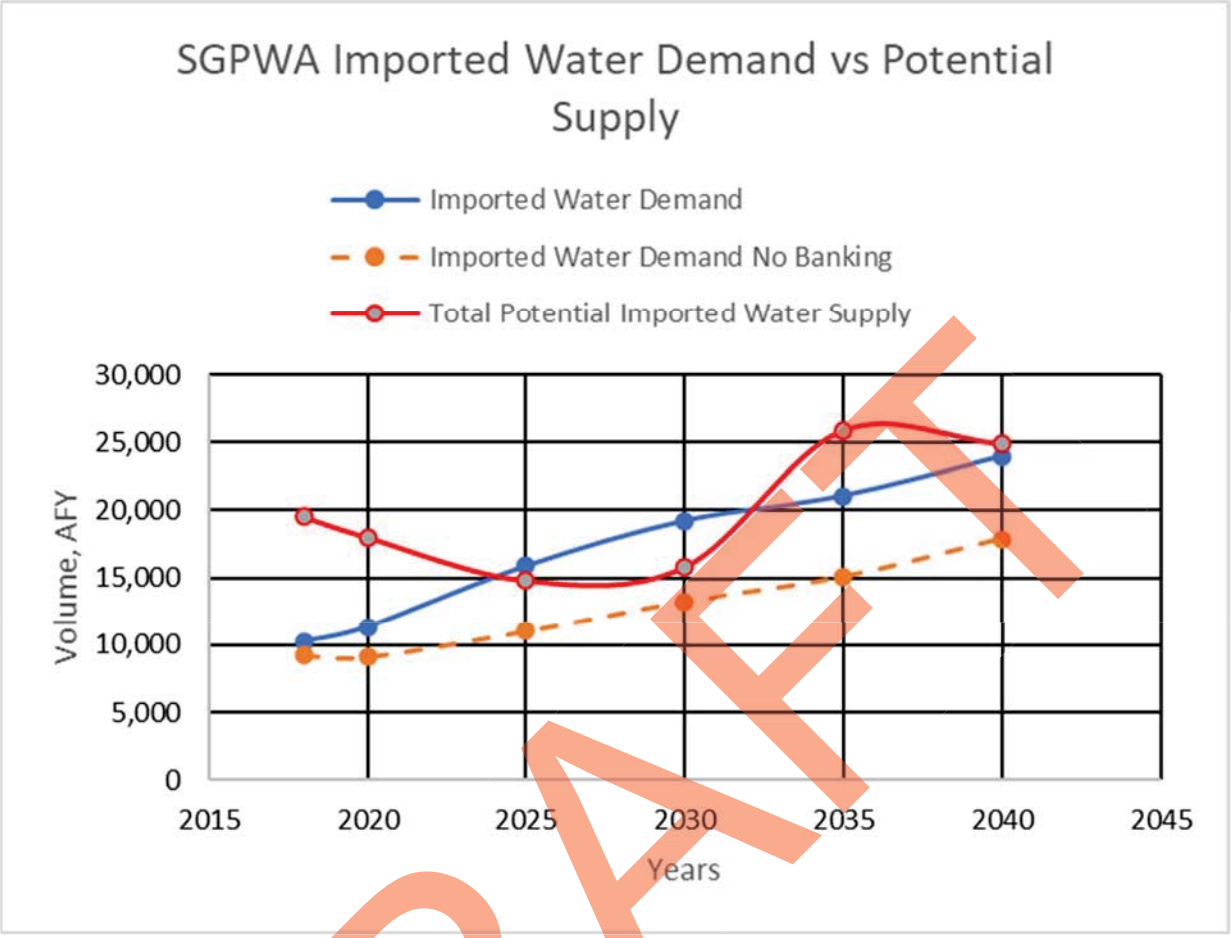

Figure 5
SGPWA Imported Water Demand vs Potential Imported Water Supply

Looking at Table 16, until 2025, SGPWA has sufficient imported water to meet the demands of the City of Banning, BCVWD, YVWD/Calimesa as well as the demands from those SGPWA members currently not taking imported water (called "other agencies"). BCVWD believes these other agency demands are very conservative and believes it is unlikely these areas will be developing to require those demands within the timeframe shown. It would be reasonable to believe that the Yucaipa/Calimesa to Banning area will develop more fully before development moves into these outlying areas. Beyond 2025 to about 2032 or so, when Sites Reservoir and the Delta Conveyance Project come on-line, there is sufficient imported water supply available except that not all of the banking demands will be met. BCVWD believes the increase in imported water demand shown in Figure 5 is aggressive and likely will not occur at the pace shown.

One of the uncertainties in Table 16 and Figure 5 is the yield from Sites Reservoir. BCVWD and the SGPWA have participated to 14,000 AFY; but only 65% of that was used in Table 16 and Figure 5 to account for reliability and uncertainty. If the full 14,000 AFY can be realized, the total imported water supply. Another 3,900 AFY can be realized. At the growth rate in imported water demand shown in Figure 5, this would provide imported water supply to beyond 2045 with banking and drought proofing.

Beyond 2025, the SGPWA will have to aggressively secure additional Table A from partner SWP agencies or other agencies on a short term basis until Sites Reservoir and the DCP are on line. With Sites Reservoir and DCP on line, the SGPWA will have more than ample imported water supply to 2040. As the Sites Reservoir and DCP become more firm in terms of the estimated yield, it may be necessary for SGPWA to plan on securing more water supply. This could consist of:

- Temporary or permanent transfers of other SWCs' Table A.
- Participating in other local/regional water supply projects with transfers and exchanges to ensure water supply well beyond 2040

Nevertheless, Table 13, presented previously, shows that about 6,000 AFY will be banked regionally by the water suppliers, including BCVWD, between now and 2025, i.e. about 45,000 AF of additional water is projected to be in storage than the current 106,000 AF. (See Table 13 presented previously). This would result in over 151,000 AF banked in regional storage. This storage could possibly be used to meet short term demands.

7.12 Contingency Plan

Once DCP and Sites Reservoir are operational there will be adequate water supply to meet the SGPWA imported water demands beyond 2040; just how long will depend on the rate of growth. It is recognized that there is some risk that DCP and Sites will be delayed or perhaps further reduced in size and capacity, but as these projects go through the design and permitting process over the next 5 years or so, there will be time to assess the risk. SGPWA can take action to supplement their existing supply with short-term exchanges and transfers from other agencies. If it is evident that DCP and/or Sites Reservoir will not move forward, the short-term exchanges and transfers can be converted to long-term transfers. Table 16 and Figure 5 assume the AVEK-Nickel Water Agreement will be extended for another 20 years to 2057 as allowed in the existing agreement. Another option is participating with other local agencies in other water resource projects such as groundwater, brackish water, or ever sea water desalination projects with water exchanges.

8. WATER SUPPLY AND DEMAND FOR BCVWD

Section 6.1.3 presented the water demand and water supply requirements, including imported water, under average hydrologic conditions for BCVWD. Section 7 quantified the imported water demands on the SGPWA from BCVWD and the other member agencies of the SGPWA. It is clear from the discussion at the end of Section 7, and Figure 5, presented above, that SGPWA will have enough imported water or has made commitments for, or taken steps to acquire additional imported water supply to meet its needs to year 2040 and beyond. However, there is risk that Sites Reservoir and the DCP may be delayed or may not be implemented. The projects are moving forward through the design and permitting process, but there is always a chance that the projects could be stalled.

Since BCVWD's demands and imported water requirements are included in SGPWA's imported water demands, it can be concluded that BCVWD has firm supply including imported water to meet demands to 2025 under average demand and supply conditions based on the growth rates and water consumption rates presented previously in this WSA, so long as Recycled Water is implemented and planned SGPWA water supply projects are finalized. Beyond 2025 BCVWD will rely on the SGPWA to secure short term water transfers, purchase of Turn-back Pool Water, and Article 21 Water to the time when DCP and Sites Reservoir are on line.

It should be noted that 28.6%, (4000 AF/14,000 AF), of the Sites Reservoir Project Yield, indicated in Table 15 for SGPWA, is committed to BCVWD by virtue of BCVWD's financial commitment to the Sites Reservoir Project Phase 1 and Phase 2 - 2019.

Figure 6 shows BCVWD's total potable and non-potable water supply and demand. Figure 6 shows BCVWD is able to meet its demands, providing recycled water and imported water supplies are available. Of note is the significant contribution from recycled water, shown in magenta in Figure 6. Without recycled water, BCVWD would not be able to meet future demands. The imported water demands in Figure 6 include the banking demands for drought proofing.

Figure 6 shows BCVWD's demand is less than the available supply. Figure 6 is based on the data from Table 12, presented previously, and assumes that all of BCVWD's needed imported water is available. Availability depends on the development and imported water needs of those agencies in SGPWA service area that are now not taking imported water.

Figure 7 shows the accumulated volume in BCVWD's Beaumont Basin groundwater storage account, and by 2040, the storage account is almost full (76,796 AF in storage). Table 12, presented previously, indicated that BCVWD's imported water demand was 10,470 AFY in 2040; this means that BCVWD is projected to have 7.3 years of imported water demand in storage which can be used to supply water during drought periods even if no SPW is available.

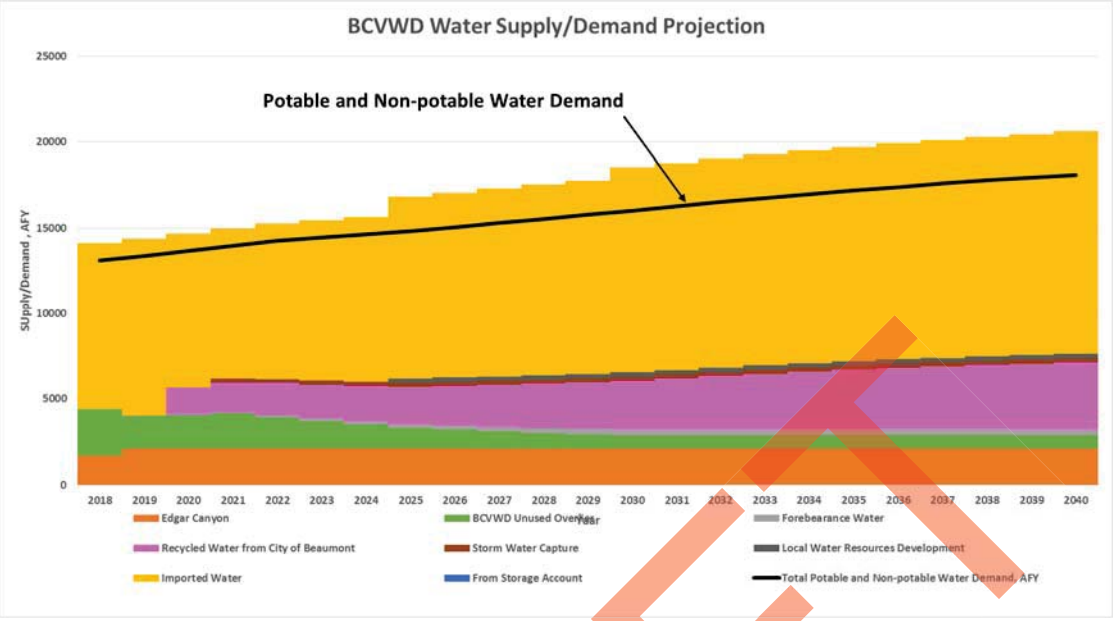

Figure 6
BCVWD's Water Supply and Demand Projection to 2040

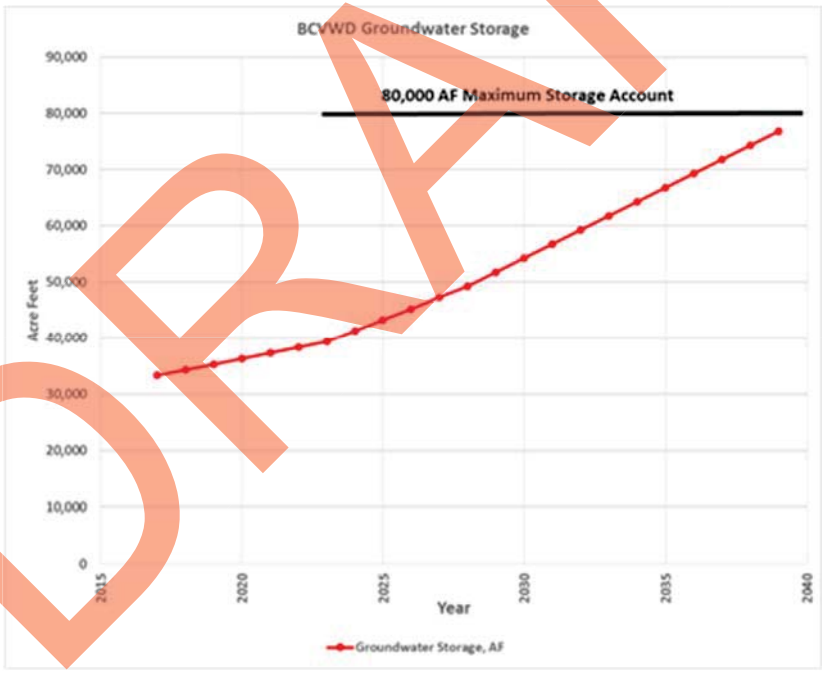

Figure 7
BCVWD's Groundwater Storage Balance to 2040

9. WATER SUPPLY SINGLE AND MULTIPLE DRY PERIOD ANALYSIS

The previous sections in this WSA analyzed a typical, normal or average, water supply year. The previous sections demonstrated there is adequate water supply both regionally and for BCVWD to meet the needs provided that the projects and agreements identified are implemented. But, in addition to a "normal" year, the WSA requires a supply sufficiency analysis for critical dry year and multiple dry year conditions. The water supply conditions for these periods are presented in BCVWD's 2015 UWMP, Section 7, Water Supply Reliability Assessment. Key tables and information are extracted from the 2015 UWMP to support the analysis presented herein and updated. The scenarios evaluated in this section include:

- Single Critical Dry Year -- the lowest water supply available to BCVWD, a worst case condition
- 2 Consecutive Dry Years -- the lowest average available water supply over a continuous 2-year period
- 3 Consecutive Dry Years-- the lowest average available water supply over a continuous 3-year period
- 6 Consecutive Dry Years-- the lowest average available water supply over a continuous 6-year period

BCVWD will be relying on banked water to provide the major portion of the supply during these periods.

BCVWD enjoys the benefits of a groundwater basin, (Beaumont Basin), with very large storage capacity. BCVWD and its neighboring agencies in the San Gorgonio Pass Area take advantage of this by banking imported water during wet years for use during extended droughts. Complementing the large storage capacity is the fact that percolation and recharge occur at relatively high rates. It is very easy to "bank" water in the Beaumont Basin. It is retained in the Basin due to well-managed groundwater levels, and the ample storage capacity. Figure 8 shows the amount of water BCVWD has accumulated in its storage account since 2003. Imported water began to be spread in 2006. As of the end of 2018, there were 34,794 AF in storage. BCVWD's current maximum storage capacity is 80,000 AF. Figure 8 shows the drop in storage in response to the drought in 2015 when there was very little imported water available for recharge and banking.

9.1 Water Source Availability

The amount of water available during the dry periods from BCVWD's water sources are presented below.

9.1.1 Groundwater

9.1.1.1 Beaumont Basin

The Beaumont Basin is managed by the Beaumont Basin Watermaster under the principles of the Adjudication.

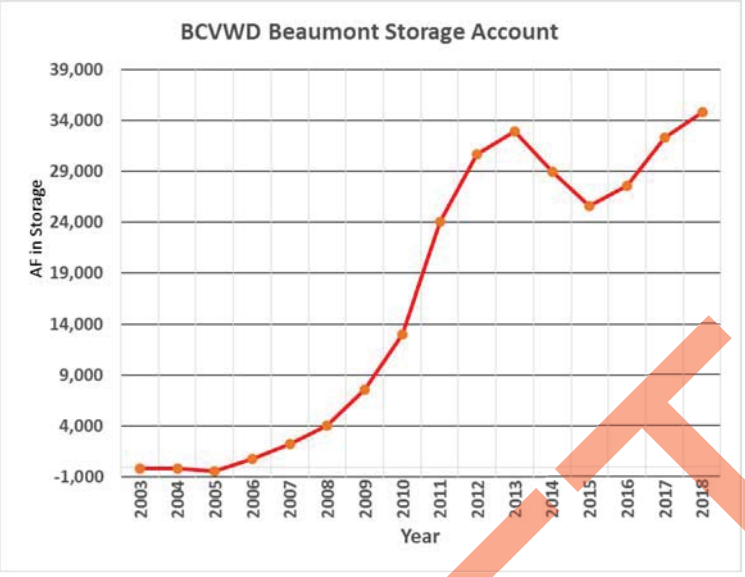

Figure 8
BCVWD Historic Beaumont Basin Groundwater Storage Account

In any year, BCVWD can pump out its stored (banked) water. The storage is replenished, at least partially, every year by forbearance water, reallocated unused Overlying Party pumping rights, and imported water when available. Recharge, using advanced treated recycled water from the City, is proposed to occur in the future. The amount of imported water that can be recharged in any year depends on DWR's SWP allocation. This varies from year to year depending on the weather.

The amount of unused Overlying Party rights is determined by the Watermaster and is based on a 5-year moving average and could decrease slightly during drought periods as the Overlying Parties use more groundwater to compensate for the lack of rainfall. The forbearance water will also decrease during dry periods as users reduce water consumption.

Table 17 shows the estimated amount of water credited to BCVWD by Watermaster for a single or multiple dry year analysis. For the dry year analysis, it was estimated that there would be a 15% conservation effect; in other words, for dry year analysis, only 85% of average annual forbearance, reallocated Overlying Party rights, etc. would be available. In Table 17, the 15% reduction factor is also applied to the recycled forbearance water to account for a potential reduction in treated wastewater due to water conservation effects.

9.1.1.2 Edgar Canyon

Groundwater from Edgar Canyon is affected to some degree by climate. The average annual extraction from Edgar Canyon is 2,094 AFY, (rounded to 2,100 AFY), based on records from 1983-2019. During that period of time the minimum extracted was 1,117 AFY, which occurred in 1991. This can be considered the "Single Dry Year Water Available." The 2-year, 3-year, and 6-year moving averages for the extractions from 1983 -2019 were determined and are presented in Table 18 along with the Base Period for moving averages.

Table 17
Summary of BCVWD's Forbearance and Reallocated Overlier Pumping Rights

Item	2018	2020	2025	2030	2035	2040
Total Allocated Overlying Party Rights, and Forbearance Water from Table 12, AFY	2,706	2,012	1,400	800	800	800
Expected to be Available for Single and Multiple Dry Year Analysis, AFY	2,300	1,710	1,190	680	680	680

Table 18
Groundwater Available from Edgar Canyon for Single and Multiple Dry Year Analysis

Drought Condition (Base Years)	Average Available over the Drought Period, AFY
Single Dry Year (1991)	1,117
2 Consecutive Dry Years (1990 – 91)	1,173
3 Consecutive Dry Years (1989 – 91)	1,230
6 Consecutive Dry Years (1987 – 92)	1,367

9.1.2 Imported Water

The amount of imported water available from the SGPWA via the State Water Project is climate dependent. A spreadsheet was developed using the 2015 DWR Delivery Capability Report simulation data (1922 to 2003) for SGPWA to develop an estimate of the delivery capability for the single dry year and multiple dry year reliability analysis. The 2-, 3-, and 6-year moving averages of annual estimated delivery allocations were determined for the period 1922-2003. A summary of the Table A delivery percentages is shown in Table 19.

The percentages in Table 19 were compared to actual SWP delivery allocations for the period 1992 to 2020, a 28-year period:

Minimum year	5% (2014)
Minimum 2 consecutive years	12.5% (2014-15)
Minimum 3 consecutive years	20% (2013 – 15)
Minimum 6 consecutive years	40% (2013 – 18)

As can be seen, the actual minimum year and minimum 2- and 3-consecutive year allocation percentages are less than those reported in the 2015 DWR SWP Delivery Capability Report. So,

for the reliability analysis in this WSA, the allocation percentages shown in Table 20 below will be used, except for the 6-year dry period where 28% will be used, to be conservative.

Table 19
SGPWA SWP Delivery Capability as Percent of Table A
(Based on 2015 DWR SWP Delivery Capability Report)

Dry Year(s)	Single	2-year	3-year	6-year
Table A Annual Delivery Average Over the Drought Period, %	8	19	22	28

Table 20
SGPWA SWP Delivery Capability as Percent of Table A
(Used for WSA Reliability Analysis)

Dry Year(s)	Single	2-year	3-year	6-year
Table A Annual Delivery Average Over the Drought Period, %	5	12.5	20	40

Previously, in this WSA, a number of imported water sources available to SGPWA were presented. Not all of these will be available during extended dry periods, however.

Yuba Accord Water is a dry year program and SGPWA can expect 200 AFY even during dry years. AVEK-Nickel Water is "south of the Delta" water and is not affected by DWR's SWP reliability issues and is available every year until termination of the existing agreement in 2037. The DCP reliability recovery water would be available during extended dry periods but is subject to the average Table A delivery percentages as SPW in Table 20, above.

During dry periods, San Bernardino Valley MWD Surplus Water, Article 21 water, and Turnback Pool Water would likely not be available and should not be counted on for supply. Similarly, the availability of water during short and long term exchanges is unlikely, which would also include any additional Table A Water should SGPWA be able to secure a long-term exchange contract with a Partner Agency.

The Sites Reservoir Project was designed to be a dry period flow augmentation project. Excess storm flows in the Sacramento River are diverted and pumped into Sites Reservoir, stored, and released back into the Sacramento River during dry periods. Data from the Sites Project Authority submitted with their application to the California Water Commission for Proposition 1 Funding was used to determine the amount of water which could be depended on during dry periods. Figure 9 below, extracted from the Sites Reservoir Project Authority's Proposition 1 Application Executive

Summary shows the dry year benefits based on 82 years of hydrologic simulation using the CalSim II Model.[22].

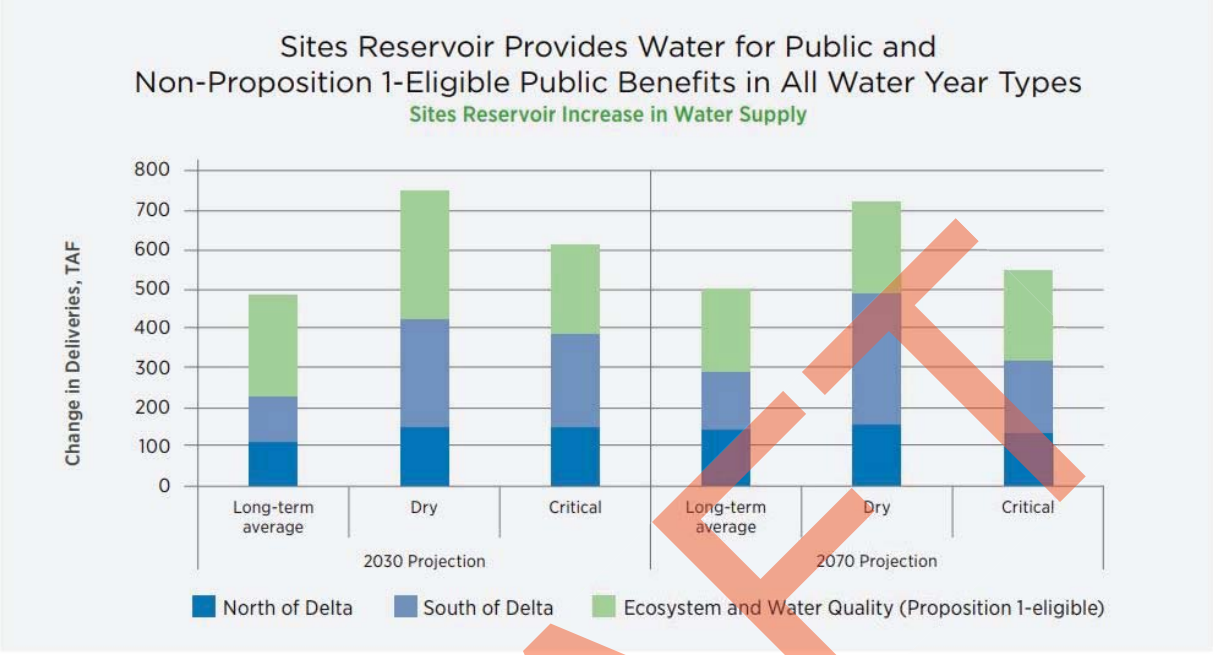

Figure 9
Sites Reservoir Available Water 2030 and 2070

Attachment D9, prepared by the Sites Project Authority, in response to questions from the California Water Commission, February 23, 2018, provided a breakdown of the estimated amounts of Sites Project Water which would be delivered to the project participants. Table 21 presents a summary of the preliminary estimates of Sites Reservoir Water available to SGPWA. It is important to note this is a preliminary estimate developed prior to the "Value Planning Analysis described previously. No new information is available at this time and this WSA will rely on the data in Sites Attachment D9

The modeling that was performed for the application was prescribed by the California Water Commission and includes the effects of climate change. For the analysis in this WSA, the year 2030 values will be used for 2030 through 2040. The "critical" volume will be used for all of the dry period analyses to be conservative.

[22] Sites Project Authority (2017). Sites Project Executive Summary for California's Water Storage Investment Program, August 14.

Table 21
SGPWA Preliminary Amount of Sites Reservoir Water Available, AFY

Development Condition	82-year Simulation (Average)	Water Year Type				
		Wet	Above Normal	Below Normal	Dry	Critical
Current	8,400	2,700	2,900	5,600	19,000	13,800
2030	9,500	3,000	7,700	7,400	18,000	16,400
2070	11,400	5,400	7,300	11,500	17,900	17,200

Source: Attachment D9 of Sites Project Authority response to California Water Commission comments on Proposition 1 Application February 23, 2018.

Tables 22 through 25 present a summary of the imported water supply to the SGPWA for the single dry year, and 2-, 3- and 6- consecutive year dry periods.

Table 22
Regional Summary of SGPWA Imported Water Supply Single Dry Year, AFY

Source	Year				
	2020	2025	2030	2035	2040
Table A	17,300	17,300	17,300	17,300	17,300
Allocation (5%)	865	865	865	865	865
Yuba Accord (Dry Year Program)	200	200	200	200	200
AVEK Nickel (Not Affected and extended)	1,700	1,700	1,700	1,700	1,700
Subtotal	2,765	2,765	2,765	2,765	2,765
DCP (worst case)					
DCP Allocation (5% of reliability recovery, 2,080 AFY)				104	104
Sites Reservoir Critical Dry Period (From Table 21)				16,400	16,400
Total Imported Water Supply	2,765	2,765	2,765	19,269	19,269

Table 23
Regional Summary of SGPWA Imported Water Supply
Two Consecutive Dry Years, AFY

Source	Year				
	2020	2025	2030	2035	2040
Table A	17,300	17,300	17,300	17,300	17,300
Allocation (12.5%)	2,163	2,163	2,163	2,163	2,163
Yuba Accord (Dry Year Program)	200	200	200	200	200
AVEK Nickel (Not Affected and extended)	1,700	1,700	1,700	1,700	1,700
Subtotal	4,063	4,063	4,063	4,063	4,063
DCP Allocation (12.5% of reliability recovery, 2,080 AFY)				260	260
Sites Reservoir Critical Dry Period (From Table 21)				16,400	16,400
Total Imported Water Supply	4,063	4,063	4,063	20,723	20,723

Table 24
Regional Summary of SGPWA Imported Water Supply
Three Consecutive Dry Years, AFY

Source	Year				
	2020	2025	2030	2035	2040
Table A	17,300	17,300	17,300	17,300	17,300
Allocation (20%)	3,460	3,460	3,460	3,460	3,460
Yuba Accord (Dry Year Program)	200	200	200	200	200
AVEK Nickel (Not Affected and extended)	1,700	1,700	1,700	1,700	1,700
Subtotal	5,360	5,360	5,360	5,360	5,360
DCP Allocation (20% of reliability recovery, 2,080 AFY)				416	416
Sites Reservoir Critical Dry Period (From Table 21)				16,400	16,400
Total Imported Water Supply	5,360	5,360	5,360	22,176	22,176

Table 25
Regional Summary of SGPWA Imported Water Supply
Six Consecutive Dry Years, AFY

Source	Year				
	2020	2025	2030	2035	2040
Table A	17,300	17,300	17,300	17,300	17,300
Allocation (28%)	4,844	4,844	4,844	4,844	4,844
Yuba Accord (Dry Year Program)	200	200	200	200	200
AVEK Nickel (Not Affected and extended)	1,700	1,700	1,700	1,700	1,700
Subtotal	6,744	6,744	6,744	6,744	6,744
DCP Allocation (28% of reliability recovery, 2,080 AFY)				582	582
Sites Reservoir Critical Dry Period (From Table 21)				16,400	16,400
Total Imported Water Supply	6,744	6,744	6,744	23,726	23,726

Table 26 presents a summary of total SGPWA regional imported water demand and the imported water supply available during the single and multiple dry years. The demand does not include the "banking" demand, since "banking" would not be occurring during years when imported water supply is reduced. Table 26 shows the conditions when the imported water demand exceeds the supply which will require SGPWA's member agencies, like BCVWD to withdraw water from their storage account. The supply of imported water is less than the demand until Sites Reservoir comes on line about year 2035.

Table 26
Summary of SGPWA Regional Imported Water Supply and Demand
Single and Multiple Dry Years

Source	Year				
	2020	2025	2030	2035	2040
Demand without Banking or drought proofing (Table 13, 16), AFY	9,109	11,019	13,254	15,097	17,924
Total Supply					
Single Dry Year (Table 22), AFY	2,765	2,765	2,765	19,269	19,269
2 Consecutive Dry Years (Table 23), AFY	4,063	4,063	4,063	20,723	20,723
3 Consecutive Dry Years (Table 24), AFY	5,360	5,360	5,360	22,176	22,176
6 Consecutive Dry Years (Table 25), AFY	6,744	6,744	6,744	23,726	23,726

When the demand for imported water exceeds the supply, it is reasonable to assume the imported water will be allocated in proportion to the member agency's fraction of the total imported water demand without banking. Table 27 shows the allocation percentages.

Table 27
Member Agency's Percent of Available Imported Water
When Demand Exceeds Supply

Agency	Year				
	2020	2025	2030	2035	2040
City of Banning	0	0	0	0	5.6%
YVWD/Calimesa	6.7%	7.0%	7.3%	7.9%	8.1%
BCVWD	87.8%	78.5%	71.6%	66.3%	58.4%
Other Member Agencies	5.5%	14.5%	21.1%	25.8%	27.9%
Total	100%	100%	100%	100%	100%

Water demand quantities for each agency are from Table 7 (Banning), Table 9 (YVWD), Table 12 (BCVWD), and SGPWA UWMP Table 2-4 (Other Member Agencies)

Table 28 shows the estimated amount of imported water BCVWD can expect during single and multiple dry year periods based on the amount of imported water presented in Table 28 and the allocation percentages in Table 27.

Table 28
BCVWD Available Imported Water
Single and Multiple Dry Year Periods*

Agency	Year				
	2020	2025	2030	2035	2040
Single Dry Year, AFY	2,400	2,100	2,000	12,800	11,300
2 Consecutive Dry Years, AFY	3,500	3,200	2,900	13,700	12,100
3 Consecutive Dry Years, AFY	4,700	4,200	3,800	14,700	13,000
6 Consecutive Dry Years, AFY	5,900	5,300	4,800	15,700	13,800
* *Values are Rounded*					

9.1.3 Recycled Water

Recycled water from the City is considered to be consistently available; although during droughts, consumers are more aware of water conservation and reduce their indoor water consumption somewhat. They are more aware of the need to do only full loads of laundry, full loads for the dishwasher, etc. Agencies, including the City of Beaumont, have observed a reduction in wastewater flows during the most recent drought.

The average year amount of recycled water from the City is taken from Table 12 presented previously. As stated in the discussion for Table 12, the total wastewater produced by the City is reduced by 1.8 mgd for habitat maintenance, and a capacity factor of 75% was applied to the

remaining water to account for brine and other losses. For a single dry year, an estimate of 90% of the normal, average recycled water will be available. As the drought becomes more pervasive, the amount of recycled water is estimated to reduce further to 85% of normal. Table 29 provides an estimate of the available recycled water during extended dry periods from the City.

Table 29
BCVWD Available Recycled Water
During Single and Multiple Dry Year Periods

Agency	Year				
	2020	2025	2030	2035	2040
Average Year (Table 12), AFY	1,556	2,188	2,840	3,487	3,930
Single Dry Year (90%), AFY	1,400	1,970	2,555	3,135	3,535
2-, 3-, and 6- Consecutive Dry Years (85%), AFY	1,320	1,860	2,415	2,960	3,340

9.1.4 Storm Water and Other Local Water Resources

Storm water and Urban Runoff quantities are dependent on rainfall. Review of the rainfall record at Beaumont for the period 1888 – 2006 resulted in the data shown in Table 30. To determine the multiple dry year rainfall as a percent of the average rainfall, the 2-, 3-, and 6-year moving averages of the annual rainfall was determined.

Table 30
Ratio of Dry Period Precipitation to Average Precipitation at Beaumont
and Estimated New Water from Storm Water Capture
and Local Water Resource Projects

Dry Year(s)	Single	2-year	3-year	6-year
% of Annual Average	36%	45%	45%	65%
Total Storm water Capture, beginning 2021, 250 AFY	90	110	110	160
Total Local Water Resource Projects, beginning 2025, 250 AFY	90	110	110	160

9.2 Water Demands During Critical and Multi-year Dry Periods

Table 12, presented previously, showed the average BCVWD water demands (potable and non-potable). These demands are used in the Dry Period Reliability Analysis below for the 1-, 2-, and 3- consecutive year dry periods, primarily because there may not be enough time to implement water demand restrictions and see the effect of these restrictions on demand. However, for the 6-consecutive year dry period, it is assumed the water shortage contingency planning actions set forth in Section 8 of BCVWD's 2015 UWMP would be in effect and at least a 15% reduction in

demand would be obtained. This is over and above the nominal water conservation efforts envisioned in the development of the average demands in Table 12 presented previously.

Water supply for single dry year, 2- consecutive dry years, 3- consecutive dry years, and 6 consecutive dry years are presented in Tables 31 through 34 respectively.

Tables 31 through 34 demonstrate BCVWD can provide water to the planned developments listed in Table 11 (presented previously) which included the Legacy Highlands Development during critical dry year and multiple dry year periods by relying on BCVWD's Beaumont Basin Groundwater Storage assuming DCP and Sites are on-line as planned. BCVWD will need to maintain 25,111 AF of water banked in storage to meet the 6-year dry period by the time Sites Reservoir and the DCF are "on-line." This is not an unreasonable amount of storage considering BCVWD has an 80,000 AF storage account and as of the end of 2018, 34,794 AF in storage.

Table 12, presented previously, provided BCVWD's Beaumont Basin storage account balance under the basis of average water supply conditions assuming the development projects listed in Table 11 (presented previously) were constructed. Table 12 shows a steady increase in projected groundwater storage from 35,296 AF in 2020 to almost 76,800 AF in the year 2040. To achieve this level of storage, BCVWD will be banking additional water for drought proofing to able to supply water during critical and multiple dry year period.

Table 31
BCVWD Water Supply Summary – Critical Dry Year

Single Dry Year					
	YEAR				
	2020	2025	2030	2035	2040
DEMAND					
Total Water Demand	13,668	14,841	16,032	19,192	18,100
SUPPLY					
Groundwater					
Edgar Canyon, AFY	1,117	1,117	1,117	1,117	1,117
Beaumont Basin,Allocated Overlier Pumping Rights and Forbearance Water, AFY AFY	1,710	1,190	680	680	680
Storm Water, AFY	90	90	90	90	90
Other Local Water Resource Projects, AFY	90	90	90	90	90
Recycled Water, AFY	1,400	1,970	2,555	3,135	3,535
Imported SPW,AFY	2,400	2,100	2,000	12,800	11,300
Subtotal Supply, AFY	6,807	6,557	6,532	17,912	16,812
From Banked Beaumont Basin Storage, AF	6,861	8,284	9,500	1,280	1,288

Table 32
BCVWD Water Supply Summary – 2 Consecutive Dry Years

2 Consecutive Dry Years					
	YEAR				
	2020	2025	2030	2035	2040
DEMAND					
Total Water Demand	13,668	14,841	16,032	19,192	18,100
SUPPLY					
Groundwater					
Edgar Canyon, AFY	1,173	1,173	1,173	1,173	1,173
Pumping Rights and Forbearance Water, AFY AFY	1,710	1,190	680	680	680
Storm Water, AFY	90	90	90	90	90
Other Local Water Resource Projects, AFY	90	90	90	90	90
Recycled Water, AFY	1,320	1,860	2,415	2,960	3,340
Imported SPW,AFY	3,500	3,200	2,900	13,700	12,100
Subtotal Supply, AFY	7,883	7,603	7,348	18,693	17,473
From Banked Beaumont Basin Storage, AFY	5,785	7,238	8,684	499	627
Total Volume Withdrawn from Storage, AF	11,570	14,476	17,368	998	1,254

Table 33
BCVWD Water Supply Summary – 3 Consecutive Dry Years

3 Consecutive Dry Years					
	YEAR				
	2020	2025	2030	2035	2040
DEMAND					
Total Water Demand	13,668	14,841	16,032	19,192	18,100
SUPPLY					
Groundwater					
Edgar Canyon, AFY	1,230	1,230	1,230	1,230	1,230
Beaumont Basin,Allocated Overlier Pumping Rights and Forbearance Water, AFY AFY	1,710	1,190	680	680	680
Storm Water, AFY	90	90	90	90	90
Other Local Water Resource Projects, AFY	90	90	90	90	90
Recycled Water, AFY	1,320	1,860	2,415	2,960	3,340
Imported SPW,AFY	4,700	4,200	3,800	14,700	13,000
Subtotal Supply, AFY	9,140	8,660	8,305	19,750	18,430
From Banked Beaumont Basin Storage, AFY	4,528	6,181	7,727	-558	-330
Total Volume Withdrawn from Storage, AF	13,584	18,543	23,181	-1,674	-990

Table 34
BCVWD Water Supply Summary – 6 Consecutive Dry Years

6 Consecutive Dry Years					
	YEAR				
	2020	2025	2030	2035	2040
DEMAND					
Total Water Demand	11,618	12,615	13,627	16,313	15,385
SUPPLY					
Groundwater					
Edgar Canyon, AFY	1,367	1,367	1,367	1,367	1,367
Beaumont Basin,Allocated Overlier Pumping Rights and Forbearance Water, AFY AFY	1,710	1,190	680	680	680
Storm Water, AFY	90	90	90	90	90
Other Local Water Resource Projects, AFY	90	90	90	90	90
Recycled Water, AFY	1,320	1,860	2,415	2,960	3,340
Imported SPW,AFY	5,900	5,300	4,800	15,700	13,800
Subtotal Supply, AFY	10,477	9,897	9,442	20,887	19,367
From Banked Beaumont Basin Storage, AFY	1,141	2,718	4,185	-4,574	-3,982
Total Volume Withdrawn from Storage, AF (6 Year Period)	6,845	16,307	25,111	-27,443	-23,892

The water banking is clearly stated in BCVWD's 2015 UWMP:

> *BCVWD's plan, which is shown in BCVWD's 2015 UWMP envisions banking anywhere from 1,000 AFY to 2,500 AFY to drought proof new development. This is accounted for in the spreadsheet each year. Should there be a year when the projected amount cannot be delivered by SGPWA, any deficiency will be made up in successive years when adequate supply is available. As stated in BCVWD's 2105 UWMP*[23]

In addition to BCVWD, YVWD/Calimesa and the City of Banning have storage accounts which when combined with BCVWD's have 103,748 AF in storage as of the end of 2018. Previous Tables 7 and 10 presented previously, show that the storage accounts for YVWD/Calimesa and the City of Banning are projected to have 50,000 and nearly 76,510 AF in storage by 2040. When combined with BCVWD's projected storage account balance, on a regional basis there will be over 200,000 AF in banked storage – more than ample to meet the needs during short-term droughts.

10. CONCLUSIONS

1. BCVWD has complied with §10910 of the California Water Code (SB 610) and California Government Code Section 66473.7, (SB 221) requirements to prepare a Water Supply Assessment. This WSA was prepared for Legacy Highlands Development based on information provided by the Developer supplemented with analyses by BCVWD.

[23] BCVWD (2015). UWMP, pg 7-4

2. BCVWD prepared a series of White Papers which analyzed the regional (SGPWA) imported water supply requirements and funding requirements. These White Papers provided a starting point for the preparation of this WSA. The basis for the White Papers was a regional spreadsheet demand model, developed by BCVWD, which was reviewed by the City of Banning and YVWD.
3. The projected potable water demand from the Legacy Highlands Development is approximately 1,450 AFY; non-potable water demand is estimated to be 178 AFY. This is about 11% of BCVWD's current demand of 13,129 AFY.
4. The Legacy Highlands Development was included in the list of planned development projects in BCVWD's 2015 UWMP. In the 2015 UWMP, Legacy Highlands was anticipated to have 3,218 EDUs at 0.65 AFY/EDU for a total demand of 2,092 AFY. This is more than the current 2,868 residential EDUs requiring 1,628 AFY (potable plus non-potable) total water demand.
5. Legacy Highlands Development, when fully developed at 2,868 residential EDUs will generate an estimated 524 AFY of recycled water, (which includes a 25% loss for brine and in-plant losses), which could be recycled and which could supply all of the estimated 178 AFY of Legacy Highlands Development's non-potable demand and provide 346 AFY available to meet the non-potable demands in other areas of BCVWD's system or be advance treated and recharged to augment BCVWD's potable water supply. Thus the net increase in water demand for Legacy Highlands Development is approximately 1,104 AFY.
6. Based on comparison of the SGPWA Imported Water Demands in Table 13 and the Imported Water Supply in Table 16, and summarized below, the SGPWA has sufficient imported water to meet the regional demands, including the demands of those member agencies currently not taking imported water, until 2040.

	Year					
	2018	2020	2025	2030	2035	2040
Total Potential Imported Water Supply (Table 16), AFY	19,530	18,035	14,824	15,812	25,880	24,880
Total Firm Imported Water Supply, no Partner Agency Side Deals, Article 21 Water, Turn-back Pool Water, etc. (derived from Table 16), AFY	19,530	14,035	11,324	12,812	10,200	8,500*
Total Imported Water Demand (Table 13 and 16), AFY	10,272	11,360	15,874	19,214	21,057	23,950
Total Imported Water Demand, No Banking or Drought proofing, (Table 13 and 16), AFY	9,223	9,109	11,019	13,254	15,097	17,924

*10,200 AFY with Nickel Extension

However, not all of those supplies are firm with agreements in place. Beyond 2025, SGPWA and BCVWD will be relying on the reliability of Table A, the availability of Article 21 and Turnback Pool Water, short term water transfers which are not yet agreed to, and the DCP and Sites Reservoir. Both DCP and Sites Reservoir are moving forward, and there is more than reasonable probability these projects will come to fruition. But there is always some risk. This risk will decrease over time as design and permitting progress, but nevertheless, there is risk, which BCVWD believes is low.

7. Figure 6 shows the importance of recycled water from the City of Beaumont for BCVWD to be able to meet future demands. The BCVWD 2015 UWMP as well as previous UWMPs and water master plans since 2000 identified recycled water from the City for non-potable water irrigation with a plan for the recharge of surplus recycled water with appropriate treatment and permits. A Memorandum of Understanding (MOU was executed in July 2019) by the City and BCVWD. The City and BCVWD are working on a recycled water purchase agreement and have been coordinating on the location of pumping and storage facilities on or adjacent to the City's wastewater treatment plant. Construction on the new treatment facility is nearing completion. Although there is some risk, that recycled water may not be available to BCVWD, that risk is small.

8. In light of the importance of recycled water in BCVWD's ability to meet projected demands and the delays in securing recycled water for BCVWD's non-potable water supply, as a condition for approval, Legacy Highlands will be required to use their on-site wells to supply the required non-potable water distribution system until such time as recycled water is available from the City to BCVWD and facilities have been installed to deliver BCVWD non-potable water to Legacy Highlands. BCVWD shall inspect the installation of the non-potable water distribution system. Legacy Highlands shall be required to provide treatment of all of the well water for iron and manganese removal. Sequestration is not an acceptable treatment technology. Prior to dedicating the non-potable water system to BCVWD, the system, including all irrigation laterals and piping, shall be thoroughly flushed and shock chlorinated. Upon dedication of the non-potable water system, Legacy Highlands shall transfer and/or convey all wells and related facilities to BCVWD for its full ownership and control as per the conditions set forth by the City of Beaumont.

9. BCVWD prepared and adopted a Potable Water Master Plan in January 2016 which identified water supply needs, facility needs and funding requirements to build-out. The Master Plan included consideration of Legacy Highlands Development.

10. Storm water capture and other local water resource projects were identified in BCVWD's 2015 UWMP and Water Master Plan and in this WSA. One of these projects, MDP-Line 16, (Grand Avenue Storm Drain) is currently nearing design completion by the Riverside County Flood and Water Conservation District and BCVWD. The storm drain will be partially funded through a grant from the Santa Ana Watershed Project Authority.

11. SGPWA and BCVWD have made financial commitments to the Sites Reservoir project Phase 1 studies and Phase 2-2019 and anticipates committing funds for the continuation of Phase 2 and future phases.

12. Pursuant to §10910 of the California Water Code (SB 610) and information provided in this WSA, BCVWD has determined that sufficient currently available and planned supplies exist to meet the water demands of the proposed Legacy Highlands Development in addition to the existing and other projected demands during normal, single dry and multiple dry years over the next 20 years, providing imported water and recycled water projects and agreements move forward. BCVWD will supplement their existing supply sources during these dry periods with banked water in BCVWD's Beaumont Basin Groundwater Storage Account.

13. Pursuant to the California Government Code Section 66473.7, (SB 221), BCVWD has determined that it has sufficient and adequate water supply available to serve a long-term needs of the Legacy Highlands Development in addition to the existing and other projected demands during normal, single dry and multiple dry years over the next 20 years, provided imported water projects and imported water supply agreements move forward.

11. RECOMMENDATIONS

Because of the risk in the implementation of Sites Reservoir and DCF, extended dry periods occurring over the next 10 to 15 years reducing the imported water levels before these projects come on line, the uncertainty of executing short term water transfers and purchases, the Board may want to consider:

1. Condition the approval of Legacy Highlands for water service to a time when recycled water is actually delivered to, and received by BCVWD from the City.
2. Condition the approval of Legacy Highlands for water service on the basis of Legacy Highlands using their on-site wells, with full treatment for iron and manganese until recycled water is available as discussed in this WSA.
3. Conditionally approve the Legacy Highlands Development in Phases until the implementation Sites Reservoir, the DCP, and other necessary agreements are in place.
4. Hold off approval until critical water supply projects, such as Sites Reservoir and DCP, are more certain, additional water supply opportunities being considered by the SGPWA and formalized, and recycled water is actually being delivered to BCVWD.

12. ACKNOWLEDGEMENTS

This WSA was prepared by Senior Engineer, Joseph C. Reichenberger PE with support from Dan Jaggers, PE, General Manager, and Mark Swanson, PE, Senior Engineer. The WSA was based on White Papers prepared, in part, by Kaden Johnsen, Civil Engineering Assistant.

13. REFERENCES

1. 2015 Urban Water Management Plan, Beaumont Cherry Valley Water District, adopted by Board of Directors, January 17, 2017; acknowledged by California Department of Water Resources, March 14, 2018.
2. Potable Water Master Plan, Beaumont Cherry Valley Water District, adopted by Board of Directors, January 13, 2016.
3. White Paper No 1, Discussion of the Analysis of State Project Water (SPW) Requirements for SGPWA and BCVWD, prepared by BCVWD, September 6, 2017.
4. White Paper No 2, Role of Groundwater Storage and Banking in Meeting State Project Water (SPW) Requirements for SGPWA and BCVWD, prepared by BCVWD, November 15, 2017.
5. White Paper No 3, Water Supply Portfolio Unit Costs, prepared by BCVWD, December 20, 2017.
6. White Paper No 3, Water Supply Portfolio Unit Costs, prepared by BCVWD, December 20, 2017.
7. White Paper No 4, Water Supply Portfolio Funding Requirements, prepared by BCVWD, December 20, 2017.
8. White Paper No 5, Funding Strategies, prepared by BCVWD, January 2, 2018.
9. White Paper No 6 (Rev. 4), Updated San Gorgonio Pass Regional Water Supply Planning Spreadsheet, prepared by BCVWD, May 16, 2018.
10. White Paper No 7 (Draft), Funding Strategies for New and Existing Regional Water Supplies, Sites Reservoir and Other Sources, prepared by BCVWD, August 15, 2018.
11. Appendix F, San Gorgonio Pass Water Agency 2015 UWMP, Yuba Accord Agreements.
12. Sites Project Authority, Sites Reservoir Project Description and Assumptions of with-Project Conditions for Years 2030 and 2070, plus with and without-Project current conditions, Appendix A1 to Application, August 9, 2017
13. Sites Project Authority, Attachment D, Water Operations Review, response to California Water Commission Comments on Application, February 23, 2018.
14. Sites Project Authority, Modeling Results Compendium, Appendix A6.D. to Application, August 9, 2017
15. Sites Project Authority, Sites Project to Receive $816 million in State Funding, press release, July 24, 2018.
16. San Gorgonio Pass Water Agency, Update of Sites Reservoir, presentation to Board of Directors, July 9, 2018
17. Consideration of the San Gorgonio Pass Water Agency's April 6, 2017 Sites Reservoir Cost Sharing Draft Agreement and Associated Transmittal Letter dates April 6, 2017, prepared by Eric Fraser (BCVWD) to BCVWD Board of Directors, May 9, 2017.

18. San Gorgonio Pass Water Agency, 2015 Urban Water Management Plan, prepared by Kennedy/Jenks Consultants, adopted by Board of Directors, March 20, 2017.

19. SGPWA General Manager to Board of Directors, Surplus Water Sale Agreement with San Bernardino Valley MWD ("Valley District") October 16, 2017. Approved by SGPWA Board of Directors per Regular Board Meeting Minutes, October 16, 2017.

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RESOLUTION 2020-__

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE BEAUMONT-CHERRY VALLEY WATER DISTRICT TO APPROVE THE WATER SUPPLY ASSESSMENT (WSA) FOR THE LEGACY HIGHLANDS DEVELOPMENT PROJECT

WHEREAS, the Legacy Highlands Development Project (Tentative Tract Map 31570) is a proposed mixed use development consisting of commercial-industrial development, single family residential, and a gated active adult residential community, occupying approximately 1,600 acres of land, having more than 2,800 dwelling units, and therefore qualifies as a "Project" under the Water Code, requiring the preparation of a Water Supply Assessment; and

WHEREAS, the Water Supply Assessment (WSA) has been prepared in accordance with Water Code §10910 (c)(1) and SB 610; and

WHEREAS, the Beaumont-Cherry Valley Water District Board of Directors has the authority and responsibility for approving the WSA; and

WHEREAS, Beaumont-Cherry Valley Water District staff prepared the WSA, which includes any and all WSA addendums; and

WHEREAS, the WSA relied on existing information in the Urban Water Management Plan and more recent District water planning analysis and sets forth the existing and planned water supplies necessary to provide the existing and planned developments within the District's Sphere of Influence; and

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of the Beaumont-Cherry Valley Water District finds and determines as follows:

1. The above recitals are true and correct and reflect the independent judgment of the Board
2. The WSA was prepared in accordance with the California Water Code
3. The conclusions set forth in the WSA are supported by substantial evidence and reasonable analysis, and are consistent with District policies, plans, documents and operations; and
4. The WSA accurately sets forth the existing and planned water supplies necessary to provide the existing and planned developments within the District's Sphere of Influence.

NOW THEREFORE, BE IT FURTHER RESOLVED that, in the exercise of independent judgment, and taking onto consideration the WSA and engaging in due deliberations, the Board does hereby adopt the TTM 31570 – The Legacy Highlands Development Project WSA.

ADOPTED this _____ day of _____, 2020, by the following vote:

AYES:
NOES:
ABSTAIN:

ABSENT:

ATTEST:

Director John Covington, President of the Board of Directors of the Beaumont-Cherry Valley Water District	Director Lona Williams, Secretary to the Board of Directors of the Beaumont-Cherry Valley Water District