



BEAR VALLEY WATER DISTRICT
BOARD MEETING
January 22, 2018 - 9 A.M.
Conference Room
441 Creekside Drive, Bear Valley, CA 95223
Call- In Info: 605-475-5920 Access Code: 475-0045

DECLARATION OF A QUORUM

James Bissell, President - Stefaniya Becking, Vice President - John Boyle, Treasurer - Ken Brown, Secretary
Gunnar Thordarson, Member

BOARD MEETING

Public comments on agenda items will be limited to 3 minutes or otherwise at the discretion of the Board Chair.

PUBLIC FORUM

Any member of the public may address and ask questions of the Board relating to any matter within the Board's jurisdiction provided the matter is not on the agenda or pending before the Board.

BOARD BUSINESS

1. **Mandatory 2-Year Ethics Training (AB 1234) – District Legal Counsel Dan Schroeder**
2. **Capacity Charges (Buy-In Fee) – District Engineer Gary Ghio** - Discussion and Possible Action Item
3. **Retirement Plan Management Services** - Discussion and Possible Action Item
4. **Operations Report – General Manager**
5. **Financial Report – General Manager**
 - 5.1 P&L and Balance Sheet Reports - Discussion and Possible Action Item
 - 5.2 Accounts Payable Report - Discussion and Possible Action Item
 - 5.3 A/R & Aging Reports – Discussion
6. **The Board will consider adoption of the October 23, 2017 Board Meeting minutes**
7. **Board Member Reports**

Materials related to any item on this Agenda are available for public inspection in the District Office at 441 Creekside Drive, Bear Valley, CA 95223 during normal business hours. Information on materials in the agenda is also available on the Bear Valley Water District website at <http://www.bearvalleywater.org>, subject to staff's ability to post the documents before the meeting. Any material provided to the legislative body at the meeting by agency staff or a member of the legislative body will be available at the public meeting, documents provided by others will be available right after the meeting.

This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the Americans with Disabilities Act of 1990 (42USC, #12132) and the Ralph M. Brown Act, CA Government Code # 54954.2.

Any persons requesting a disability related modification or accommodation in order to participate in the meeting should contact Judi Silber at 209-753-2112, during regular business hours, at least 72 hours prior to the meetings. All regular meetings are held on the third Monday of the month at 9:00 A.M.

AGENDA ITEM

DATE: JANUARY 22, 2018

TO: BVWD BOARD OF DIRECTORS

FROM: JEFF GOUVEIA, DISTRICT GENERAL MANAGER

RE: DISTRICT CAPACITY AND BUY-IN FEE CALCULATION

BACKGROUND:

The District Engineer's 2017 water balance coupled with completion of various capital projects since the last revision necessitates a revised capacity charge. Yet, the absence of a clear historical approach to determining the cost basis of the District's assets highlights the need to standardize the approach to determining the actual value of District assets.

While undertaking the latest effort to revise the capacity charge ("buy-in" fee) for new connections to the wastewater system, staff reviewed the history behind previous capacity charge determinations. Since 1972, District records indicate the capacity charge has been reviewed and revised approximately 20 times. However, the historical record for these revisions does not appear to indicate nor establish the methodology behind the determination of the cost basis used to calculate the value of the District's collection, treatment and disposal systems.

Moreover, the most recent revisions to the capacity charge, including Ordinance No. 68 (2006) which established a charge of \$15,740 and Ordinance No. 71 (2015) which reduced the fee to \$5414, established these charges based on assumptions of proposed project costs or estimates for projects under review. In many cases, some of these projects were never initiated and in other cases the projects came in significantly under the estimate used as a basis for past capacity charges.

Following discussion and careful consideration of the issue, the General Manager and District Engineer decided the District's depreciation schedule provides the most accurate and defensible historical record of actual costs of the District's collection, treatment and disposal systems. The depreciation schedule was established by the District's independent auditor and is updated annually to reflect completed capital expenditures that meet the District's capitalization policy.

As further explained in the District Engineer's January 9, 2018 memorandum, the District's depreciation schedule has been utilized to inform the recommendation for revising the capacity charge. The schedule has been updated to reflect all items currently owned by the District, the date each item was purchased and the original cost of the item. These costs were then escalated to December 2017 costs using the Engineering News Record (ENR) 20 City Construction Cost Index.

Based upon this analysis, the total adjusted value of the District's collection, treatment and disposal systems in December 2017 dollars is approximately \$13,605,000. This figure represents all projects completed to date and does not include any proposed projects nor any erroneous estimates for projects previously completed.

RECOMMENDATION:

In the interest of establishing a revised capacity charge in 2018 which is both defensible and based in true costs, not estimates, it is recommended the Board accept the District Engineer's January 9, 2018 memorandum and thereby accept the underlying approach to establishing the cost basis through an adjustment of the depreciation schedule.

BEAR VALLEY WATER DISTRICT

MEMORANDUM

TO BOARD OF DIRECTORS

FROM GARY S. GHIO, DISTRICT ENGINEER *GSG*

RE DISTRICT CAPACITY AND BUY-IN FEE CALCULATION UPDATE

DATE January 9, 2018

In 2014 the District adopted a buy-in fee to be charged to new customers based upon a District capacity of 245 additional EDUs along with a total cost of District completed improvements determined through the Eco-Logic 2006 Phase 1 Tertiary Facility Plan combined with the cost of improvements which were completed since the Plan was created. Attached to this memorandum is a copy of a memorandum to the Board of Directors dated November 20, 2014 which provides the basis for the current buy-in fee of \$5,414. (See pages 4 and 5)

When the buy-in fee was adopted in 2014 there were still several uncertainties associated with the District's potential ability to discharge into Bloods Creek; primarily the limited flow data which was available for Bloods Creek at that time combined with the fact that the District had not done any type of discharge previously to verify the adequacy of the discharge system.

Subsequent to this, the District received a new NPDES permit which removed some of the requirements which limited future District capacity to 245 additional EDUs. The primary limitation contained in the previous NPDES permit was the requirement that the polishing pond reach the two-thirds full level prior to discharge. This requirement was removed in the current, adopted NPDES permit and in June of 2016 the water balances were updated to reflect the potential change in NPDES permit. The result of this analysis indicated an increase in the District's capacity to 1,196 additional EDUs assuming no infiltration associated with said EDUs. Although this determination was made in June 2016, it was recommended to the Board not to modify District capacity due to the issues associated with lack of information on Bloods Creek flow. I have also attached a copy of the June 7, 2016 memorandum to the Board of Directors wherein these items were discussed. (See pages 6 - 9)

As the Board of Directors is aware, the winter of 2017/2018 once again exceeded the total precipitation criteria for 1 in 100 year storm season. Due to this, the District proceeded with its first ever successful discharge to Bloods Creek; and in addition, obtained valid creek flow data

for Bloods Creek for the entire January through June period. In addition, this successful discharge once again provides the District the opportunity to update its 1 in 100 year water balance to verify the assumptions, limitations and capacity determinations which were utilized in previous water balances.

2017 WATER BALANCE UPDATE

The following table presents a comparison of the total precipitation and snow water content projected in the 1 in 100 year water balances as well what occurred during the 2010/2011, 2015/2016, and 2017/2018 precipitation seasons.

	1 IN 100	2010/2011	2015/2016	2017/2018
Total Precipitation (In Inches)	83.00	84.73	54.62	90.91
Snow Water Content (In Inches)	60.00	60.82	34.56	43.32

As can be seen by the above comparisons of total precipitation and snow water content for 2010/2011 and 2017/2018, both storm seasons exceeded the 1 in 100 total precipitation amount, but the snow water content was significantly lower in 2017/2018 as compared to 2010/2011.

Attached to this memorandum is the 2017 water balance update with actual flows/precipitation which was calibrated based upon actual storage levels encountered for November through June. (See page 10) As can be seen by the water balance the estimated storage, predicted by the spreadsheet, tracks very closely with actual storage experienced during this time period which provides verification of the accuracy of the water balance.

The Regional Water Quality Control Board criteria to perform 1 in 100 year projections is to utilize a historical DWR monitoring site in order to derive the 100 year monthly distribution of precipitation. As no DWR site exists near Bear Valley which has this data, the previous water balances (2011 and 2016) and capacity determinations were based on the monthly distribution of precipitation that was experienced in 2011 which was the last year of 1 in 100 year total precipitation exceedance at that time. The 2017 precipitation year also exceeded the 1 in 100 year total precipitation amount, but the pattern differed significantly from what was experienced in 2010/2011. The 2017 1 in 100 year water balance projections which are attached to this memorandum (See pages 11-12) were performed utilizing both precipitation patterns reduced down to 1 in 100 year levels. This analysis was performed to ensure the water balances' basis is the worst case precipitation level and pattern based upon available data.

In comparing the resulting two 2017 spreadsheets, the 2017 precipitation pattern would have been a worst year in terms of volumes as compared to 2010/2011 but not of such significance that it would alter the capacity determination from 2016 of an additional 1,196 EDUs. Based upon the results of this analysis, combined with a much higher level of confidence on the ability of the District to discharge the required volumes into Bloods Creek, indicates the Board of Directors could increase District capacity to an additional 1,196 EDUs over existing connections with confidence.

BUY-IN FEE UPDATE

As any change in adopted District capacity correlates directly to the buy-in fee which is charged to new development, District staff has re-examined the existing number of connections (EDUs) as well as actual costs of the District's collection and treatment systems. Attached to this memorandum is a summary of the existing number of connections as of January 5, 2018 broken down by residential and commercial developments. (See page 13.) In addition, this table provides information on recent flows from not only the mountain but from the Forest Service and Lake Alpine Resort which were previously lacking. As can be seen from this table, the total number of EDUs currently connected to the District's system is 650. Combining the current number of connected EDUs (650) with additional District capacity (1,196) yields a total District capacity of 1,846 EDUs.

In order to verify the actual costs of the District's collection and treatment systems, the District's depreciation schedule was updated to reflect all items currently owned by the District, the date purchased, and the original cost of the item. These costs were then escalated to December 2017 costs using the ENR 20 City Construction Cost Index. Based upon this analysis, the total value of the District's collection and treatment systems in December 2017 dollars would be approximately \$13,605,000. See attached depreciation schedule for breakdown of items, date purchased, original and escalated costs (pages 14-16).

The following presents the calculation for the buy-in fee:

<p>Cost of completed improvements = \$13,605,000 Existing plus Additional Capacity EDUs = 1846 Buy-in Fee = \$13,605,000 / 1846 = \$7,370 per EDU</p>

Based upon the analysis of costs, 2017 Water Balance update, and increased confidence in the level of Bloods Creek flows and corresponding ability of the District to discharge required volumes it is recommended the Board of Directors adopt the District capacity as 1,196 additional EDUs and revised the Buy-in Fee amount to \$7,370/EDU.

I will be present at the January 22 Board meeting should the Board have questions on any of the items contained herein.

BEAR VALLEY WATER DISTRICT

MEMORANDUM

TO BOARD OF DIRECTORS
FROM GARY GHIO, DISTRICT ENGINEER
RE BUY-IN FEE CALCULATION
DATE NOVEMBER 20, 2014

Based upon discussions with Dan Schroeder, District Legal Counsel, it is recommended that in lieu of developing a revised connection fee for the District that the District charge a buy-in fee to new development until such time as the existing District capacity (245 EDU's) is reached.

The attached buy-in fee calculation reflects a recommended buy-in fee cost for each equivalent dwelling unit (EDU) served until such time as the District reaches its current capacity (245 additional EDU). This memo details the methodology used to determine the various components of the buy-in fee calculation.

Update of the previously determined existing facilities cost allocation:

Existing Facilities Cost Allocation per the 2006 Phase I Tertiary Facilities Plan = \$3,032 Average annual Construction Cost Index escalation rate history between 2006 and 2014 = 3.1% Using the single payment compound-amount interest factor, $\$3,032 (1+0.031)^8 = \$3,871$

Additional buy-in cost for completed improvements since 2006:

Cost of completed improvements and financing thereof = \$1,435,097 Existing plus Additional Capacity EDUs = 930 Additional buy-in cost = $\$1,435,097 / 930 = \$1,543$ per EDU
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Buy-in Fee = $\$3,871 + \$1,543 = \$5,414$
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List of Improvements

11/19/2014

Phase	Item #	Improvement Project Description	Cost
Completed Improvements	1	Outfall Project	\$815,000
	2	Main Pump Station	\$272,500
	3	Chlorine Tank	\$108,145
	4	Dechlorination Facility	\$22,618
	Total:		

Reference

[1] & [2]

[1]

Jeff

Jeff

References:

[1] 9/13/11 Connection Fee Memorandum from G. Ghio

[2] 11/14/06 Connection Fee Memorandum from N. Colwell

Buy-in Fee Calculation

11/19/2014

Fee Component	Description	Value
Buy-in	Existing Facilities Cost Allocation per EDU ^a	\$3,871
	Cost of Completed Improvements ^b	\$1,218,263
	Cost of Financing for Completed Improvements ^b	\$216,834
Equivalent Dwelling Units	Current EDUs Served	685
	Existing District Capacity, EDU	245
	Total EDUs	930
Total Cost per EDU	Buy-in Cost	\$3,871
	Cost of Completed Improvements	\$1,543
	Buy-in cost per EDU:	\$5,414

Notes:

a. Buy in cost of \$3,032/EDU per the 2006 Phase I Tertiary Facilities Plan adjusted to 2014 levels

b. Projects completed since 2006 Connection Fee Analysis. Costs to be distributed over 930 customers

References:

[1] 11/14/06 Connection Fee Memorandum from N. Colwell and Bear Valley Master Plan

BEAR VALLEY WATER DISTRICT

MEMORANDUM

TO BOARD OF DIRECTORS

FROM GARY S. GHIO, DISTRICT ENGINEER

RE 1 in 100 YEAR WATER BALANCE AND PROPOSED
NPDES PERMIT RENEWAL

DATE June 7, 2016

As directed, I have updated the District's 1 in 100 Year Water Balance in an effort to reflect the anticipated requirements which are contained within the draft renewal copy of the District's NPDES permit for discharges to Bloods Creek.

As the Board Members may recall, the District's current NPDES permit prohibits discharge to Bloods Creek from the polishing pond when there is greater than 35 MG of unused storage in the pond. The 35 MG threshold was dictated by the Regional Water Quality Control Board (RWQCB) during the NPDES renewal process in 2011 and was based upon the requirement of having the polishing pond two-thirds full before the discharge to Bloods Creek could commence. This limitation was incorporated into the District's 1 in 100 Year Water Balance and resulted in estimates of future District capacity of 245 RLUs. (See Bear Valley Water District Memorandum dated February 4, 2014.)

As the proposed NPDES permit has removed the two-thirds full requirement for discharge, and in an effort to determine the effects on District capacity, the 1 in 100 Year Water Balance (attached) was revised based upon the assumption that discharge to Bloods Creek would commence once flows within the creek were adequate to accept the District's discharge.

Bloods Creek Flow Data and Influent Flow Data

In order to determine potential monthly amounts of discharge to Bloods Creek based upon the 20:1 dilution requirement contained in the NPDES permit, 2015/2016 Bloods Creek flow data was utilized in the updated water balance in lieu of 2010/2011 data due to concerns with the accuracy of the 2010/2011 data. Both sets of data are attached to this memorandum for information purposes.

The following table presents a comparison of the total precipitation and snow water content projected in the 1 in 100 Year Water Balance as well as what occurred during the 2010/2011 and 2015/16 precipitation seasons.

	1 in 100	2010/2011	2015/2016
Total Precipitation (Inches)	83.00	84.73	54.62
Snow Water Content (Inches)	60.00	60.82	34.56

Although the 2015/2016 water year did not approach what was experienced in 2010/2011, which forms the basis for the 1 in 100 Year Water Balance, the potential discharge amounts for January thru May contained in the attached water balance, are based upon the 2015/2016 flow data and proposed permit limits. The amount of potential creek discharge for the month of June was assumed the same as May due to lack of data in 2015/2016 and the fact that discharges would have occurred thru June in the 2010/2011 scenario. This should result in a conservative estimate of District capacity.

In addition to updating the potential discharge amounts to Bloods Creek, the 90th percentile influent flows contained in the water balance were updated to include influent data thru May 2016.

Water Balance Results

As can be seen from the attached water balance, incorporating the items described above results in a potential District capacity of 1,196 RLUs assuming no infiltration associated with said RLUs.

The Board should remain cognizant that the water balances are to serve as a guide to capacity and total discharge amounts only. The exact timing of discharges to Bloods Creek as well as irrigation of the spray fields will differ from year to year. Due to the limited Bloods Creek flow data used in this analysis, it is not recommended the District revise the adopted estimate of future District capacity. This analysis is primarily to provide the Board members with information regarding the potential increase in capacity based upon the renewal of the NPDES permit.

Collection of accurate Bloods Creek flow data is essential to the determination of District Capacity and as additional data is collected during subsequent years the potential monthly discharge amounts should be refined. It should also be noted the District's waste discharge requirements (WDRs) currently contain a wastewater inflow limit of 100,000 gpd which will need to be revised as new customers are added and flows increase.

**BEAR VALLEY WATER DISTRICT
 COMPARISON OF BLOOD CREEK FLOWS 2010/2011 AND 2015/2016
 June 7, 2016**

BLOODS CREEK TOTAL FLOW (MG)

	January	February	March	April	May	June
2010/2011			232	736	1,163	1,705
2015/2016	92	189	402	711	600	

20:1 DILUTION BLOODS CREEK FLOWS (MG)

	January	February	March	April	May	June
2010/2011			11.0	35.1	55.4	81.2
2015/2016	4.4	9.0	19.1	33.8	28.6	

BEAR VALLEY WATER DISTRICT WASTEWATER TREATMENT AND DISPOSAL SYSTEM

(2016 update - (Potential NPDES Permit) Water Year 2011 1 in 100 Year Water Balance Projection - 2000 thru 5/2016 90TH Percentile monthly ADF Plus 1,196 EDU (201 gpd/EDU) -Assumes no infiltration with new EDUs

1/5/2018 11:49

INPUT DATA

TREATMENT POND CHARACTERISTICS		STORAGE RESERVOIR		IRRIGATION AREA CHARACTERISTICS		CLIMATOLOGICAL FACTORS	
GROSS AREA (ac)	3.2	GROSS AREA (ac)	18.0	DISTRICT DISPOSAL LAND (AC)	80	OCT-APR EVAP/AVG EVAP RATIO	0.76
WATER SURFACE AREA (ac)	2.9	MAX. WATER SURFACE (ac)	14.2	SOIL WATER DEFICIT BEFORE IRRIGATION (IN)	n/a	MAY-SEP EVAP/AVG EVAP RATIO	1.00
		STORAGE CAPACITY (MG)	76.43	FRACTION OF LAND IRRIGATED	n/a	PAN COEFFICIENT	0.80
		FRAC EST. PERC	1.0	IRRIGATION EFFICIENCY (DECIMAL FRACT)	n/a	LAND PRECIP COLLECTED (FRAC)	0.9

PARAMETER / MONTH	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	ANNUAL
DAYS IN MONTH	30	31	31	28	31	30	31	30	31	31	30	31	365
AVG PAN EVAP (IN)	0.89	0.51	0.76	0.83	2.14	3.69	5.34	6.84	7.63	6.87	5.17	3.05	43.62
ESTIMATED PRECIP (IN)	10.69	20.00	2.84	10.62	21.42	3.37	4.65	1.57	1.66	0.00	1.88	4.35	83.00
ESTIMATED SNOW ACCUM (IN Water) _{sp}	7.82	23.83	26.08	36.04	63.71	41.82	22.86	0.00	0.00	0.00	0.00	2.98	
ESTIMATED SNOW MELT IN MONTH (IN Water)	0.00	0.00	0.36	0.12	0.71	13.40	21.11	22.88	0.00	0.00	0.00	1.42	60.00
ESTIMATED NEW SNOW IN MONTH (IN Water)	7.82	19.01	2.51	10.06	18.38	1.30	2.37	0.00	0.00	0.00	0.00	1.53	60.11
ESTIMATED MAX PERCOLATION (IN) _d	10.0	29.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.0
# OF ADDITIONAL CONNECTIONS (RLL)	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196
ADDITIONAL INFILTR FLOW (GAL/D)	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396
90TH PERCENTILE EXISTING FLOWS (Avg GAL/D)	35,340	75,835	83,020	106,476	123,884	184,549	184,868	125,446	74,970	84,231	40,142	32,953	
TOTAL INFILTR FLOW (GAL/D)	275,736	316,231	323,416	346,872	364,280	424,945	425,264	365,842	315,372	304,627	280,538	273,349	

CALCULATIONS

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	ANNUAL
WASTEWATER VOLUME (gal)	8,272,080	9,803,161	10,025,896	9,768,416	11,292,680	12,749,350	13,163,604	10,975,260	9,776,532	9,443,437	8,416,140	8,473,619	122,179,575
EVAPORATION (IN)	0.5	0.4	0.5	0.5	1.3	2.2	4.3	5.3	6.1	5.5	4.1	1.9	32.6
PRECIPITATION (IN)	10.66	20.00	2.84	10.62	21.42	3.37	4.65	1.57	1.66	0.00	1.88	4.35	83.00
TREATMENT POND													
PERCOLATION (IN)	-8.38	-5.41	-12.69	-7.74	-5.73	-21.00	-15.57	-17.29	-4.18	-2.11	-2.81	-2.97	-106.55
PERC VOLUME (gal)	-659,620	-426,378	-999,502	-609,371	-461,372	-1,705,370	-1,226,247	-1,381,614	-329,361	-168,362	-221,115	-233,664	-8,300,176
EVAP. VOLUME (gal)	39,374	31,499	39,374	39,374	102,372	173,244	338,614	417,361	460,369	433,111	322,664	149,620	2,567,166
PRECIP. VOLUME (gal)	917,893	1,721,582	244,465	914,160	1,843,814	290,087	400,268	135,144	142,891	0	160,107	374,444	7,144,564
TREATMENT DISPOSAL(GAIN) (gal)	(1,537,849)	(2,116,461)	(1,204,593)	(1,484,157)	(2,162,819)	(1,822,212)	(1,267,901)	(1,079,397)	8,107	266,749	(68,358)	(458,088)	(12,967,574)
POLISHING RESERVOIR													
PERCOLATION (IN)	10.00	29.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.00
PERC VOLUME (gal)	1,535,438	7,269,203	0	0	0	0	0	0	0	0	0	0	8,803,641
W.S. AREA (ac) _{ts}	5.65	9.23	10.59	11.28	11.85	12.20	11.03	11.01	10.27	10.10	8.53	3.88	
EVAP. VOLUME (gal)	75,772	100,251	143,735	152,944	416,428	728,847	1,287,727	1,684,042	1,700,365	1,507,916	949,500	169,939	8,850,466
PRECIP. VOLUME (gal)	5,017,132	9,607,174	1,374,682	5,180,096	10,441,890	1,645,993	2,256,360	761,738	802,063	0	889,825	2,026,313	39,983,375
MONTHLY AVAIL. SNOWMELT (IN) _{ts}	0.00	0.00	0.36	0.12	0.71	13.40	21.11	22.88	0.00	0.00	0.00	1.42	60.00
ESTIMATED SNOW CONTR. (%) _{ts}	0%	0%	0%	0%	0%	0%	45%	28%	0%	0%	0%	0%	
ESTIMATED AREA OF INFLUENCE (ac)	50	50	50	50	50	50	50	50	50	50	50	50	
ESTIMATED INFILX TO STORAGE (gal) _{ts}	0	0	0	0	0	0	12,897,727	6,697,760	0	0	0	0	21,595,507
RESERVOIR DISPOSAL(GAIN) (gal)	(3,404,922)	(2,238,720)	(1,230,947)	(5,007,151)	(10,023,451)	(917,146)	(13,856,380)	(7,875,476)	898,301	1,507,916	59,575	(1,626,974)	(43,824,776)
IRRIGATION													
IRRIGATION DISPOSAL (gal) _{ts}	0	0	0	0	0	0	0	0	10,788,000	22,351,000	17,521,000	11,969,000	62,577,000
STORAGE													
BEGINNING STORAGE (gal)	3,298,000	16,482,851	30,641,193	38,702,628	45,982,353	50,371,299	35,859,007	35,597,093	25,927,225	25,001,349	10,309,121	1,203,044	
CALCULATED STORAGE GAIN (gal)	13,214,851	14,156,341	12,461,435	18,259,725	23,508,649	15,467,700	26,338,095	19,030,133	-1,925,976	-14,692,228	-9,106,077	-1,240,119	
PROJECTED ESTIMATED STORAGE (gal)	16,482,851	30,641,193	43,102,628	54,982,353	69,471,299	65,859,007	64,197,093	55,527,225	25,001,349	10,309,121	1,203,044	0	
AMOUNT DISCHARGED TO BLOODS CREEK (gal)	0	0	4,400,000	9,000,000	19,100,000	30,000,000	28,600,000	26,800,000	0	0	0	0	119,700,000
ACTUAL ESTIMATED STORAGE (gal)	16,482,851	30,641,193	38,702,628	45,982,353	50,371,299	35,859,007	35,597,093	25,927,225	25,001,349	10,309,121	1,203,044	0	

MAXIMUM STORAGE (MG)..... 50.37
AVAILABLE STORAGE (MG)..... 76.43

SUMMARY

ANNUAL INFLOW (MG)		ANNUAL OUTFLOW POTENTIAL (MG)	
WASTEWATER..... 122.18		AMOUNT DISCHARGED TO BLOODS CREEK..... 119.70	
PRECIPITATION..... 47.13		EVAPORATION..... 11.42	
SNOW INFILX (MG)..... 21.50		PERCOLATION..... 17.10	
TOTAL..... 190.80		IRRIGATION..... 82.88	
		TOTAL..... 210.99	
		OVERALL BALANCE	
		UNUSED DISPOSAL CAPACITY (MG)..... 16.82	
		(MUST NOT BE NEGATIVE)	
		UNUSED STORAGE CAPACITY (MG)..... 26.06	
		(MUST NOT BE NEGATIVE)	

(a) Estimated percolation based upon measured inflow components, estimated evaporation, and actual reservoir levels in 2011 - in Storage Reservoir only.
 (b) Reservoir water surface area is a function of storage volume at start of month.
 (c) Estimated snowmelt volume available for influx to storage reservoir.
 (d) Estimated percentage of snowmelt contributing to influx to reservoir.
 (e) Estimated based on fraction of accumulated snow within reservoir "area of influence" entering the reservoir during snowmelt months.
 (f) Disposal capacity based on maximum estimated land disposal volumes.
 (g) Per Bloods Creek Gauging Station
 (h) Not used in calculations

BEAR VALLEY WATER DISTRICT WASTEWATER TREATMENT AND DISPOSAL SYSTEM

15/2016

9:34

(2017 update) Actual Flows/Precipitation

INPUT DATA

TREATMENT POND CHARACTERISTICS		STORAGE RESERVOIR		IRRIGATION AREA CHARACTERISTICS				CLIMATOLOGICAL FACTORS				
GROSS AREA (ac)	3.2	GROSS AREA (ac)	18.6	DISTRICT DISPOSAL LAND (AC)				OCT-APR EVAP/AVG EVAP RATIO				0.76
WATER SURFACE AREA (ac)	2.9	MAX WATER SURFACE (ac)	14.2	SOIL WATER DEFICIT BEFORE IRRIGATION (IN)	n/a			MAY-SEP EVAP/AVG EVAP RATIO				1.00
		STORAGE CAPACITY (MG)	76.43	FRACTION OF LAND IRRIGATED	n/a			PAN COEFFICIENT				0.80
		FRACTION OF EST. PERC	1.0	IRRIGATION EFFICIENCY (DECIMAL FRACTION)	n/a			LAND PRECIP COLLECTED (FRAC)				0.9

PARAMETER / MONTH	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	ANNUAL
DAYS IN MONTH	30	31	31	28	31	30	31	30	31	31	30	31	365
AVG PAN EVAP (IN)	0.89	0.61	0.76	0.83	2.14	3.69	5.34	6.64	7.03	6.87	5.17	3.05	43.62
ACTUAL PRECIP (IN)	3.47	9.28	33.72	24.71	6.27	10.16	1.20	2.09	0.00	0.00	0.00	0.00	90.91
ACTUAL SNOW ACCUM (IN Water) _(a)	2.26	4.56	27.72	43.32	40.56	39.24	0.00	0.00	0.00	0.00	0.00	0.00	
ACTUAL SNOW MELT IN MONTH (IN Water)	0.84	1.08	0.00	1.32	8.28	10.56	39.24	0.00	0.00	0.00	0.00	0.00	61.32
ACTUAL NEW SNOW IN MONTH (IN Water)	3.12	3.36	23.16	16.92	5.52	9.24	0.00	0.00	0.00	0.00	0.00	0.00	81.32
ESTIMATED MAX PERCOLATION (IN) _(b)	10.0	29.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ACTUAL INFLUENT FLOW (Avg. GAL/D)	32,967	93,549	152,032	212,250	121,032	156,800	166,591	109,700	0	0	0	0	

CALCULATIONS

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	ANNUAL
WASTEWATER VOLUME (gal)	989,010	2,800,019	4,712,992	5,943,000	3,761,892	4,704,000	5,784,011	3,261,000	0	0	0	0	32,046,024
EVAPORATION (IN)	0.5	0.4	0.5	0.5	1.3	2.2	4.3	6.1	5.5	4.1	1.9	1.9	32.6
PRECIPITATION (IN)	3.47	9.29	33.72	24.71	6.27	10.16	1.20	2.09	0.00	0.00	0.00	0.00	90.91
TREATMENT POND PERCOLATION (IN)	8.38	5.41	12.69	7.74	5.73	21.68	15.57	17.29	4.18	2.11	2.61	2.97	103.55
PERC VOLUME (gal)	659,820	426,378	999,502	609,371	451,372	1,705,370	1,226,247	1,381,614	329,361	166,362	221,116	233,864	8,330,176
EVAP. VOLUME (gal)	39,374	31,469	39,374	39,374	102,372	173,244	338,614	417,361	490,359	433,111	322,864	149,520	2,567,168
PRECIP. VOLUME (gal)	298,694	799,675	2,902,587	2,127,014	539,716	874,564	103,295	179,905	0	0	0	0	7,825,450
TREATMENT DISPOSAL (GAIN) _(c) (gal)	(400,293)	341,798	1,863,711	1,478,269	(14,026)	(1,004,051)	(1,461,566)	(1,599,670)	(809,720)	(569,473)	(543,979)	(353,484)	(3,131,893)
POLISHING RESERVOIR PERCOLATION (IN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PERC VOLUME (gal)	0	0	0	0	0	0	0	0	0	0	0	0	0
W.S. AREA (ac) _(d)	6.20	7.79	9.22	11.29	12.94	12.57	11.28	10.43	8.89	8.62	8.25	7.84	
EVAP. VOLUME (gal)	84,162	84,572	125,165	153,323	458,775	750,752	1,317,554	1,501,080	1,472,890	1,288,867	918,969	404,486	8,556,633
PRECIP. VOLUME (gal)	1,838,285	4,428,117	16,198,694	12,098,082	3,075,012	4,972,517	593,124	1,010,762	0	0	0	0	43,910,552
MONTHLY AVAIL. SNOWMELT (IN) _(e)	0.84	1.08	0.00	1.32	8.28	10.56	39.24	0.00	0.00	0.00	0.00	0.00	61.32
ESTIMATED SNOW CONTR. (%) _(f)	100%	100%	100%	100%	40%	40%	30%	0%	0%	0%	0%	0%	
ESTIMATED AREA OF INFLUENCE (ac)	50	50	50	50	50	50	50	50	50	50	50	50	
ESTIMATED INFLUX TO STORAGE (gal) _(g)	1,140,480	1,468,331	0	1,792,183	4,496,750	5,734,895	15,983,013	0	0	0	0	0	30,613,742
RESERVOIR DISPOSAL (GAIN) (gal)	2,694,503	5,807,876	16,071,528	13,648,942	7,114,988	9,858,751	15,248,583	(490,316)	(1,472,830)	(1,288,867)	(918,969)	(404,486)	65,967,701
IRRIGATION IRRIGATION DISPOSAL (gal) _(h)	0	0	0	0	0	0	0	0	0	0	0	0	0
STORAGE BEGINNING STORAGE (gal)	4,060,000	7,343,314	16,393,007	39,041,239	60,109,451	55,139,552	38,935,244	28,624,449	13,134,329	10,851,679	8,965,340	7,502,391	
CALCULATED STORAGE GAIN (gal)	3,283,314	9,049,993	22,648,232	21,068,212	10,852,950	13,656,700	19,571,027	1,171,612	-2,282,850	-1,898,339	-1,462,649	-787,970	
PROJECTED ESTIMATED STORAGE (gal)	7,343,314	16,393,007	39,041,239	60,109,451	70,962,401	68,796,252	58,506,271	29,996,061	10,651,679	8,965,340	7,502,391	6,714,421	
AMOUNT DISCHARGED TO BLOODS CREEK (gal)	0	0	0	0	15,822,849	29,851,008	29,581,822	16,861,732	0	0	0	0	
ESTIMATED STORAGE (gal)	7,343,314	16,393,007	39,041,239	60,109,451	55,139,552	38,935,244	28,624,449	13,134,329	10,851,679	8,965,340	7,502,391	6,714,421	
ACTUAL STORAGE (gal)	7,480,000	17,530,000	40,520,000	64,370,000	56,340,000	39,880,000	27,490,000	15,720,000					

SUMMARY	ANNUAL INFLOW (MG)	ANNUAL OUTFLOW POTENTIAL (MG)	OVERALL BALANCE
WASTEWATER	32.05	AMOUNT DISCHARGED TO BLOODS CREEK	92.23
PRECIPITATION	51.74	EVAPORATION	11.12
SNOW INFLUX (MG)	30.61	PERCOLATION	8.39
TOTAL	114.40	IRRIGATION	0.00
		TOTAL	111.74
		MAXIMUM STORAGE (MG)	63.11
		AVAILABLE STORAGE (MG)	79.43
		UNUSED DISPOSAL CAPACITY (MG)	-6.71
		UNUSED STORAGE CAPACITY (MG)	16.32

(a) Estimated percolation based upon measured inflow components, estimated evaporation, and actual reservoir levels in 2011 - in Storage Reservoir only.
 (b) Reservoir water surface area is a function of storage volume at start of month.
 (c) Estimated snowmelt volume available for influx to storage reservoir.
 (d) Estimated percentage of snowmelt contributing to influx to reservoir.
 (e) Estimated based on fraction of accumulated snow within reservoir "area of influence" entering the reservoir during snowmelt months.
 (f) Disposal capacity based on maximum estimated land disposal volumes.
 (g) Per Bloods Creek Gauging Station
 (h) Not used in calculations

BEAR VALLEY WATER DISTRICT WASTEWATER TREATMENT AND DISPOSAL SYSTEM															
[2017 update- 2011 Precip. Pattern] 1 in 100 Year Water Balance Projection - 2000 thru 5/2016 90TH Percentile monthly ADF plus 1196 EDU (201 gpd/EDU) - Assumes no infiltratn with new EDUs															
1/5/2018 11:53															
INPUT DATA															
TREATMENT POND CHARACTERISTICS				STORAGE RESERVOIR				IRRIGATION AREA CHARACTERISTICS				CLIMATOLOGICAL FACTORS			
GROSS AREA (ac)		3.2	GROSS AREA (ac)		18.0	DISTRICT DISPOSAL LAND (AC)		80		OCT-APR EVAP/AVG EVAP RATIO				0.79	
WATER SURFACE AREA (ac)		2.9	MAX. WATER SURFACE (ac)		14.2	SOIL WATER DEFICIT BEFORE IRRIGATION (IN)		n/a		MAY-SEP EVAP/AVG EVAP RATIO				1.00	
			STORAGE CAPACITY (MG)		76.43	FRACT OF LAND IRRIGATED		n/a		PAN COEFFICIENT				0.80	
			FRAC EST. PERC		1.0	IRRIGATION EFFICIENCY (DECIMAL FRACT)		n/a		LAND PRECIP COLLECTED (FRAC)				0.9	
						FRACTION OF EST. PERC RATE		n/a							
PARAMETER / MONTH	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	ANNUAL		
DAYS IN MONTH	30	31	31	28	31	30	31	30	31	31	30	31	365		
AVG PAN EVAP (IN)	0.89	0.61	0.76	0.83	2.14	3.89	5.34	6.64	7.83	6.87	5.17	3.05	43.82		
ESTIMATED PRECIP (IN)	10.68	20.00	2.84	10.62	21.42	3.37	4.65	1.57	1.66	0.00	1.85	4.35	83.00		
ESTIMATED SNOW ACCUM (IN Water) ₂₀	7.82	23.83	28.08	36.04	53.71	41.62	22.68	0.00	0.00	0.00	0.00	2.96			
ESTIMATED SNOW MELT IN MONTH (IN Water)	0.00	0.00	0.38	0.12	0.71	13.40	21.11	22.88	0.00	0.00	0.00	1.42	60.00		
ESTIMATED NEW SNOW IN MONTH (IN Water)	7.82	16.01	2.81	10.08	18.38	1.30	2.37	0.00	0.00	0.00	0.00	1.53	80.11		
ESTIMATED MAX PERCOLATION (IN) ₂₀	10.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
# OF ADDITIONAL CONNECTIONS (RLU)	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196			
ADDITIONAL INFLUENT FLOW (GAL/D)	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396			
90TH PERCENTILE EXISTING FLOWS (Avg. GAL/D)	35,340	75,835	83,020	108,476	123,884	184,540	184,889	125,448	74,976	64,231	40,142	32,953			
TOTAL INFLUENT FLOW (GAL/D)	275,739	316,231	323,416	348,872	394,280	424,945	425,294	365,842	315,372	304,627	280,538	273,349			
CALCULATIONS															
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	ANNUAL		
WASTEWATER VOLUME (gal)	8,272,080	9,803,161	10,025,698	9,768,416	11,282,680	12,748,350	13,183,804	10,975,260	9,776,632	9,443,437	8,415,140	8,473,819	122,179,575		
EVAPORATION (IN)	0.5	0.4	0.5	0.5	1.3	2.2	4.3	5.3	6.1	5.5	4.1	1.9	32.5		
PRECIPITATION (IN)	10.68	20.00	2.84	10.62	21.42	3.37	4.65	1.57	1.66	0.00	1.85	4.35	83.00		
TREATMENT POND															
PERCOLATION (IN)	8.38	5.41	12.69	7.74	5.73	21.68	15.57	17.29	4.18	2.11	2.81	2.97	108.55		
PERC VOLUME (gal)	659,620	426,378	999,502	606,371	451,372	1,705,870	1,226,247	1,381,614	329,901	168,382	221,115	233,884	8,369,176		
EVAP. VOLUME (gal)	39,374	31,469	39,374	39,374	102,372	173,244	338,814	417,361	480,359	433,111	322,864	149,820	2,587,166		
PRECIP. VOLUME (gal)	917,603	1,721,582	244,465	914,160	1,843,814	290,087	400,268	135,144	142,891	0	160,107	374,444	7,144,564		
TREATMENT DISPOSAL (GAIN) (gal)	216,809	1,263,705	(794,411)	265,415	1,260,070	(1,588,528)	(1,164,693)	(1,843,831)	(668,629)	(598,473)	(383,872)	(9,040)	(9,812,778)		
POLISHING RESERVOIR															
PERCOLATION (IN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
PERC VOLUME (gal)	0	0	0	0	0	0	0	0	0	0	0	0	0		
W.S. AREA (ac) ₂₀	6.20	9.37	11.21	11.71	12.19	12.46	11.02	10.79	9.80	9.69	6.30	2.57			
EVAP. VOLUME (gal)	84,162	101,709	152,244	158,953	490,172	744,194	1,286,794	1,553,151	1,623,738	1,446,786	700,034	132,594	8,415,492		
PRECIP. VOLUME (gal)	5,032,687	9,614,784	1,379,515	5,172,859	10,451,230	1,848,344	2,256,279	760,823	799,979	0	878,649	2,010,984	40,016,223		
MONTHLY AVAIL. SNOWMELT (IN) ₂₀	0.00	0.00	0.38	0.12	0.71	13.40	21.11	22.88	0.00	0.00	0.00	1.42	60.00		
ESTIMATED SNOW CONTR. (%) ₂₀	0%	0%	0%	0%	0%	0%	45%	29%	50%	50%	50%	50%			
ESTIMATED AREA OF INFLUENCE (ac)	50	50	50	50	50	50	50	50	50	50	50	50			
ESTIMATED INFLUX TO STORAGE (gal) ₂₀	0	0	0	0	0	0	12,997,727	8,697,780	0	0	0	996,122	22,561,629		
RESERVOIR DISPOSAL (GAIN) (gal)	4,848,725	9,512,995	1,227,271	5,019,906	10,031,058	904,150	13,667,212	7,505,452	(823,760)	(1,446,786)	177,715	2,844,422	54,162,360		
IRRIGATION															
IRRIGATION DISPOSAL (gal) ₂₀	0	0	0	0	0	0	0	0	10,796,000	22,391,000	17,521,000	11,989,000	62,877,000		
STORAGE															
BEGINNING STORAGE (gal)	4,090,000	17,499,415	38,079,276	44,138,032	50,185,768	53,690,576	35,763,549	33,049,972	21,686,653	19,176,796	4,212,974	0			
CALCULATED STORAGE GAIN (gal)	13,438,415	23,579,891	10,458,756	15,047,737	22,613,808	12,063,973	29,888,423	17,238,881	-2,510,057	-14,963,822	-9,311,017	-880,799			
PROJECTED ESTIMATED STORAGE (gal)	17,499,415	39,079,276	48,538,032	59,185,768	72,799,576	65,753,549	61,649,972	50,288,853	19,176,796	4,212,974	0	0			
AMOUNT DISCHARGED TO BLOODS CREEK (gal)	0	0	4,400,000	9,000,000	19,100,000	30,000,000	28,600,000	29,600,000	0	0	0	0	119,700,000		
ESTIMATED STORAGE (gal)	17,499,415	38,079,276	44,138,032	50,185,768	53,690,576	35,763,549	33,049,972	21,686,653	19,176,796	4,212,974	0	0			
												MAXIMUM STORAGE (MG)	53.70		
												AVAILABLE STORAGE (MG)	78.43		
SUMMARY															
ANNUAL INFLOW (MG)															
WASTEWATER													122.18		
PRECIPITATION													47.16		
SNOW INFLUX (MG)													22.58		
TOTAL													191.90		
ANNUAL OUTFLOW POTENTIAL (MG)															
												AMOUNT DISCHARGED TO BLOODS CREEK	119.70		
												EVAPORATION	10.98		
												PERCOLATION	8.39		
												IRRIGATION	62.68		
												TOTAL	201.75		
OVERALL BALANCE															
												UNUSED DISPOSAL CAPACITY (MG)	5.70		
												(MUST NOT BE NEGATIVE)			
												UNUSED STORAGE CAPACITY (MG)	22.73		
												(MUST NOT BE NEGATIVE)			

(a) Estimated percolation based upon measured inflow components, estimated evaporation, and actual reservoir levels in 2011 - in Storage Reservoir only.
 (b) Reservoir water surface area is a function of storage volume at start of month.
 (c) Estimated snowmelt volumes available for influx to storage reservoir.
 (d) Estimated percentage of snowmelt contributing to influx to reservoir.
 (e) Estimated based on fraction of accumulated snow within reservoir "area of influence" entering the reservoir during snowmelt months.
 (f) Disposal capacity based on maximum estimated land disposal volumes.
 (g) Per Bloods Creek Gauging Station
 (h) Not used in calculations

BEAR VALLEY WATER DISTRICT WASTEWATER TREATMENT AND DISPOSAL SYSTEM

(2017 update - 2017 Precip. Pattern) 1 in 100 Year Water Balance Projection - 2000 thru 5/2016 91TH Percentile monthly ADF plus 1196 EDU (201 gpd/EDU) - Assumes no infiltration with new EDUs

1/5/2018

11.52

INPUT DATA

TREATMENT POND CHARACTERISTICS

GROSS AREA (ac)..... 3.2
 WATER SURFACE AREA (ac)..... 2.9

STORAGE RESERVOIR

GROSS AREA (ac)..... 18.6
 MAX. WATER SURFACE (ac)..... 14.2
 STORAGE CAPACITY (MG)..... 76.43
 FRAC EST. PERC..... 1.0

IRRIGATION AREA CHARACTERISTICS

DISTRICT DISPOSAL LAND (AC)..... 80
 SOIL WATER DEFICIT BEFORE IRRIGATION (IN)..... n/a
 FRACT OF LAND IRRIGATED..... n/a
 IRRIGATION EFFICIENCY (DECIMAL FRACT)..... n/a
 FRACTION OF EST. PERC RATE..... n/a

CLIMATOLOGICAL FACTORS

OCT-APR EVAP/AVG EVAP RATIO..... 0.76
 MAY-SEP EVAP/AVG EVAP RATIO..... 1.00
 PAN COEFFICIENT..... 0.80
 LAND PRECIP COLLECTED (FRAC)..... 0.9

PARAMETER / MONTH	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	ANNUAL
DAYS IN MONTH	30	31	31	28	31	30	31	30	31	31	30	31	365
AVG PAN EVAP (IN)	0.59	0.61	0.78	0.83	2.14	3.98	5.34	6.64	7.63	6.87	5.17	3.05	43.62
ESTIMATED PRECIP (IN)	3.17	8.48	30.79	22.56	5.72	9.28	1.10	1.91	0.00	0.00	0.00	0.00	83.00
ESTIMATED SNOW ACCUM (IN Water) ₃₀	2.23	4.46	27.12	42.39	39.69	38.40	0.00	0.00	0.00	0.00	0.00	0.00	
ESTIMATED SNOW MELT IN MONTH (IN Water)	0.82	1.06	0.00	1.29	8.10	10.33	38.40	0.00	0.00	0.00	0.00	0.00	60.00
ESTIMATED NEW SNOW IN MONTH (IN Water)	3.05	3.29	22.86	16.56	5.40	9.04	0.00	0.00	0.00	0.00	0.00	0.00	60.00
ESTIMATED MAX PERCOLATION (IN) ₃₀	10.0	29.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
# OF ADDITIONAL CONNECTIONS (RLU)	1,166	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	1,196	
ADDITIONAL INFLUENT FLOW (GAL/D)	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	240,396	
90TH PERCENTILE EXISTING FLOWS (Avg. GAL/D)	35,340	75,835	83,020	108,478	123,684	184,549	184,638	125,446	74,976	84,231	40,142	32,953	
TOTAL INFLUENT FLOW (GAL/D)	275,736	316,231	323,416	348,872	364,260	424,945	425,284	365,642	315,372	304,627	260,538	273,349	

CALCULATIONS

	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	ANNUAL
WASTEWATER VOLUME (gal)	8,272,080	9,803,161	10,025,896	9,768,416	11,292,680	12,748,350	13,163,804	10,975,260	9,776,532	9,443,437	8,415,140	8,473,819	122,179,575
EVAPORATION (IN)	0.5	0.4	0.5	0.5	1.3	2.2	4.3	5.3	6.1	5.5	4.1	1.9	32.6
PRECIPITATION (IN)	3.17	8.48	30.79	22.56	5.72	9.28	1.10	1.91	0.00	0.00	0.00	0.00	83.01
TREATMENT POND													
PERCOLATION (IN)	8.38	5.41	12.69	7.74	5.73	21.66	15.57	17.20	4.18	2.11	2.81	2.97	108.55
PERC VOLUME (gal)	659,820	428,378	999,502	609,371	451,372	1,705,370	1,228,247	1,361,614	329,361	166,382	221,115	233,864	8,390,176
EVAP. VOLUME (gal)	39,374	31,469	39,374	39,374	102,372	173,244	338,614	417,361	480,359	433,111	322,664	149,620	2,567,166
PRECIP. VOLUME (gal)	272,871	723,951	2,650,375	1,941,544	492,372	798,814	94,687	184,411	0	0	0	0	7,145,425
TREATMENT DISPOSAL (GAIN) _(gal)	(426,123)	272,074	1,611,500	1,293,199	(61,372)	(1,079,801)	(1,470,174)	(1,814,564)	(808,720)	(599,473)	(543,979)	(383,484)	(3,811,918)
POLISHING RESERVOIR													
PERCOLATION (IN)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PERC VOLUME (gal)	0	0	0	0	0	0	0	0	0	0	0	0	0
W.S. AREA (ac) ₃₀	6.20	9.02	10.62	12.32	13.41	13.33	12.67	12.50	10.89	10.58	9.12	6.05	
EVAP. VOLUME (gal)	84,162	97,825	142,868	167,265	473,377	796,269	1,479,375	1,799,534	1,803,763	1,580,200	1,015,010	343,175	9,782,944
PRECIP. VOLUME (gal)	1,499,647	4,065,510	14,698,468	11,026,175	2,812,579	4,581,027	538,670	934,466	0	0	0	0	40,336,541
MONTHLY AVAIL. SNOWMELT (IN) ₃₀	0.82	1.06	0.00	1.29	8.10	10.33	38.40	0.00	0.00	0.00	0.00	0.00	60.00
ESTIMATED SNOW CONTR. (%) ₃₀	100%	100%	100%	100%	40%	40%	30%	0%	0%	0%	0%	0%	
ESTIMATED AREA OF INFLUENCE (ac)	50	50	50	50	50	50	50	50	50	50	50	50	
ESTIMATED INFUX TO STORAGE (gal) ₃₀	1,116,930	1,434,767	0	1,753,604	4,368,951	5,611,532	15,638,958	0	0	0	0	0	29,954,738
RESERVOIR DISPOSAL (GAIN) (gal)	2,528,414	5,405,352	14,755,579	12,612,514	8,739,152	9,376,289	14,636,250	(665,067)	(1,803,763)	(1,580,200)	(1,015,010)	(343,175)	60,508,335
IRRIGATION													
IRRIGATION DISPOSAL (gal) ₃₀	0	0	0	0	0	0	0	0	10,796,000	22,361,000	17,621,000	11,999,000	62,677,000
STORAGE													
BEGINNING STORAGE (gal)	4,060,000	14,434,371	29,914,958	51,907,933	66,582,062	65,452,522	58,497,361	54,309,241	34,204,870	30,571,918	15,474,682	4,810,833	
CALCULATED STORAGE GAIN (gal)	10,374,371	15,480,587	26,392,975	23,674,129	17,970,480	21,044,839	26,411,680	8,485,628	-3,632,951	-15,097,236	-10,663,849	-4,251,841	
PROJECTED ESTIMATED STORAGE (gal)	14,434,371	29,914,958	56,307,933	75,582,062	84,552,522	86,497,361	82,909,241	62,804,870	30,571,918	15,474,682	4,810,833	558,993	=CARRYOVER
AMOUNT DISCHARGED TO BLOODS CREEK (gal)	0	0	4,400,000	9,000,000	10,100,000	30,000,000	28,600,000	28,600,000	0	0	0	0	119,700,000
ESTIMATED STORAGE (gal)	14,434,371	29,914,958	51,907,933	66,582,062	65,452,522	58,497,361	54,309,241	34,204,870	30,571,918	15,474,682	4,810,833	558,993	

SUMMARY

ANNUAL INFLOW (MG)	ANNUAL OUTFLOW POTENTIAL (MG)	OVERALL BALANCE
WASTEWATER..... 122.18	AMOUNT DISCHARGED TO BLOODS CREEK..... 119.70	UNUSED DISPOSAL CAPACITY (MG)..... -0.56
PRECIPITATION..... 47.48	EVAPORATION..... 12.35	(MUST NOT BE NEGATIVE)
SNOW INFUX (MG)..... 29.95	PERCOLATION..... 8.39	UNUSED STORAGE CAPACITY (MG)..... 9.85
TOTAL..... 199.62	IRRIGATION..... 62.68	(MUST NOT BE NEGATIVE)
	TOTAL..... 203.12	

(a) Estimated percolation based upon measured inflow components, estimated evaporation, and actual reservoir levels in 2011 - in Storage Reservoir only.
 (b) Reservoir water surface area is a function of storage volume at start of month.
 (c) Estimated snowmelt volume available for influx to storage reservoir.
 (d) Estimated percentage of snowmelt contributing to influx to reservoir.
 (e) Estimated based on fraction of accumulated snow within reservoir "area of influence" entering the reservoir during snowmelt months.
 (f) Disposal capacity based on maximum estimated land disposal volumes.
 (g) Per Bloods Creek Gauging Station
 (h) Not used in calculations

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**BEAR VALLEY WATER DISTRICT
EXISTING NUMBER OF CONNECTIONS (EDUs)
1/16/2018**

RESIDENTIAL DEVELOPMENT		2005		2018		Buildout
Single Family Parcels						
Northside						
	SF - 1 (Old Sub)	41	45	301	436	59
	SF - 2, 3, 4, 6 (New Sub)	22	22	37	436	37
	Lake Alpine Basin Cabins	22	22	37	436	37
	North Side Sub Total	346	368	368	532	532
Southside						
	SF - 5	0	0	0	44	44
	SF - 7	0	0	0	50	50
	SF - 8	0	0	0	22	22
	SF - 9	0	0	0	44	44
	SF - 10	0	0	0	1	1
	Southside Sub Total	0	0	0	161	161
	Residential Sub Total	346	368	368	693	693
Multi Family Parcels						
Northside						
	MF - 1 (Condo Bear)	16	16	16	16	16
	MF - 2 (Creekside)	113	113	113	132	132
	MF - 4 (Tamarack)	20	20	20	20	20
	MF - 5 (Pine Tree Village / Silver Mountain)	0	0	0	100	100
	MF - 6 (Sundowner)	0	0	0	12	12
	MF - 9	0	0	0	30	30
	MF - 11	0	0	0	12	12
	MF - 10 (Black Forest)	0	0	0	45	45
	MF - 12 (Bear Paw Ridge)	0	0	0	113	113
	North Side Sub Total	149	149	149	480	480
Southside						
	MF - 12 (Southside)	0	0	0	34	34
	MF - 13 (Southside)	0	0	0	54	54
	MF - 14 (Southside)	0	0	0	62	62
	MF - 15 (Southside)	0	0	0	122	122
	MF - 16 (Southside)	0	0	0	40	40
	South Side Sub Total	0	0	0	312	312
	Multi Family Sub Total	149	149	181	792	792
	Single Family + Multi Family Total	495	517	549	1485	1485
COMMERCIAL DEVELOPMENT						
	VC - 1 (Bear Valley Village - Existing)	54	54	54	76	76
	VC - 2 (Bear Valley Village - Proposed)	0	0	0	385	385
	Bear Valley Mountain Resort	21	21	21	29	29
	Bear Top Lodge (Proposed)	0	0	0	14	14
	US Forest Service Facilities (Resort/Campgrounds)	101	101	101	26	26
	Commercial Sub Total	101	101	101	530	530
	Grand Total	596	650	650	2015	2015
	Total Number of EDUs Per 1978 Master Plan =	596	650	650	2015	2015
	EDUs Remaining - System Total - 1846 EDUs =	1250	1196	1196	-169	-169

- 1 BVMF General Development Plan - SF 1
- 2 BVMF General Development Plan - SF 2, 3, 4, 6, MF-11, MF-12 (New Sub incl Cub Lane, Avahanche, Flynn Road, Granite Ridge)
- 3 Existing Condos - Creekside = 113, Condo Bear = 16, Tamarack = 20, Sundowner = 12; Total = 161
- 4 [22] Special Use Permit (SUP) Cabins Invoiced (connected to BVMF); 37 Cabins Total - Assumes All Could Connect to BVMF
- 5 BVMF General Development Plan - VC 1 + C 1
- 6 2012 BVMF EIR Addendum - The project would generate a net demand for 385 new SFEs: (350 residential SFEs + 16.8 employee housing SFEs + 45 commercial SFEs - 26.5 Bear Valley Lodge SFEs = 385 SFEs). Rather than defining a unit as a two-bedroom residence, the applicant is proposing to define the residential portion of the project in terms of Equivalent Dwelling Units where one EDU is equivalent to 1,350 sq ft of residential space.
- 7 2012 BVMF EIR Addendum - Increasing skier visitation by 40,000 (i.e., from 140,000 to 180,000 skiers per season) represents a 29 percent increase. Therefore, the ski area improvements could generate demand for an additional 7 SFEs (i.e., a 29-percent increase over 24 SFEs).
- 8 Bear Valley Mountain - Wastewater Flow 543,300 gal - 12 month
- 9 2012 Bear Valley Mountain Expansion EA - 12,500 sq ft Bear Top Lodge - 270 seat capacity - 14 RLUs
- 10 USFS - Day Use Bathrooms (4) 131,150 gal - 12 month
USFS - Campground Bathrooms (14) 303,980 gal - 12 month
Lake Alpine Resort (Res/Cabins/Store) 295,191 gal - 12 month
- 11 2006 BVMF - ECOLOGIC Engineering - Phase 1 Tertiary Facilities Plan 13

**Bear Valley Water District
Depreciation Schedule - Book Data
Year Ended 12/31/2017
Buy-In Fee Calculation**

<u>Set No.</u>	<u>Asset Description</u>	<u>Life</u>	<u>Date Purchased</u>	<u>Original Cost</u>	<u>Date Constructed</u> <u>ENR Construction</u> <u>Cost Index</u>	<u>Dec. 2017</u> <u>ENR Construction</u> <u>Cost Index</u>	<u>Adjusted</u> <u>Dec 2017 Cost</u>
(c) 1: LAND							
1.0 Land	1.0 Land	0	1/19/20	\$25,805			
© 1: LAND				\$25,805			
(c) 21: PLANT & ADMIN							
11.0	1993 Ford 4X4 Pickup Truck	5	6/1/93	\$12,747	5260	10870	\$26,342
14.0	Snowblower	5	10/1/97	\$1,925	5848	10870	\$3,578
15.0	Office Building	40	10/31/97	\$288,204	5848	10870	\$535,701
17.0	Dodge Ram Pickup	6	1/1/99	\$16,846	6000	10870	\$30,519
197.0	Utility Transfer Switch	20	8/24/15	\$1,555	10039	10870	\$1,684
	Phone System		2016	\$2,240	10338	10870	\$2,355
	Web Site		2014	\$1,775	9806	10870	\$1,968
© 21: PLANT & ADMIN - 18 Asset(s)				\$325,292			\$602,147
(c) 22: SEWAGE - LIFT STATIONS							
21.0	Generator	20	11/1/91	\$12,402	4896	10870	\$27,535
23.0	Boat Ramp	15	12/1/92	\$6,299	5059	10870	\$13,534
25.0	Chickaree Pump House	10	6/1/98	\$3,190	5895	10870	\$5,882
26.0	Chickaree Pump House	10	1/1/99	\$1,126	6000	10870	\$2,040
27.0	Lake Alpine Pumps & Auto Dialer	15	1/1/05	\$76,657	7297	10870	\$114,192
28.0	Irr. Pump #2 & Upgrades	15	1/1/05	\$2,720	7297	10870	\$4,052
29.0	Remodel Costs	15	1/1/05	\$8,765	7297	10870	\$13,057
30.0	Boat Ramp	15	1/1/05	\$2,567	7297	10870	\$3,824
31.0	Auto Dialer	15	9/1/05	\$3,516	7540	10870	\$5,069
33.0	A/B 100 HP Start w/Controls	15	10/13/06	\$13,621	7883	10870	\$18,782
199.0	Phase Converter L.A.	10	6/30/17	\$6,891	10703	10870	\$6,999
	(2) Apollo Actuator Valves - Lake Alpine Boat Ramp		2017	\$5,959	10870	10870	\$5,959
© 22: SEWAGE - LIFT STATIONS - 17 Asset (s)				\$143,713			\$220,924
© 23: SEWAGE COLLECTION							
37.0	Main & LA Pump Station	40	9/1/79	\$33,186	3003	10870	\$120,124
38.0	Connector	10	10/1/79	\$7,846	3003	10870	\$28,400
39.0	Pump Station Modification	40	10/1/79	\$6,748	3003	10870	\$24,426
40.0	Log Cabin Bypass	20	11/1/79	\$8,157	3003	10870	\$29,526
42.0	Containment Basin	10	9/1/79	\$5,716	3003	10870	\$20,690
43.0	Comminutor	10	10/1/79	\$3,289	3003	10870	\$11,905
44.0	Pump	10	7/31/80	\$2,236	3237	10870	\$7,509
46.0	Pump & Switch Gear	10	11/1/80	\$2,478	3237	10870	\$8,321
48.0	Raco High Water Alarm	10	10/18/83	\$1,809	4066	10870	\$4,836
49.0	Transformer	10	10/1/84	\$4,567	4146	10870	\$11,974
52.0	Relief Control Valve-LA Pump	10	7/1/85	\$1,947	4195	10870	\$5,045
53.0	Press Relief Valves - Boat Ramp	10	7/1/85	\$518	4195	10870	\$1,342
57.0	Leak Detection System	10	9/1/86	\$1,982	4295	10870	\$5,016
61.0	Overflow Tanks	10	6/1/88	\$9,339	4519	10870	\$22,464
63.0	Smart Pump LC Unitype	10	10/1/89	\$1,129	4615	10870	\$2,659
64.0	New Pump - Lake Alpine	10	10/1/89	\$6,778	4615	10870	\$15,965
67.0	Generator (Emergency Response)	15	8/1/02	\$9,547	6592	10870	\$15,743
70.0	System Maps	10	11/1/03	\$6,928	6794	10870	\$11,084
71.0	Waterman Valve	10	11/1/03	\$5,954	6794	10870	\$9,526
75.0	2007 Chevy Truck	5	10/13/06	\$8,330	7883	10870	\$11,486
77.0	Confined Space Entry Equipment	10	1/1/09	\$4,219	8549	10870	\$5,364
177.0	Main Pump Station Flood Control	20	6/30/12	\$171,561	9291	10870	\$200,718
182.0	Ebara K Series Pump	10	6/25/13	\$6,114	9542	10870	\$6,965
183.0	Versight Pro 200 Push Camera	10	8/30/13	\$11,910	9545	10870	\$13,563
185.0	Additional Ebara Pump Costs	10	9/30/13	\$688	9552	10870	\$783
198.0	Smartcover Monitor/Alarm	7	6/30/17	\$15,390	10703	10870	\$15,630
	New E&H 8" Mag Flow Meter - Main Pump St.		2017	\$16,185	10870	10870	\$16,185
© 23: SEWAGE COLLECTION 47 Asset (s)				\$354,551			\$627,250

<u>Set No.</u>	<u>Asset Description</u>	<u>Life</u>	<u>Date Purchased</u>	<u>Original Cost</u>	<u>Date Constructed</u> <u>ENR Construction</u> <u>Cost Index</u>	<u>Dec. 2017</u> <u>ENR Construction</u> <u>Cost Index</u>	<u>Adjusted</u> <u>Dec 2017 Cost</u>
@ 24:	SEWAGE DISPOSAL FACILITY						
76.0	Bloods Creek Outfall	40	6/30/08	\$742,797	8185	10870	\$986,463
78.0	Disposal Facilities	40	1/1/71	\$8,587	1581	10870	\$59,039
79.0	Engineering	40	1/1/77	\$6,648	2576	10870	\$28,053
80.0	Irrigation Pipe	10	8/1/80	\$7,567	3237	10870	\$25,410
81.0	Spray Field Phase I	10	1/1/83	\$48,778	4066	10870	\$130,403
82.0	Sprayfield Additions	20	9/1/85	\$6,644	4195	10870	\$17,216
83.0	Pump & Irrigation Valves	10	8/1/86	\$7,074	4295	10870	\$17,903
84.0	Irrigation Systems	10	8/1/87	\$5,070	4406	10870	\$12,508
85.0	New Irrigation System	7	7/1/88	\$522	4519	10870	\$1,256
86.0	Absorbion Trench	10	7/1/88	\$1,970	4519	10870	\$4,739
87.0	Trench	10	9/1/88	\$5,123	4519	10870	\$12,323
88.0	Sprayfield	10	7/1/89	\$1,068	4615	10870	\$2,516
89.0	Sprayfield	10	9/1/89	\$445	4615	10870	\$1,048
90.0	Sprayfield	10	4/1/90	\$10,237	4693	10870	\$23,711
91.0	Pump	10	7/1/90	\$7,643	4734	10870	\$17,550
92.0	Sprayfield Expansion	10	10/1/91	\$4,251	4892	10870	\$9,446
93.0	Sprayfield Expansion	10	6/1/93	\$420	5260	10870	\$868
94.0	Sprayfield Expansion	10	8/1/93	\$13,353	5230	10870	\$27,753
95.0	Extend Sprayfield	10	12/1/96	\$10,131	5744	10870	\$19,172
96.0	Irrigation Pipe	10	3/1/98	\$898	5875	10870	\$1,661
97.0	Booster Pump MDL 8C-4	10	7/1/01	\$8,940	6404	10870	\$15,175
98.0	Guard-It Auto Dialer	10	9/1/01	\$1,053	6391	10870	\$1,791
99.0	Pumps	10	8/1/01	\$8,399	6389	10870	\$14,290
100.0	Effluent 100 HP Pump	10	10/1/01	\$7,000	6397	10870	\$11,895
101.0	Peerless Pump	10	9/1/02	\$5,974	6589	10870	\$9,855
102.0	Simfloo Pump	7	10/1/02	\$2,365	6579	10870	\$3,908
103.0	Irrigation Flow Meter	10	6/1/04	\$9,841	7109	10870	\$15,047
104.0	Groundwater Monitoring Wells	10	1/1/05	\$10,785	7297	10870	\$16,066
105.0	Paco Pumps	10	10/23/06	\$4,050	7883	10870	\$5,585
106.0	Outfall Permit & Design	50	1/5/07	\$51,378	7880	10870	\$70,873
107.0	NPDES Permit - 2011	5	7/1/11	\$60,189	9080	10870	\$72,054
108.0	DSP Facilities/Sprayfield Pipe	5	6/30/12	\$17,442	9291	10870	\$20,406
109.0	Dechlorination System	10	7/1/12	\$21,540	9324	10870	\$25,112
110.0	Outfall Bypass	25	8/24/14	\$28,914	9846	10870	\$31,921
111.0	Pump Rebuild	15	9/22/14	\$20,199	9870	10870	\$22,246
112.0	Softstart for Pump	15	9/17/14	\$8,545	9870	10870	\$9,411
113.0	Cla-Val Irrigation Pump	20	11/24/14	\$7,229	9912	10870	\$7,928
114.0	Sprayfield Pipes	5	6/30/17	\$5,965	10703	10870	\$6,058
115.0	MPS Pump Contoller - SCADA Power Fail Relay	10	6/30/17	\$1,188	10703	10870	\$1,207
178.0	Sigma Flow Meter - Analog Connections	10	6/30/17	\$2,072	10703	10870	\$2,104
	2015 Mixing Zone Study		2015	\$37,612	10035	10870	\$40,741
179.0	2017 Mixing Zone Study	5	6/30/17	\$13,234	10703	10870	\$13,440
181.0	NPDES Permit - 2016	5	6/30/17	\$10,345	10703	10870	\$10,506
190.0	Priority Pollutant Test	5	6/30/17	\$10,378	10703	10870	\$10,540
	Chronic and Acute Toxicity Tests		2017	\$7,361	10870	10870	\$7,361
	SCADA Monitoring Alarm System (2014-2017)		2017	\$122,348	10870	10870	\$122,348
	Sprayfield Access Road Improvements		2017	\$12,515	10870	10870	\$12,515
	ATI Chlorine & Sulfite Analyzers + Install		2017	\$21,657	10870	10870	\$21,657
@ 24:	SEWAGE DISPOSAL FACILITY			\$1,407,744			\$2,001,075
@ 25:	SUBSURFACE LINES						
116.0	Sewage Lines	99	1/19/71	\$72,801	1581	10870	\$500,536
117.0	Engineering	99	8/30/71	\$1,003	1581	10870	\$6,896
118.0	System (1972-1)	99	1/19/74	\$564,625	2020	10870	\$3,038,353
119.0	Tract #5 Sewer System (1974-1)	99	1/19/76	\$34,732	2401	10870	\$157,241
120.0	Lake Alpine Col Sys 1 Pump Station	99	1/1/76	\$502,742	2401	10870	\$2,276,054
121.0	Sewer Line	75	9/19/64	\$5,500	936	10870	\$63,873
122.0	Subsurface Lines	75	11/1/97	\$1,941	5838	10870	\$3,614
123.0	Sewer Lateral To Lot 1-7	75	12/1/01	\$3,978	6390	10870	\$6,767
124.0	Sewage Lines - Pair - Inst.	99	1/1/77	\$4,167	2576	10870	\$17,584
125.0	Sewer Lines Lissen Project	50	7/31/10	\$5,000	8844	10870	\$6,145
	ESRI ArcGIS - GIS System		2017	\$12,674	10870	10870	\$12,674
	NexGen AMS - Asset Management System		2017	\$13,888	10870	10870	\$13,888
	US Jetter Model 4018-75		2017	\$59,272	10870	10870	\$59,272
@ 25:	SUBSURFACE LINES 12 Asset(s)			\$1,282,323			\$6,162,897

<u>Set No.</u>	<u>Asset Description</u>	<u>Life</u>	<u>Date Purchased</u>	<u>Original Cost</u>	<u>Date Constructed</u> <u>ENR Construction</u> <u>Cost Index</u>	<u>Dec. 2017</u> <u>ENR Construction</u> <u>Cost Index</u>	<u>Adjusted</u> <u>Dec 2017 Cost</u>
© 26:	TREATMENT FACILITY						
127.0	Treatment Facility	40	1/19/71	\$27,918	1581	10870	\$191,947
128.0	Soil Test & Pollution Study	40	1/19/73	\$3,276	1895	10870	\$18,792
129.0	Treatment Plant & Disposal System	40	1/1/76	\$658,865	2401	10870	\$2,982,867
130.0	Spring Field Phase II	40	11/1/83	\$107,354	4066	10870	\$286,999
131.0	A Frame	40	9/1/83	\$2,669	4066	10870	\$7,135
132.0	Lake Alpine Col System & Pump Station	99	6/12/78	\$43,200	2776	10870	\$169,159
133.0	Pump, NSC	10	7/1/89	\$3,226	4615	10870	\$7,598
134.0	Comminutor	10	10/1/89	\$11,384	4615	10870	\$26,813
135.0	Pump	10	10/1/91	\$6,323	4892	10870	\$14,050
136.0	Comminutor	10	3/1/94	\$3,492	5381	10870	\$7,054
137.0	Truck	5	7/1/01	\$9,322	6404	10870	\$15,823
138.0	WWTF Sampling Equipment	10	1/1/04	\$1,388	6825	10870	\$2,211
139.0	Chlorine Safety Upgrades	5	11/1/05	\$4,405	7630	10870	\$6,276
140.0	Toshiba 30HP Air Compressor	10	9/5/06	\$1,329	7763	10870	\$1,861
141.0	2007 Chevy Truck	5	10/13/06	\$8,330	7883	10870	\$11,486
142.0	Chlorine Contact Tank Project	30	7/31/10	\$108,145	8844	10870	\$132,919
143.0	Chlorine Gas Detection System	10	10/1/13	\$5,420	9689	10870	\$6,081
144.0	Addn'l Chlorine Gas Dection System	10	11/22/13	\$490	9666	10870	\$551
145.0	Addn'l Chlorine Gas Dection System	10	1/13/14	\$308	9664	10870	\$346
146.0	D. O. Probe	10	9/1/14	\$10,101	9870	10870	\$11,124
147.0	Gardner Denver VFD Blower	15	12/9/14	\$41,437	9936	10870	\$45,332
148.0	TSS Probe	10	8/1/15	\$3,929	10039	10870	\$4,254
149.0	Lighteneing /Surge Protector - EH	25	11/30/15	\$3,315	10092	10870	\$3,571
150.0	Treatment Pond Dock	70	6/30/16	\$10,582	10337	10870	\$11,128
	(2) Paco 350 GPM Transfer Pumps + Install		2017	\$22,486	10870	10870	\$22,486
	Regal 100 PPD Chlorination System		2017	\$3,260	10870	10870	\$3,260

© 26:	TREATMENT FACILITY 56 Asset(s)			\$1,101,954			\$3,991,122
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GRAND TOTALS				\$4,641,381			\$13,605,417
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ADMIN FACILITIES				\$351,097			\$602,147
COLLECTION SYSTEM				\$1,282,323			\$6,162,897
LIFT STATIONS				\$498,264			\$848,175
TREATMENT FACILITY				\$1,101,954			\$3,991,122
DISPOSAL FACILITY				\$1,407,744			\$2,001,075
TOTAL				\$4,641,381			\$13,605,417

CURRENT EDUs:	650
ADDITIONAL EDUs:	1196
TOTAL:	1846
BUY IN FEE:	\$7,370

PROJECT SUMMARY
BEAR VALLEY DEVELOPMENT PLAN

Alpine County Public Library
P.O. Box 187
Markleeville, CA 96120-0187

ALPINE COUNTY
PLANNING DEPARTMENT
P. O. Box 107
MARKLEEVILLE, CA 96120

General Development Plan
North Side

<u>Single Family Parcel</u>	<u>Acerage</u>	<u>Density</u>	<u>Units</u>	<u>Beds 6/Unit</u>	<u>Cars 2/Unit</u>
SF 1	52.8	1.1	59	354	118
SF 2	200.0	1.9	389	2334	778
SF 3	6.9	1.1	8	48	16
SF 4	12.7	2.0	26	156	52
SF 6	6.2	2.1	13	78	26
Sub Total	278.6		495	2970	990

<u>Multi Family Parcel</u>	<u>Acerage</u>	<u>Density</u>	<u>Units</u>	<u>Beds 4/Unit</u>	<u>Cars 1.5/Unit</u>
MF 1	.7	22.8	16	64	24
MF 2	3.9	15.4	60	240	90
MF 3	4.1	17.6	72	288	108
MF 4	.7	28.6	20	80	30
MF 5	5.4	18.5	100	400	150
MF 6	.5	24.0	12	48	18
MF 7	---	---	---	---	---
MF 8	---	---	---	---	---
MF 9	3.5	8.6	30	120	45
MF 10	3.8	11.8	45	180	68
MF 11	2.5	4.8	12	48	18
MF 12	33.1	3.4	113	452	170
MF 13	---	---	---	---	---
Sub Total	58.2		480	1920	721

<u>Village Center</u>	<u>Acerage</u>	<u>Density</u>	<u>Units</u>	<u>Beds 2/Unit</u>	<u>Cars 1/Unit</u>
VC 1	2.5	---	62	124	62
VC 2	15.2	---	500	1000	500
Sub Total	17.7		562	1124	562

<u>Commerical</u>	<u>Acerage</u>	<u>Density</u>	<u>Units</u>	<u>Beds 2/Unit</u>	<u>Cars 1/Unit</u>
C 1	.1	---	14	28	14
C 2	.7	---	---	---	---
C 3	1.5	---	---	---	---
Sub Total	2.3		14	28	14

North Side Total	356.8		1551	6042	2287
80% Occupancy				4834	1830

South Side

<u>Single Family Parcel</u>	<u>Acreage</u>	<u>Density</u>	<u>Units</u>	<u>Beds 6/Unit</u>	<u>Cars 2/Unit</u>
SF 6	13.8	1.8	25	150	50
SF 7	20.4	2.5	50	300	100
SF 8	22.0	1.0	22	132	44
SF 9	39.4		44	264	88
SF 10 #	27.5	-	1	6	2
Sub-Total	123.1		142	852	284

<u>Multi Family Parcel</u>	<u>Acreage</u>	<u>Density</u>	<u>Units</u>	<u>Beds</u>	<u>Cars</u>
MF 12	4.6	7.4	34	136	51
MF 13	4.1	13.2	54	216	81
MF 14	3.9	15.9	62	248	93
MF 15	8.9	13.7	122	488	183
MF 16	3.0	13.3	40	160	60
Sub-Total	24.5	12.7	312	1248	468

Southside Total	147.6		454	2100	752
80% Occupancy				1680	602

General Development Plan Total	508		2052	8414	3130
80% Occupancy				6731	2504

Community Services

CS1	P.G. & E Substation	0.3 acres
CS2	Elementary School	2.9
CS3	Maintenance Center	1.6
CS4	Sheriff & Fire Station	0.4
CS5	Pacific Telephone	0.2
CS6	Maintenance Yard	0.4
CS7	Short Term Parking	0.9
CS8	Off-Site Parking	5.0
CS10	Helipport	2.0
CS11	School	5.9
CS12	Sewage Treatment	127.6

Recreation

Rec1	Tennis Facility	13.6
Rec2	Stables and Arena	3.3
Rec3	Homeowner's Center	2.2
Rec4	Beach - Picnic Area	2.1

* Not a part of this project

ORDINANCE NO. 73

BEAR VALLEY WATER DISTRICT

AN ORDINANCE AMENDING SUBSECTIONS A AND B OF SECTION 2 OF ARTICLE IV OF ORDINANCE NO.1 REVISING SEWER CAPACITY CHARGES.

WHEREAS, the Board (“Board”) of Directors of the Bear Valley Water District (“District”) has determined that the capacity charges for new connections should be revised, and

WHEREAS, the Board has determined that the District must revise its sewer capacity charges originally established in Article IV of Ordinance No. 1, and most recently amended by Ordinance No. 71 establishing sections 1 and 2 under Article IV establishing a connection fee and a capacity charge for new connection as set forth in Government Code Section 66013(b)(1) and (5), and (3); and

WHEREAS, the Board desires to revise the capacity charge set forth Subsection A and B of Section 2 of Article IV; and

NOW THEREFORE, the Board of Directors of the Bear Valley Water District finds, determines and resolves as follows:

1. The above recitals are true and correct, and are hereby incorporated as part of this Ordinance.

2. Subsections A and B of Section 2 of Article IV of Ordinance No. 1, and all amendments thereto, is amended as follows:

“A. The Capacity Charge for each residential connection permitted by the District shall be \$7,370.00.

B. Subject to Article IV, section 2.C, the Capacity Charge for each non-residential connection permitted by the District shall be proportionately rated to a twenty-four-fixture-unit residence following the Equivalent Drainage Fixture Unit Table in the current edition of the Uniform Plumbing Code as follows:

$$\text{Capacity Charge} = \frac{\text{Fixture Load} \times \$7,370.00}{24}”$$

3. The Board finds and declares that the adoption of this ordinance and the charges established herein is exempt from the requirements of the California Environmental Act pursuant to Title 14, *California Code of Regulations* § 15273(a), and

specifically adopts and incorporates herein as part of the record and as findings those sections of the report which discuss the need for revenue, including the projected total operating expenses, the capital projects and required improvements, and specifically finds and declares that the charges established herein for the purposes specified in Title 14, *California Code of Regulations* § 15273(a)(1) through 15273(a)(4), and not to fund expansion of the sewer system.

4. The Secretary of the District is hereby authorized and directed to file a notice of exemption pursuant to Title 14, *California Code of Regulations* § 15062.

5. This ordinance shall become effective 30 days after its passage.

6. Upon the effective date of this Ordinance, those portions of Ordinances predating this Ordinance that conflict with this Ordinance, are hereby repealed.

Passed and adopted at the regular meeting of the Board of Directors of the Bear Valley Water District on _____, by the following votes:

A YES:

NOS:

ABSENT:

ABSTAIN:

President
Bear Valley Water District

ATTEST:

Board Secretary
Bear Valley Water District

ORDINANCE NO. 71

BEAR VALLEY WATER DISTRICT

**AN ORDINANCE AMENDING ARTICLE IV OF ORDINANCE NO. 1
AMENDING SEWER CONNECTION FEES AND CHARGES.**

WHEREAS, the Board (“Board”) of Directors of the Bear Valley Water District (“District”) has determined that the capacity charges for new connections should be revised, and

WHEREAS, the Board has determined that the District must reduce its sewer capacity charges originally established in Article IV of Ordinance No. 1, and most recently amended by Ordinance No. 68; and

WHEREAS, the Board desires to create a separate subsection under Article IV establishing a connection fee and a capacity charge for new connection as set forth in Government Code Section 66013(b)(1) and (5), and (3); and

NOW THEREFORE, the Board of Directors of the Bear Valley Water District finds, determines and resolves as follows:

1. The above recitals are true and correct, and are hereby incorporated as part of this Ordinance.
2. Article IV of Ordinance No. 1, and all amendments thereto is amended as follows:

“Article IV”

Sewer Connection Charges

Section 1. Connection Fee. All applications for new or additional sewer service to the District’s Sewer System shall submit a fully completed written application (“Connection Application”) for each connection requested to the District in the form provided by the District together with payment of the following:

- A. Application Fee. Applicants shall pay a nonrefundable application administrative fee of \$100.00 for each Residential connection in the Connection Application and \$100.00 for each non-Residential connection in the Connection Application to cover the District’s costs of administration of the application.
- B. The Connection Fee. The Applicant shall be responsible for retaining a licensed contractor approved by the District to make the physical connection to the District’s Sewer System at the applicant’s expense and shall pay the District a

Connection Fee as defined by Government Code Section 66013(b)(5) for the inspection of the physical connection for each connection applied for as follows:

- 1. \$100.00 for each Residential Connection applied for.
- 2. \$100.00 for each Non-Residential Connection applied for.

Section 2. Capacity Charges. All applicants for new or additional sewer service to the District’s Sewer System shall pay a Capacity Charge as defined by Government Code Section 66013(b)(3) prior to issuance of a permit by the District. The Capacity Charge for each connection for existing and uncommitted sewer capacity shall be as follows:

- A. The Capacity Charge for each residential connection permitted by the District shall be \$ 5,414.00.
- B. Subject to Article IV, section 2.C, the Capacity Charge for each non-residential connection permitted by the District shall be proportionately rated to a twenty-four-fixture-unit residence following the Equivalent Drainage Fixture Unit Table in the current edition of the Uniform Plumbing Code as follows:

$$\text{Capacity Charge} = \frac{\text{Fixture Load} \times \$5,414}{24}$$

- C. The Capacity Charge for each non-residential connection that the District determines may generate a high waste volume or impose high BOD loading shall be established by the Board of Directors and based on the projected flow and BOD load as determined by the District’s Engineer or Manager.

3. The Board finds and declares that the adoption of this ordinance and the charges established herein is exempt from the requirements of the California Environmental Act pursuant to Title 14, *California Code of Regulations* § 15273(a), and specifically adopts and incorporates herein as part of the record and as findings those sections of the report which discuss the need for revenue, including the projected total operating expenses, the capital projects and required improvements, and specifically finds and declares that the charges established herein for the purposes specified in Title 14, *California Code of Regulations* § 15273(a)(1) through 15273(a)(4), and not to fund expansion of the sewer system.

4. The Secretary of the District is hereby authorized and directed to file a notice of exemption pursuant to Title 14, *California Code of Regulations* § 15062.

5. This ordinance shall become effective 30 days after its passage.

6. Upon the effective date of this Ordinance, those portions of Ordinances predating this Ordinance that conflict with this Ordinance, are hereby repealed.

Passed and adopted at the regular meeting of the Board of Directors of the Bear Valley Water District on February 23, 2015 by the following votes:

AYES:

NOS:

ABSENT:

ABSTAIN:

President
Bear Valley Water District

ATTEST:

Board Secretary
Bear Valley Water District

AGENDA ITEM

DATE: JANUARY 22, 2018

TO: BVWD BOARD OF DIRECTORS

FROM: JEFF GOUVEIA, DISTRICT GENERAL MANAGER

RE: RETIREMENT FUND MANAGEMENT SERVICE PROVIDERS

BACKGROUND:

At its October 23, 2017 meeting, the Bear Valley Water District Board of Directors agreed to enhance the District's pension program voting in favor of an expanded defined contribution plan. The review and expansion of retirement benefits is part of a larger analysis of the District's broader benefits program. The principal reasons cited for expanding retirement and other benefits include retention of current employees as well as preparing to attract future employees as retirement age approaches for several key personnel.

In order to support an enhanced defined contribution program, the District's current retirement plan must be replaced with a program sufficient to meet the new program's goals and objectives. The current SIMPLE IRA retirement program, initiated by the District in 2006, limits by statute the amount an employer may match of an employee's deferred compensation to no more than 3% of the employee's compensation.

Since the Board voted in October to contribute both a 3% "grant" of each qualifying employee's compensation and up to a 3% match of each qualifying employee's deferred compensation into the employee's retirement plan (up to 6%), the SIMPLE IRA plan is simply insufficient to provide for the increased employer contribution rate as well as to allow for potentially higher defined contribution rates in the future.

Therefore, on behalf of the District, the General Manager solicited proposals from three (3) reputable public-sector retirement plan service providers responsible for administrative, record keeping, education, and investment services designed to meet the needs of public-sector plan participants.

The firms contacted and solicited for proposals included:

- Public Agency Retirement Services (PARS) - Newport Beach, CA – Tel: (800) 540-6369
- Inter'l City/County Mgt. Assoc. Retirement Corp. (ICMA-RC) – San Jose, CA – Tel: (408) 360-8752
- NFP Retirement (Nimble, Fantastic, Personal) – Chicago, IL – Tel: 312.683.7163

The Scope of Work requested of the three (3) plan service providers consisted of:

- Recommendations for retirement plans which ensure compliance with IRS guidelines under both the Employee Retirement Income Security Act (ERISA) and the California Public Employees' Pension Reform Act (PEPRA) for public employers
- Evaluation of plans that ensure IRS compliance with the District's concurrent Section 218 agreement with the Social Security Administration
- Evaluation of retirement plans to maximize flexibility for employer and employee contribution rates
- Consideration for retirement plan design to maximize employer contribution limits under the tax code as well as to maximize employee deferred compensation limits

In addition to this requested scope of work, information was provided regarding the District's estimated contribution amounts and policies concerning full and part time employment at the District.

Retirement plans established for the benefit of governmental employees generally function in ways similar to those covering private employers. However, after May 6, 1986, state and local governments became ineligible to adopt the most popular private sector plan, Section 401(k) plans, except for rural cooperatives, Indian tribal entities or grandfathered plans established prior to that date.

In addition, effective July 2, 1991, Congress made social security coverage mandatory for state and local government employees who are neither covered by a Section 218 Agreement nor qualifying participants in a public retirement system. Under this provision, state and local governments can provide employees with membership in a public retirement system as an alternative to mandatory social security coverage. Employees may also be covered by both a public retirement system and social security under a Section 218 Agreement. The District entered into a Section 218 Agreement with the social security administration effective July 1, 1988 and the District's employees are currently covered under both social security as well as the current SIMPLE IRA retirement plan.

The following public employer plans qualify as governmental retirement plans and almost all governmental plans are covered under one of these Sections.

- Section 401(a) - Qualified Plan
- Section 403(b) – Annuity for public schools and 501(c)(3) organizations
- Section 457(b) – Nonqualified, eligible deferred compensation plans for state and local governments and tax-exempt organizations
- Section 457(f) – Nonqualified, ineligible deferred compensation plans, benefits are subject to income tax upon vesting

RECOMMENDATION:

The proposals received from the three (3) firms solicited are responsive to the request and appear to provide the requested deliverables in order to assist the District in the selection of an appropriate retirement management solution. Each of the firms appear to have similar experience and qualifications with retirement management service administration in California and offer licensed and experienced professionals for the administration of the District's retirement fund assets. The below recommendation is based most significantly on the short and long term fiscal impact on both the District and its employees of adopting the retirement program.

ICMA-RC provides a range of services to public employers and employees for the operation of employee retirement plans including but not limited to communications concerning investment alternatives, account maintenance, account recordkeeping, investment and tax reporting, transaction processing, benefit disbursement, and asset management.

ICMA-RC has over 6,000 agencies across the country including many California public agencies such as the Alameda County Water District, Northern California Power Authority (NCPA), City of Roseville, City of Elk Grove, County of Butte, City of Yuba City and the Contra Costa Water District.

Based on the overall responsiveness of the ICMA-RC proposal, their experience with administering public agency retirement management services and the cost of service when compared to the other proposals, it is recommended that the District consider accepting the ICMA-RC proposal.

The proposed budget for the Scope of Work presented by ICMA-RC is detailed on the attached comparative cost memorandum.

ACTION:

1. Motion to Accept the proposal from ICMA-RC for retirement management services
2. Motion to Approve ICMA-RC's:
 - a. 401 Money Purchase Plan Suggested Resolution
 - b. 457 Plan Suggested Resolution

Attachments:

- Public Agency Retirement Services (PARS) Proposal
- NFP Retirement (Nimble, Fantastic, Personal) Proposal
- BVWD Retirement Fund Management Comparative Cost Memorandum
- Inter'l City/County Mgt. Assoc. Retirement Corp. (ICMA-RC) Proposal
- ICMA-RC 401 Money Purchase Plan Suggested Resolution
- ICMA-RC 457 Plan Suggested Resolution
- ICMA-RC Administrative Services Agreement

BVWD Retirement Fund Management Comparative Cost Memorandum

Management Fee Summary Comparison			
Firm	Start Up Fees	Admin Fees	Avg Inv Expense + Other Fees
ICMA-RC	\$0	0.55%	0.85%
PARS	\$1,500	0.50% (Subject to Min)	0.81%
NFP	\$775	\$825 / yr	0.19 % + Asset Fee 0 - 250K = 2.0% 250 - 500k = 1.99 % 500 - 750k 1.69 % 750 - 1.0M = 1.49 %

	Scenarios						
	Year 1	Year 2	Year 4	Year 8	Year 13	Year 17	Year 20
	\$25,000	\$50,000	\$100,000	\$250,000	\$500,000	\$750,000	\$1,000,000
Admin (ER Paid)	138	275	550	1,375	2,750	4,125	5,500
Inv Exp (EEs Paid)	213	425	850	2,125	4,250	6,375	8,500
Total	350	700	1,400	3,500	7,000	10,500	14,000
Admin (ER Paid)	7200	7200	7200	7200	7200	7200	7200
Inv Exp (EEs Paid)	203	405	810	2025	4050	6075	8100
Total	7,403	7,605	8,010	9,225	11,250	13,275	15,300
Admin (ER Paid)	825	825	825	825	825	825	825
Inv Exp (EEs Paid)	548	1,095	2,190	4,975	8,450	11,175	14,900
Total	1,373	1,920	3,015	5,800	9,275	12,000	15,725

ICMC-RC Projection with ER/ EE Contributions + Market Performance						
Year	9% Annual Contr Rate	7.00% Market Return	Admin Fee (ER PAID)	Avg Investment Exp (EE Paid)	Total	
1	\$25,000	\$1,750	\$138	\$213	\$350	
2	\$51,750	\$3,623	\$285	\$440	\$725	
3	\$80,373	\$5,626	\$442	\$683	\$1,125	
4	\$110,999	\$7,770	\$610	\$943	\$1,554	
5	\$143,768	\$10,064	\$791	\$1,222	\$2,013	
6	\$178,832	\$12,518	\$984	\$1,520	\$2,504	
7	\$216,351	\$15,145	\$1,190	\$1,839	\$3,029	
8	\$256,495	\$17,955	\$1,411	\$2,180	\$3,591	
9	\$299,450	\$20,961	\$1,647	\$2,545	\$4,192	
10	\$345,411	\$24,179	\$1,900	\$2,936	\$4,836	
11	\$394,590	\$27,621	\$2,170	\$3,354	\$5,524	
12	\$447,211	\$31,305	\$2,460	\$3,801	\$6,261	
13	\$503,516	\$35,246	\$2,769	\$4,280	\$7,049	
14	\$563,762	\$39,463	\$3,101	\$4,792	\$7,893	
15	\$628,226	\$43,976	\$3,455	\$5,340	\$8,795	
16	\$697,201	\$48,804	\$3,835	\$5,926	\$9,761	
17	\$771,005	\$53,970	\$4,241	\$6,554	\$10,794	
18	\$849,976	\$59,498	\$4,675	\$7,225	\$11,900	
19	\$934,474	\$65,413	\$5,140	\$7,943	\$13,083	
20	\$1,024,887	\$71,742	\$5,637	\$8,712	\$14,348	

BVWD - Illustration based on an Annual Salary of \$50,000		
Contribution Type	% of Salary	Annual Contribution
BVWD Base Contribution ("Grant") to 401(a)	3%	\$1,500
Employee contribution to 457(b)	3%	\$1,500
BVWD "Matching" Contribution to 401(a)	3%	\$1,500
TOTAL	9%	\$4,000

RESOLUTION FOR A LEGISLATIVE BODY RELATING TO A MONEY PURCHASE PLAN

RESOLUTION OF _____ (EMPLOYER NAME).

PLAN NUMBER 10- _____

WHEREAS, the Employer has employees rendering valuable services; and

WHEREAS, the establishment of a money purchase retirement plan benefits employees by providing funds for retirement and funds for their beneficiaries in the event of death; and

WHEREAS, the Employer desires that its money purchase retirement plan be administered by ICMA-RC and that the funds held in such plan be invested in VantageTrust, a trust established by public employers for the collective investment of funds held under their retirement and deferred compensation plans:

NOW THEREFORE BE IT RESOLVED that the Employer hereby establishes or has established a money purchase retirement plan (the "Plan") in the form of: (Select one)

- The ICMA Retirement Corporation Governmental Money Purchase Plan & Trust, pursuant to the specific provisions of the Adoption Agreement (executed copy attached hereto).
- The Plan and Trust provided by the Employer (executed copy attached hereto).

The Plan shall be maintained for the exclusive benefit of eligible employees and their beneficiaries; and

BE IT FURTHER RESOLVED that the Employer hereby adopts the Declaration of Trust of VantageTrust, intending this adoption to be operative with respect to any retirement or deferred compensation plan subsequently established by the Employer, if the assets of the plan are to be invested in VantageTrust.

BE IT FURTHER RESOLVED that the Employer hereby agrees to serve as trustee under the Plan and to invest funds held under the Plan in VantageTrust; and

BE IT FURTHER resolved that the _____ (use title of official, not name) shall be the coordinator for the Plan; shall receive reports, notices, etc., from ICMA Retirement Corporation or VantageTrust; shall cast, on behalf of the Employer, any required votes under VantageTrust; may delegate any administrative duties relating to the Plan to appropriate departments; and

BE IT FURTHER RESOLVED that the Employer hereby authorizes _____ (use title not name) to execute all necessary agreements with ICMA Retirement Corporation incidental to the administration of the Plan.

I, _____, Clerk of the (City, County, etc.) of _____, do hereby certify that the foregoing resolution proposed by (Council Member, Trustee, etc.) of _____, was duly passed and adopted by the (Council, Board, etc.) of the (City, County, etc.) of _____ at a regular meeting thereof assembled this _____ day of _____, 20____, by the following vote:

AYES:

NAYS:

ABSENT:

(SEAL)

Clerk of the (City, County, etc.)

**SUGGESTED RESOLUTION
FOR A LEGISLATIVE BODY RELATING TO A 457 DEFERRED COMPENSATION PLAN**

Account Number 30-_____

Name of Employer: _____ State: _____

Title of Program Coordinator: _____
(see definition below for duties of Program Coordinator)

Resolution of the above named Employer ("Employer")

WHEREAS, the Employer has employees rendering valuable services; and

WHEREAS, the establishment of a deferred compensation plan for such employees serves the interests of the Employer by enabling it to provide reasonable retirement security for its employees, by providing increased flexibility in its personnel management system, and by assisting in the attraction and retention of competent personnel; and

WHEREAS, the Employer has determined that the establishment of a deferred compensation plan to be administered by the ICMA Retirement Corporation serves the above objectives; and

WHEREAS, the Employer desires that its deferred compensation plan be administered by the ICMA Retirement Corporation, and that some or all of the funds held under such plan be invested in VantageTrust, a trust established by public employers for the collective investment of funds held under their retirement and deferred compensation plans;

NOW THEREFORE BE IT RESOLVED that the Employer hereby adopts the deferred compensation plan (the "Plan") in the form of: (Select one)

- The ICMA Retirement Corporation Deferred Compensation Plan and Trust, referred to as Appendix A
- The plan provided by the Employer (executed copy attached hereto).

BE IT FURTHER RESOLVED that the Employer hereby adopts the Declaration of Trust of VantageTrust, attached hereto as Appendix B, intending this adoption to be operative with respect to any retirement or deferred compensation plan subsequently established by the Employer, if the assets of the plan are to be invested in VantageTrust.

BE IT FURTHER RESOLVED that the assets of the Plan shall be held in trust, with the Employer serving as trustee, for the exclusive benefit of the Plan participants and their beneficiaries, and the assets shall not be diverted to any other purpose.

BE IT FURTHER RESOLVED that the Employer hereby agrees to serve as trustee under the Plan.

BE IT FURTHER RESOLVED that the _____ (use title of official, not name) shall be the coordinator for this program; shall receive necessary reports, notices, etc. from ICMA Retirement Corporation or VantageTrust; shall cast, on behalf of the Employer, any required votes under VantageTrust; Administrative duties to carry out the plan may be assigned to the appropriate departments, and is authorized to execute all necessary agreements with ICMA Retirement Corporation incidental to the administration of the Plan.

I, _____, Clerk of the (City, County, etc.) of _____, do hereby certify that the foregoing resolution, proposed by _____, in the (Council Member, Trustee, etc.) of _____ was duly passed and adopted in the (Council, Board, etc.) of the (City, County, etc.) of _____ at regular meeting thereof assembled this ____ day of _____, 20____, by the following vote:

AYES:

NAYS:

ABSENT:

(Seal)

Clerk of the (City, County, etc.)

ADMINISTRATIVE SERVICES AGREEMENT

Between

ICMA Retirement Corporation

and

Bear Valley Water District

Type: 457

Account #: 307544

Type: 401

Account #: 109698

ADMINISTRATIVE SERVICES AGREEMENT

This Administrative Services Agreement (“Agreement”), made as of the day of , 20____ between the International City Management Association Retirement Corporation (“ICMA-RC”), a nonprofit corporation organized and existing under the laws of the State of Delaware, and the Bear Valley Water District (“Employer”), an Entity organized and existing under the laws of the State of California with an office address of P.O. Box 5027, Bear Valley, California 95223.

RECITALS

Employer acts as public plan sponsor of a retirement plan (“Plan”), and in that capacity, has responsibility to obtain administrative services and investment alternatives for the Plan;

VantageTrust is a group trust established and maintained in accordance with New Hampshire Revised Statutes Annotated section 391:1 and Internal Revenue Service Revenue Ruling 81-100, 1981-1 C.B. 326, which provides for the commingled investment of retirement funds;

ICMA-RC acts as investment adviser to VantageTrust Company, LLC, the Trustee of VantageTrust;

ICMA-RC has designed, and VantageTrust offers, a series of separate funds (the “Funds”) for the investment of plan assets as referenced in VantageTrust’s principal disclosure documents, the VantageTrust Disclosure Memorandum and the Funds’ Fact Sheets (together, “VT Disclosures”); and

In addition to serving as investment adviser to VantageTrust Company LLC, ICMA-RC provides a range of services to public employers for the operation of employee retirement plans including, but not limited to, communications concerning investment alternatives, account maintenance, account recordkeeping, investment and tax reporting, transaction processing, benefit disbursement, and asset management.

AGREEMENTS

1. Appointment of ICMA-RC

Employer hereby appoints ICMA-RC as Administrator of the Plan to perform all nondiscretionary functions necessary for the administration of the Plan. The functions to be performed by ICMA-RC shall be those set forth in Exhibit A to this Agreement.

2. Adoption of Trust

Employer has adopted the Declaration of Trust of VantageTrust Company and agrees to the commingled investment of assets of the Plan within VantageTrust. Employer agrees that the investment, management, and distribution of amounts deposited in VantageTrust shall be subject to the Declaration of Trust, as it may be amended from time to time and shall also be subject to terms and conditions set forth in disclosure documents (such as the VT Disclosures or Employer Bulletins) as those terms and conditions may be adjusted from time to time.

3. Employer Duty to Furnish Information

Employer agrees to furnish to ICMA-RC on a timely basis such information as is necessary for ICMA-RC to carry out its responsibilities as Administrator of the Plan, including information needed to allocate individual participant accounts to Funds in VantageTrust, and information as to the employment status of participants, and participant ages, addresses, and other identifying information (including tax identification numbers). Employer also agrees that it will notify ICMA-RC in a timely manner regarding changes in staff as it relates to various roles. This is to be completed through the online EZLink employer contact options. ICMA-RC shall be entitled to rely upon the accuracy of any information that is furnished to it by a responsible official of the Employer or any information relating to an individual participant or beneficiary that is furnished by such participant or beneficiary, and ICMA-RC shall not be responsible for any error arising from its reliance on such information. ICMA-RC will provide reports, statements and account information to the Employer through EZLink, the online plan administrative tool.

Employer is required to send in contributions through EZLink, the online plan administration tool provided by ICMA-RC. Alternative electronic methods may be allowed, but must be approved by ICMA-RC for use. Contributions may not be sent through paper submittal documents.

To the extent Employer selects third-party funds that do not have fund profile information provided to ICMA-RC through our electronic data feeds from external sources (such as Morningstar) or third party fund providers, the Employer is responsible for providing to ICMA-RC timely fund investment updates for disclosure to Plan participants. Such updates may be provided to ICMA-RC through the Employer's investment consultant or other designated representative.

Failure to provide timely fund profile update information, including the source of the information, may result in a lack of fund information for participants, as ICMA-RC will remove outdated fund profile information from the systems that provide fund information to Plan participants.

4. Certain Representations and Warranties

ICMA-RC represents and warrants to Employer that:

- (a) ICMA-RC is a non-profit corporation with full power and authority to enter into this Agreement and to perform its obligations under this Agreement. The ability of ICMA-RC to serve as investment adviser to VantageTrust is dependent upon the continued willingness of VantageTrust for ICMA-RC to serve in that capacity.
- (b) ICMA-RC is an investment adviser registered as such with the U.S. Securities and Exchange Commission under the Investment Advisers Act of 1940, as amended.
- (c)(i) ICMA-RC shall maintain and administer the Plan in accordance with the requirements for eligible deferred compensation plans under Section 457 of the Internal Revenue Code and other applicable federal law; provided, however, that ICMA-RC shall not be responsible for the eligible status of the Plan in the event that the Employer directs ICMA-RC to administer the Plan or disburse assets in a manner inconsistent with the requirements of Section 457 or otherwise causes the Plan not to be carried out in accordance with its terms. Further, in the event that the Employer uses its own customized plan document, ICMA-RC shall not be responsible for the eligible status of the Plan to the extent affected by terms in the Employer’s plan document that differ from those in ICMA-RC’s standard plan document. ICMA-RC shall not be responsible for monitoring state or local law applicable to retirement plans or for administering the Plan in compliance with local or state requirements unless Employer notifies ICMA-RC of any such local or state requirements.
- (c)(ii) ICMA-RC shall maintain and administer the Plan in accordance with the requirements for plans which satisfy the qualification requirements of Section 401 of the Internal Revenue Code and other applicable federal law; provided, however, ICMA-RC shall not be responsible for the qualified status of the Plan in the event that the Employer directs ICMA-RC to administer the Plan or disburse assets in a manner inconsistent with the requirements of Section 401 or otherwise causes the Plan not to be carried out in accordance with its terms; provided, further, that if the plan document used by the Employer contains terms that differ from the terms of ICMA-RC's standardized plan document, ICMA-RC shall not be responsible for the qualified status of the Plan to the extent affected by the differing terms in the Employer's plan document. ICMA-RC shall not be

Plan numbers 307544, 109698

responsible for monitoring state or local law or for administering the Plan in compliance with local or state requirements unless Employer notifies ICMA-RC of any such local or state requirements.

Employer represents and warrants to ICMA-RC that:

- (d) Employer is organized in the form and manner recited in the opening paragraph of this Agreement with full power and authority to enter into and perform its obligations under this Agreement and to act for the Plan and participants in the manner contemplated in this Agreement. Execution, delivery, and performance of this Agreement will not conflict with any law, rule, regulation or contract by which the Employer is bound or to which it is a party.
- (e) Employer understands and agrees that ICMA-RC's sole function under this Agreement is to act as recordkeeper and to provide administrative, investment or other services at the direction of Plan participants, the Employer, its agents or designees in accordance with the terms of this Agreement. Under the terms of this Agreement, ICMA-RC does not render investment advice, is not the Plan Administrator or Plan Sponsor as those terms are defined under applicable federal, state, or local law, and does not provide legal, tax or accounting advice with respect to the creation, adoption or operation of the Plan and its related trust. ICMA-RC does not perform any service under this Agreement that might cause ICMA-RC to be treated as a "fiduciary" of the Plan under applicable law, except, and only, to the extent that ICMA-RC provides investment advisory services to individual participants enrolled in Guided Pathways.
- (f) Employer acknowledges and agrees that ICMA-RC does not assume any responsibility with respect to the selection or retention of the Plan's investment options. Employer shall have exclusive responsibility for the Plan's investment options, including the selection of the applicable mutual fund share class. Where applicable, Employer understands that the VT Retirement IncomeAdvantage Fund is an investment option for the Plan and that the fund invests in a separate account available through a group variable annuity contract. By entering into this Agreement, Employer acknowledges that it has received the Important Considerations document and the VT Disclosures and that it has read the information therein concerning the VT Retirement IncomeAdvantage Fund.
- (g) Employer acknowledges that certain such services to be performed by ICMA-RC under this Agreement may be performed by an affiliate or agent of ICMA-RC pursuant to one or more other contractual arrangements or relationships, and that ICMA-RC reserves the right to change vendors with which it has contracted to provide services in connection with this Agreement without prior notice to Employer.

- (h) Employer acknowledges that it has received ICMA-RC's Fee Disclosure Statement, prepared in substantial conformance with ERISA regulations regarding the disclosure of fees to plan sponsors.
- (i) Employer approves the use of its Plan in ICMA-RC external media, publications and materials. Examples include press releases announcements and inclusion of the general plan information in request for proposal responses.

5. Participation in Certain Proceedings

The Employer hereby authorizes ICMA-RC to act as agent, to appear on its behalf, and to join the Employer as a necessary party in all legal proceedings involving the garnishment of benefits or the transfer of benefits pursuant to the divorce or separation of participants in the Plan. Unless Employer notifies ICMA-RC otherwise, Employer consents to the disbursement by ICMA-RC of benefits that have been garnished or transferred to a former spouse, current spouse, or child pursuant to a domestic relations order or child support order.

6. Compensation and Payment

- (a) Plan Administration Fee. The amount to be paid for plan administration services under this Agreement shall be 0.55% per annum of the amount of Plan assets invested in VantageTrust. Such fee shall be computed based on average daily net Plan assets in VantageTrust.
- (b) **Compensation for Management Services to VantageTrust, Compensation for Advisory and other Services to the VT III Vantagepoint Funds and Payments from Third-Party Mutual Funds.** Employer acknowledges that, in addition to amounts payable under this Agreement, ICMA-RC receives fees from VantageTrust for investment advisory services and plan and participant services furnished to VantageTrust. Employer further acknowledges that ICMA-RC, including certain of its wholly owned subsidiaries, receives compensation for advisory and other services furnished to the VT III Vantagepoint Funds, which serve as the underlying portfolios of a number of Funds offered through VantageTrust. For a VantageTrust Fund that invests substantially all of its assets in a third-party mutual fund not affiliated with ICMA-RC, ICMA-RC or its wholly owned subsidiary receives payments from the third-party mutual fund families or their service providers in the form of 12b-1 fees, service fees, compensation for sub-accounting and other services provided based on assets in the underlying third-party mutual fund. These fees are described in the VT Disclosures and ICMA-RC's fee disclosure statement. In addition, to the extent that third party mutual funds are included in the investment line-up for the Plan, ICMA-RC receives administrative fees from its third party mutual fund settlement

and clearing agent for providing administrative and other services based on assets invested in third party mutual funds; such administrative fees come from payments made by third party mutual funds to the settlement and clearing agent.

- (c) **Redemption Fees.** Redemption fees imposed by outside mutual funds in which Plan assets are invested are collected and paid to the mutual fund by ICMA-RC. ICMA-RC remits 100% of redemption fees back to the specific mutual fund to which redemption fees apply. These redemption fees and the individual mutual fund’s policy with respect to redemption fees are specified in the prospectus for the individual mutual fund and referenced in the VT Disclosures.
- (d) **Payment Procedures.** All payments to ICMA-RC pursuant to this Section 6 shall be made from Plan assets held by VantageTrust or received from third-party mutual funds or their service providers in connection with Plan assets invested in such third-party mutual funds, to the extent not paid by the Employer. The amount of Plan assets administered by ICMA-RC shall be adjusted as required to reflect any such payments as are made from the Plan. In the event that the Employer agrees to pay amounts owed pursuant to this Section 6 directly, any amounts unpaid and outstanding after 30 days of invoice to the Employer shall be withdrawn from Plan assets.

The compensation and payment set forth in this Section 6 are contingent upon the Employer’s use of ICMA-RC’s EZLink system for contribution processing and submitting contribution funds by ACH or wire transfer on a consistent basis over the term of this Agreement.

7. Contribution Remittance

Employer understands that amounts invested through VantageTrust are to be remitted directly to VantageTrust in accordance with instructions provided to Employer by ICMA-RC and are not to be remitted to ICMA-RC. In the event that any check or wire transfer is incorrectly labeled or transferred to ICMA-RC, ICMA-RC may return it to Employer with proper instructions.

8. Indemnification

ICMA-RC shall not be responsible for any acts or omissions of any person with respect to the Plan or its related trust, other than ICMA-RC in connection with the administration or operation of the Plan. Employer shall indemnify ICMA-RC against, and hold ICMA-RC harmless from, any and all loss, damage, penalty, liability, cost, and expense, including without limitation, reasonable attorney’s fees, that may be incurred by, imposed upon, or asserted against ICMA-RC by reason of any claim, regulatory proceeding, or litigation arising from any act done or omitted to be done by any individual or person with respect to the Plan or its related trust, excepting only any and all loss, damage,

penalty, liability, cost or expense resulting from ICMA-RC's negligence, bad faith, or willful misconduct.

9. Term

This Agreement shall be in effect and commence on the date all parties have signed and executed this Agreement ("Inception Date"). This Agreement may be terminated without penalty by either party on sixty days advance notice in writing to the other; provided however, that the Employer understands and acknowledges that, in the event the Employer terminates this Agreement (or replaces the VT PLUS Fund as an investment option in its investment line-up), ICMA-RC retains full discretion to release Plan assets invested in the VT PLUS Fund in an orderly manner over a period of up to 12 months from the date ICMA-RC receives written notification from the Employer that it has made a final and binding selection of a replacement for ICMA-RC as administrator of the Plan (or a replacement investment option for the VT PLUS Fund).

10. Amendments and Adjustments

- (a) This Agreement may be amended by written instrument signed by the parties.
- (b) ICMA-RC may amend this agreement by providing 60 days' advance written notice to the Employer prior to the effective date of such proposed amendment. Such amendment shall become effective unless, within the 60-day notice period, the Employer notifies ICMA-RC in writing that it objects to such amendment.
- (c) The parties agree that enhancements may be made to administrative and operations services under this Agreement. The Employer will be notified of enhancements through the Employer Bulletin, quarterly statements, electronic messages or special mailings. Likewise, if there are any reductions in fees, these will be announced through the Employer Bulletin, quarterly statement, electronic messages or special mailing.

11. Notices

All notices required to be delivered under this Agreement shall be in writing and shall be delivered, mailed, e-mailed or faxed to the location of the relevant party set forth below or to such other address or to the attention of such other persons as such party may hereafter specify by notice to the other party.

ICMA-RC: Legal Department, ICMA Retirement Corporation, 777 North Capitol Street, N.E., Suite 600, Washington, D.C., 20002-4240
Facsimile; (202) 962-4601

Employer: at the office set forth in the first paragraph hereof, or to any other address, facsimile number or e-mail address designated by the Employer to receive the same by written notice similarly given.

Plan numbers 307544, 109698

Each such notice, request or other communication shall be effective: (i) if given by facsimile, when transmitted to the applicable facsimile number and there is appropriate confirmation of receipt; (ii) if given by mail or e-mail, upon transmission to the designated address with no indication that such address is invalid or incorrect; or (iii) if given by any other means, when actually delivered at the aforesaid address.

12. Complete Agreement

This Agreement shall constitute the complete and full understanding and sole agreement between ICMA-RC and Employer relating to the object of this Agreement and correctly sets forth the complete rights, duties and obligations of each party to the other as of its date. This Agreement supersedes all written and oral agreements, communications or negotiations among the parties. Any prior agreements, promises, negotiations or representations, verbal or otherwise, not expressly set forth in this Agreement are of no force and effect.

13. Titles

The headings of Sections of this Agreement and the headings for each of the attached schedules are for convenience only and do not define or limit the contents thereof.

14. Incorporation of Schedules

All Schedules (and any subsequent amendments thereto), attached hereto, and referenced herein, are hereby incorporated within this Agreement as if set forth fully herein.

15. Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the State of California, applicable to contracts made in that jurisdiction without reference to its conflicts of laws provisions.

Plan numbers 307544, 109698

In Witness Whereof, the parties hereto certify that they have read and understand this Agreement and all Schedules attached hereto and have caused this Agreement to be executed by their duly authorized officers as of the Inception Date first above written.

BEAR VALLEY WATER DISTRICT

By _____
Signature/Date

By _____
Name and Title (Please Print)

INTERNATIONAL CITY MANAGEMENT
ASSOCIATION RETIREMENT CORPORATION

By 
Erica McFarquhar
Assistant Secretary

Please return an executed copy of the Agreement to a Delivery Address, either:

- (a) Electronically to PlanAdoptionServices@icmarc.org, or
- (b) In paper form to ICMA-RC
ATTN: PLAN ADOPTION SERVICES
777 North Capitol Street NE
Suite 600
Washington DC 20002-4240

Exhibit A

Administrative Services

The administrative services to be performed by ICMA-RC under this Agreement shall be as follows:

- (a) Participant enrollment services, including providing a welcome package and enrollment kit containing instructions and notices necessary to implement the Plan’s administration. Employees will enroll online or through a paper form. ICMA-RC will provide an enrollment link through the general ICMA-RC web site as appropriate. Employer will also make available the online enrollment link in their Intranet site or via email to new employees. Employer can also enroll employees through EZLink.
- (b) Establishment of participant accounts for each employee participating in the Plan for whom ICMA-RC receives appropriate enrollment instructions. ICMA-RC is not responsible for determining if such Plan participants are eligible under the terms of the Plan.
- (c) Allocation in accordance with participant directions received in good order of individual participant accounts to investment funds offered under the Plan.
- (d) Maintenance of individual accounts for participants reflecting amounts deferred, income, gain or loss credited, and amounts distributed as benefits.
- (e) Maintenance of records for all participants for whom participant accounts have been established. These files shall include enrollment instructions (provided to ICMA-RC through Account Access or EZLink), beneficiary designation instructions and all other and documents concerning each participant's account.
- (f) Provision of periodic reports to the Employer through EZLink. Participants will have access to account information through Investor Services, Voice Response System, Account Access and through quarterly statements that can be delivered electronically through Account Access or by postal service.
- (g) Communication to participants of information regarding their rights and elections under the Plan.
- (h) Making available Investor Services Representatives through a toll-free telephone number from 8:30 a.m. to 9:00 p.m. Eastern Time, Monday through Friday (excluding holidays and days on which the securities markets or ICMA-RC are closed for business (including emergency closings), to assist participants.
- (i) Making available access to ICMA-RC’s web site, to allow participants to access certain account information and initiate plan transactions at any

time. Account access is normally available 24 hours a day, seven days a week except during scheduled maintenance periods designed to ensure high-quality performance. The scheduled maintenance window is outlined at <https://harper1.icmarc.org/login.jsp>.

- (j) Maintaining the security and confidentiality of client information through a system of controls including but not limited to, as appropriate: restricting plan and participant information only to those who need it to provide services, software and hardware security, access controls, data back-up and storage procedures, non-disclosure agreements, security incident response procedures, and audit reviews.
- (k) Making available access to ICMA-RC's plan sponsor EZLink web site to allow plan sponsors to access certain plan information and initiate plan transactions such as enrolling participants and managing contributions at any time. EZLink is normally available 24 hours a day, seven days a week except during scheduled maintenance periods designed to ensure high-quality performance. The scheduled maintenance window is outlined at <https://harper1.icmarc.org/login.jsp>
- (l) Distribution of benefits as agent for the Employer in accordance with terms of the Plan. Participants who have separated from service can request distributions through Account Access or via form.
- (m) Upon approval by the Employer that a domestic relations order is an acceptable qualified domestic relations order under the terms of the Plan, ICMA-RC will establish a separate account record for the alternate payee and provide for the investment and distribution of assets held there under.
- (n) Loans may be made available on the terms specified in the Loan Guidelines, if loans are adopted by the Employer. Participants can request loans through Investor Services or Account Access.
- (o) Guided Pathways – Participant Advice and Guidance may be made available through a third party vendor on the terms specified on ICMA-RC's website.
- (p) ICMA-RC will determine appropriate delivery method (electronic and/or print) for plan sponsor/participant communications and education based on a number of factors (audience, effectiveness, etc.).

AGENDA ITEM

DATE: JANUARY 22, 2018

TO: BVWD BOARD OF DIRECTORS

FROM: JEFF GOUVEIA, DISTRICT GENERAL MANAGER

RE: MONTHLY OPERATIONS REPORT

1. Collections, Treatment & Disposal Operations - Update
 - a. Flows - Influent Flows & Pond Transfers
 - a. Volumes - Storage, Capacity & Disposal
2. Permit Compliance & Monitoring & Reporting Programs (MRPs) - Update
 - a. WDR MRP - Land Discharge Permit – Compliance & Reporting Update
 - i. Tri-Annual Groundwater Monitoring –
 - i. 2nd Tri Annual Report Submitted On-Time – October 30, 2017
 - ii. 3rd Tri Annual Report Submitted On-Time – January 16, 2018
 - iii. Annual Operations Report – Draft Prepared – Due Jan 31
 - b. NPDES MRP – Surface Water Discharge Permit – Compliance & Reporting Update
 - i. Annual Operations Report – Draft Prepared – Due Jan 31

Board Meeting 1-22-18 Operations Report

A.

• **Influent Flows (MG) – Total of ALL Wastewater Received / % change previous yr**

<u>September 2017</u>	<u>September 2016</u>	<u>September 2015</u>
.769 / 123.4%	.623 / 90.2%	.691 / 115.9%
<u>October 2017</u>	<u>October 2016</u>	<u>October 2015</u>
.466 / 68.8%	.677 / 140.2%	.483 / 105.7%
<u>November 2017</u>	<u>November 2016</u>	<u>November 2016</u>
1.335 / 135.0%	.989 / 179.5%	.551 / 115.8%
<u>December 2017</u>	<u>December 2016</u>	<u>December 2015</u>
1.571 / 54.2%	2.900 / 311.8%	.930 / 80.2%
<u>January 1-17 2018</u>	<u>January 2017</u>	<u>January 2016</u>
1.392	4.713 / 339.6%	1.388 / 89.5%

• **Transferred to PR (MG) - Volume of Water Moved from Treatment to Storage / % change previous yr**

<u>September 2017</u>	<u>September 2016</u>	<u>September 2015</u>
1.175 / 2.84.5%	.413 / 113.2%	.365 / 187.2%
<u>October 2017</u>	<u>October 2016</u>	<u>October 2015</u>
.623 / 37.7%	1.653 / 102.4%	1.614 / 198.0%
<u>November 2017</u>	<u>November 2016</u>	<u>November 2015</u>
2.452 / 228.1%	1.075 / 126.9%	.847 / 180.2%
<u>December 2017</u>	<u>December 2016</u>	<u>December 2015</u>
1.262 / 24.9%	5.074 / 159.3%	3.185 / 184.6%
<u>January 1-17 2018</u>	<u>January 2017</u>	<u>January 2016</u>
2.109	7.515 / 749.3%	1.003 / 73.9%

• **Land Application Annual Totals – MG Applied / % change previous yr**

<u>2017</u>	<u>2016</u>	<u>2015</u>
16.051 / 30.5%	52.572 / 215.4%	24.408 / 112.8%

2017 Land Application Began July 1 and Ended September 29

• **Discharge Effluent Flow Totals – MG**

<u>March 2017</u>	<u>April 2017</u>	<u>May 2017</u>	<u>June 2017</u>	<u>Total 2017 Discharge</u>
15.8	29.9	29.7	16.9	92.3

• **Storage Reservoir Elevations and Volumes (based on 10/6/15 pressure chart):**

- Empty (minimum pool) = 7063.0' = 0 MG = 0'
- Total Depth (w/2' Freeboard) = 7086.3' = 76.45 MG = 23.3'
- Total Depth (spillway) = 7088.3' = 85.86 MG = 25.3'
- Discharge Point (DP) Removed from New Permit = 7080.4' = 51.06 MG = 17.4'
 - Reached DP 6/2/16 = 7081.9' = 57.16 MG = 18.9'
 - Did not reach DP 2015 = N/A
 - Did not reach DP 2014 = N/A
 - Did not reach DP 2013 = N/A
- Permitted Full Reservoir (2' Freeboard) = 7086.3' = 76.45 MG = 100%
 - Highest Level 2017 – 3/8/17 = 7083.9' = 65.67 MG = 85.9%
 - Highest Level 2016 – 5/26/16 = 7081.9' = 57.16 MG = 74.7%
 - Highest Level 2015 – 5/21/15 = 7070.1' = 15.48 MG = 20.2%
 - Highest Level 2014 – 5/8/14 = 7072.3' = 21.93 MG = 28.7%
 - Highest Level 2013 – 5/16/13 = 7073.5' = 25.84 MG = 33.8%
 - Highest Level 2012 – 5/10/12 = 7078.6' = 44.03 MG = 57.6%
 - Highest Level 2011 – 7/10/11 = 7084.47' = 112.42 MG = 106.2% (1974 capacity curve in use until 12/11)
- Current Storage Volume = 7069.5 = 13.38 MG = 17.5% (1/18/2018)
- Reached Minimum Pool on 10/3/17
- 1 Year Ago = 7076.0 = 34.41 MG = 45% (1/19/2017)



Central Valley Regional Water Quality Control Board

20 November 2017

RECEIVED NOV 27 2017

Jeff Gouveia
General Manager
Bear Valley Water District
P.O. Box 5027
Bear Valley, CA 95223

SELF-MONITORING REPORT REVIEW, BEAR VALLEY WATER DISTRICT, BEAR VALLEY WASTEWATER TREATMENT FACILITY, ALPINE COUNTY

The Bear Valley Water District (Discharger) discharges treated wastewater from the Bear Valley Wastewater Treatment Facility (Facility), which is regulated by surface water discharge permit Waste Discharge Requirements (WDRs) Order R5-2016-0045 (NPDES CA0085146) and land discharge permit WDRs Order 5-01-208. The Monitoring and Reporting Program (MRP) of the WDRs requires monitoring for constituents and other parameters and specifies the location and frequency of monitoring. Central Valley Water Board staff has reviewed the electronic self-monitoring reports (eSMRs) for the surface water discharge permit submitted by the Discharger for the **March 2017** through **August 2017** monitoring periods.

No violations of the WDRs or MRP were identified from review of the eSMRs.

Submittals Required by Surface Water WDRs

No technical or progress reports were required by WDRs R5-2016-0045 during the period reviewed under cover of this letter. The next report required is the *2018 Annual Operations Report*, which is due 30 January 2018.

If you have any questions, please contact me at (916) 464-1181 or at mfarhad@waterboard.ca.gov.

MOHAMMAD FARHAD
Water Resource Control Engineer
NPDES Compliance and Enforcement Unit

Bear Valley Water District
 Performance vs. Budget
 December 2016 vs. December 2017

	Prior Year July 1 - Dec. 31	FY 16 - 17 Budget	FY 16 - 17 % Budget	Current Year July 1 - Dec. 31	FY 17-18 Budget	FY 17- 18% Budget	Variance Explanation
REVENUES							
Residential	294,968	591,000	50%	293,282	589,000	50%	
Commercial	108,732	152,000	72%	122,175	190,000	64%	
Subtotal Operating Revenue	403,700	743,000	54%	415,457	779,000	53%	Revenue Target - 50%
EXPENSES							
Salaries & Benefits	149,856	289,284	52%	162,363	325,776	50%	
Director Expenses	1,730	8,500	20%	1,035	3,000	34%	
Operator Training & Certs	340	1,000	34%	0	1,500	0%	
Gas, Diesel, Oil & Filters	4,349	13,000	33%	1,877	3,000	63%	
Insurance	10,795	22,000	49%	15,695	22,500	70%	Prepaid + FY16-17 WC Rec
Memberships & Conferences	3,271	5,000	65%	3,127	5,500	57%	
Office Expenses & Supplies	9,060	10,000	91%	7,358	10,000	74%	
Field Expenses & Supplies	8,289	15,000	55%	18,003	18,000	100%	Contingency Equipment
Grooming, Snow Removal & Vehicle Storage	1,127	2,500	45%	750	3,500	21%	
Engineering & Consulting	1,653	15,000	11%	2,733	5,000	55%	2017 Water Balance
Legal & Accounting	8,301	10,000	83%	8,755	10,000	88%	Audit Fees
Equipment Rental	9,039	18,000	50%	386	600	64%	
Repairs & Maintenance	46,314	61,200	76%	65,803	78,214	84%	Projects Completed
Laboratory Fees	15,560	21,000	74%	14,816	25,000	59%	
Regulatory Reporting & Comp. Projects	3,724	7,000	53%	3,518	6,500	54%	
Taxes, Fees, Licenses & Assessments	24,910	30,000	83%	28,702	30,000	96%	Prepaid
Utilities	38,269	55,000	70%	25,896	55,000	47%	Reduced Land Disposal
Subtotal Operating Expenses	336,587	583,484	58%	360,815	603,090	60%	Expense Target =60%
Net Operational Income	67,113	159,516	42%	54,642	175,910	31%	
OTHER REVENUE							
Interest Income - LAIF	979	500	196%	1,742	2,000	87%	
Late Fee, Penalties and Interest	5,456	10,000	55%	5,520	10,000	55%	
Expense Reimbursements - USFS Campground	2,384	2,384	100%	3,863	3,863	100%	
Expense Reimbursements - Concessionaires	4,439	4,439	100%	5,290	5,290	100%	
Misc Other Income	20	0	UBD	34	0	UBD	
Subtotal Other Revenue	13,277	17,323	77%	16,448	21,153	78%	
OTHER EXPENSES							
Loan Interest	10,281	20,156	51%	9,689	18,809	52%	
Depreciation	40,446	96,348	42%	45,449	114,223	40%	
Misc Expense				10			
Subtotal Other Expenses	50,728	116,504	44%	55,147	133,032	41%	
Net Other Income	(37,450)	(99,181)	38%	(38,699)	(111,879)	35%	
NET INCOME	29,662	60,335	49%	15,943	64,031	25%	
NON CASH EXPENDITURES (included in net income)							
Depreciation	40,446	96,348	42%	45,449	114,223	40%	
Subtotal Non-Cash Expenses	40,446	96,348	42%	45,449	114,223	40%	
CASH EXPENDITURES (Not Included in net income)							
Capital Improvements / Replacements	(49,870)	(66,500)	75%	(119,708)	(117,500)	102%	All Projects Completed
Loan Payments - Principal	(17,888)	(36,182)	49%	(18,480)	(37,629)	49%	MZ Study Phase II
Subtotal Addl Cash Expenses	(67,758)	(102,682)	66%	(138,188)	(155,129)	89%	
NET CASH FLOW	2,351	54,001	4%	-76,797	23,125	-33%	

BVWD
Balance Sheet Prev Year Comparison
As of December 31, 2017

	<u>Dec 31, 17</u>	<u>Dec 31, 16</u>	<u>\$ Change</u>	<u>% Change</u>
ASSETS				
Current Assets				
Checking/Savings				
11015 · F&M Bank	294,331.73	349,778.71	-55,446.98	-15.85%
11018 · LAIF	301,432.84	298,449.71	2,983.13	1.0%
11020 · Petty Cash	50.00	50.00		
11025 · Capital Facilities Fund	21,656.00	21,656.00		
Total Checking/Savings	<u>617,470.57</u>	<u>669,934.42</u>	<u>-52,463.85</u>	<u>-7.83%</u>
Accounts Receivable				
11050 · Accounts Receivable	-18,173.45	-11,859.09	-6,314.36	-53.25%
Total Accounts Receivable	<u>-18,173.45</u>	<u>-11,859.09</u>	<u>-6,314.36</u>	<u>-53.25%</u>
Other Current Assets				
11055 · Accounts Receivable-Tax Roll	13,862.95	8,694.33	5,168.62	59.45%
11140 · Prepaid Insurance	3,674.72	7,010.00	-3,335.28	-47.58%
Total Other Current Assets	<u>17,537.67</u>	<u>15,704.33</u>	<u>1,833.34</u>	<u>11.67%</u>
Total Current Assets	<u>616,834.79</u>	<u>673,779.66</u>	<u>-56,944.87</u>	<u>-8.45%</u>
Fixed Assets				
12010 · Land	25,805.16	25,805.16		
12020 · SbSrfLine	1,196,893.29	1,196,893.29		
12040 · Col Facilities	365,904.61	350,514.48	15,390.13	4.39%
12041 · LA Facilities	166,428.79	166,428.79		
12050 · TRT Facilities	1,122,304.14	1,122,304.14		
12060 · DSP Facilities	1,217,330.65	1,176,053.58	41,277.07	3.51%
12080 · P & A (Plant & Admin)Facilities	340,264.59	340,264.59		
12100 · Accumulated Depreciation	-2,505,708.50	-2,413,478.48	-92,230.02	-3.82%
14030 · Work in Progress				
14030.0 · W.I.P. - GIS Consulting Support	19,778.00		19,778.00	100.0%
14030.5 · WIP - Dechlorination System II	13,495.63		13,495.63	100.0%
14030.8 · SCADA Monitoring Alarm System	118,292.32	92,187.61	26,104.71	28.32%
14030.9 · W.I.P.-SMARTCOVER Monitor/Alarm		15,130.13	-15,130.13	-100.0%
14031.0 · W.I.P. Eq. House Transfer Pumps	4,829.00		4,829.00	100.0%
16500 · USFS Special Use Permit		8,343.60	-8,343.60	-100.0%
16501.1 · W.I.P. Mix Zone Study Phase II	13,233.50		13,233.50	100.0%
16530 · Hydro Jetter	59,272.04		59,272.04	100.0%
Total 14030 · Work in Progress	<u>228,900.49</u>	<u>115,661.34</u>	<u>113,239.15</u>	<u>97.91%</u>
Total Fixed Assets	<u>2,158,123.22</u>	<u>2,080,446.89</u>	<u>77,676.33</u>	<u>3.73%</u>
TOTAL ASSETS	<u><u>2,774,958.01</u></u>	<u><u>2,754,226.55</u></u>	<u><u>20,731.46</u></u>	<u><u>0.75%</u></u>
LIABILITIES & EQUITY				
Liabilities				
Current Liabilities				
Accounts Payable				
21021 · Accounts Payable	9,506.12	5,260.61	4,245.51	80.7%
Total Accounts Payable	<u>9,506.12</u>	<u>5,260.61</u>	<u>4,245.51</u>	<u>80.7%</u>
Other Current Liabilities				

BVWD
Balance Sheet Prev Year Comparison
 As of December 31, 2017

	<u>Dec 31, 17</u>	<u>Dec 31, 16</u>	<u>\$ Change</u>	<u>% Change</u>
21090 · Payroll Liabilities	14,320.78	13,720.11	600.67	4.38%
2110 · Direct Deposit Liabilities	3.54	3.54		
22021 · Accrued Vacation	5,551.72	12,028.34	-6,476.62	-53.85%
Total Other Current Liabilities	<u>19,876.04</u>	<u>25,751.99</u>	<u>-5,875.95</u>	<u>-22.82%</u>
Total Current Liabilities	29,382.16	31,012.60	-1,630.44	-5.26%
Long Term Liabilities				
26025 · F&M Bank Loan	474,736.21	511,514.55	-36,778.34	-7.19%
Total Long Term Liabilities	<u>474,736.21</u>	<u>511,514.55</u>	<u>-36,778.34</u>	<u>-7.19%</u>
Total Liabilities	504,118.37	542,527.15	-38,408.78	-7.08%
Equity				
29000 · Retained Earnings	2,254,896.13	2,182,036.95	72,859.18	3.34%
Net Income	15,943.51	29,662.45	-13,718.94	-46.25%
Total Equity	<u>2,270,839.64</u>	<u>2,211,699.40</u>	<u>59,140.24</u>	<u>2.67%</u>
TOTAL LIABILITIES & EQUITY	<u><u>2,774,958.01</u></u>	<u><u>2,754,226.55</u></u>	<u><u>20,731.46</u></u>	<u><u>0.75%</u></u>

BVWD
A/P Aging Summary
As of October 31, 2017

5.2

Prepays October 2017	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL	Description
A.T.&T.	108.82					108.82	Telephone for Lake Alpine Boat Ramp
A.T.&T.	205.36					205.36	Telephone for Main Office
A.T.&T.	45.00					45.00	U-Verse for Main Office
Bear Valley Snowmobile	326.10					326.10	Snowmobile Repair & Maintenance
Card Services	413.89					413.89	Office & Field Supplies
Cheq Processing	42.41					42.41	Simply Deposit Fees
E.D.D.	431.26					431.26	State Payroll Taxes
E.D.D.	398.35					398.35	State Payroll Taxes
F & M Bank	4,694.80					4,694.80	Principal & Interest on Loan
I.R.S.	3,404.82					3,404.82	Federal Payroll Taxes
I.R.S.	3,169.52					3,169.52	Federal Payroll Taxes
Lake Alpine Water Co.	186.90					186.90	Water for Main Office
Marty Simpson	700.00					700.00	Paint
P.G.&E.	2,123.52					2,123.52	Electricity
SDRMA	1,672.00					1,672.00	Employee Medical Insurance
SDRMA	610.37					610.37	Employee Ancillary Insurance
SDRMA	2,179.65					2,179.65	Annual PR Reconciliation Workers Comp
Solsby Refund	268.43					268.43	A/R Refund - Property Sold
TOTAL	20,981.20					20,981.20	

Accounts Payable October 2017	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL	Description
Alpha Analytical Laboratories Inc.	118.00	2,056.00				2,174.00	Laboratory Analysis
Alpine County Public Works	833.86					833.86	Fuel
Aqua Sierra Controls, Inc.		24,701.50				24,701.50	Field Equipment,
Arnold Auto Supply Inc.	167.18	21.40				188.58	Oil, Oil Filters, Antifreeze, Misc Parts
Bear Valley Cross Country, Inc	750.00					750.00	Snow Removal Fees
Card Services		4,487.11				4,487.11	Field & Office Supplies
Columbia Communications Inc.		39.00				39.00	Quarterly Pager Fees
EBBETTS PASS GAS CO. Inc.		427.37				427.37	Propane for Main Office
Ebbetts Pass Lumber Co. Inc.		554.21				554.21	Field Supplies

BVWD
A/P Aging Summary
As of October 31, 2017

Accounts Payable October 2017	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL	Description
Gateway Press Inc.		343.22				343.22	Envelope for A/R Billing
Gold Country Carpet Cleaning		125.00				125.00	Clean Office Carpet
Gunnar Thordarson		100.00				100.00	Director Fee
Hach		189.92				189.92	Field Supplies
IEH Laboratories Inc.		371.28				371.28	Laboratory Analysis
Jim Bissell		100.00				100.00	Director Fee
John Boyle		100.00				100.00	Director Fee
Ken Brown		100.00				100.00	Director Fee
Lake Alpine Water					-0.02	-0.02	Bank Debited Incorrect Amount of Check
M & K ARNOLD		20,922.27				20,922.27	TransPumps, Intake/Outtake Manifolds, Concrete Pad
Neumiller and Beardslee		75.00				75.00	Legal Fees
Pioneer Electric	1,148.50					1,148.50	Run Power to New Pumps & Install New Boxes
Sierra Chemical Co. Inc.		3,266.33				3,266.33	Chlorine
Stantec Consulting Services Inc.		7,371.50				7,371.50	Mixing Zone Study
Stefaniya Beckings		100.00				100.00	Director Fee
Weber Ghio and Associates, Inc		135.00				135.00	Engineering Fees
TOTAL	3,017.54	65,586.11			-0.02	68,603.63	

BVWD
A/P Aging Summary
As of November 30, 2017

5.2

Prepays November 2017	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL	Description
A.T.&T.	108.90					108.90	Telephone Lake Alpine Boat Ramp & MPS
A.T.&T.	205.47					205.47	Telephone for Main Office
A.T.&T.	45.00					45.00	U-Verse for Main Office
Capital Bank & Trust	2,403.56					2,403.56	Simply IRA
Card Services	2,200.31					2,200.31	Field and Office Supplies
Cheq Processing	85.92					85.92	Simply Deposit Fees
E.D.D.	202.19					202.19	State Payroll Taxes
E.D.D.	218.64					218.64	State Payroll Taxes
F&M Bank	4,694.80					4,694.80	Principal & Interest on Loan
I.R.S.	1,967.32					1,967.32	Federal Payroll Taxes
I.R.S.	2,032.76					2,032.76	Federal Payroll Taxes
Lake Alpine Water Company	161.08					161.08	Water for Main Office
P.G.&E.	1,439.77					1,439.77	Electricity
SDRMA	1,672.00					1,672.00	Employees Medical Insurance
SDRMA	642.69					642.69	Employees Dental, Vision, Life, LT Disability Ins.
USPS	6.51					6.51	Postage
USPS	294.00					294.00	Postage for Accounts Receivable Invoices
The Zenith	822.00					822.00	Workers Compensation Insurance
TOTAL	19,202.92					19,202.92	

Accounts Payable November 2017	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL	Description
Alpha Analytical Laboratories Inc.		462.00				462.00	Lab Analysis
Alpine County Public Works	176.85					176.85	Fuel
Arnold Auto Supply Inc.		239.29				239.29	Field and Vehicle Supplies
CISCO Fire Sprinkler, Inc.		100.00				100.00	Fire Extenguishers Recharged / Inspected
CSDA		1,836.00				1,836.00	Membership Dues
Ebbetts Pass Lumber Co. Inc.		306.73	10.69			317.42	Field Supplies
Hach		132.99				132.99	Field Supplies
Lake Alpine Water					-0.02	-0.02	Bank Debited Error
Rain For Rent		742.61				742.61	Pump Rentals & Spray Field Parts
Stantec Consulting Services Inc.		1,758.75				1,758.75	Consulting
TOTAL	176.85	5,578.37	10.69		-0.02	5,765.89	

BVWD
A/P Aging Summary
As of December 31, 2017

5.2

Prepaired December 2017	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL	Description
A.T.&T.	108.88					108.88	Telephone for Lake Alpine Boat Ramp & MPS
A.T.&T.	201.25					201.25	Telephone for Main Office
A.T.&T.	45.00					45.00	U-Verse for Main Office
Capital Bank & Trust	1,449.32					1,449.32	Simple IRA
Cheq Services	60.57					60.57	Simply Deposit Fees
E.D.D.	219.14					219.14	State Payroll Taxes
E.D.D.	218.87					218.87	State Payroll Taxes
E.D.D.	193.49					193.49	State Payroll Taxes
F & M Bank	4,694.80					4,694.80	Principal & Interest on Loan
I.R.S.	2,036.14					2,036.14	Federal Payroll Taxes
I.R.S.	2,033.38					2,033.38	Federal Payroll Taxes
I.R.S.	1,955.46					1,955.46	Federal Payroll Taxes
Lake Alpine Water Company	148.17					148.17	Water for Main Office
P.G.&E.	1,665.03					1,665.03	Electricity
SDRMA	1,672.00					1,672.00	Employee Medical Insurance
SDRMA	492.97					492.97	Employee Dental, Vision, Life, LT Disability
The Zenith	822.00					822.00	Workers Compensation Insurance
TOTAL	18,016.47					18,016.47	

Accounts Payable December 2017	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL	Description
Alpha Analytical Laboratories Inc.		462.00				462.00	Laboratory Analysis
Alpine County Public Works	142.79					142.79	Fuel
Arnold Auto Supply Inc.		89.11				89.11	Auto Supplies
Bear Valley Cross Country, Inc		25.00				25.00	Season Trail Pass
Bear Valley Snowmobile Inc.		473.54				473.54	Snowmobile Repair & Maint
EBBETTS PASS GAS CO. Inc.	596.28					596.28	Propane
Ebbetts Pass Lumber Co. Inc.	265.03					265.03	Field Supplies
Encode		1,500.00				1,500.00	Website Creation
ERI Street Machine & Welding		728.96				728.96	Repair & Maint Boat Ramp
Gateway Press Inc.		451.86				451.86	Envelopes for A/R
JL Analytical Services, Inc.		3,192.00				3,192.00	Laboratory Analysis
Lake Alpine Water					-0.02	-0.02	Bank Debit Error

BVWD
A/P Aging Summary
As of December 31, 2017

5.2

Accounts Payable December 2017	Current	1 - 30	31 - 60	61 - 90	> 90	TOTAL	Description
McCrometer, Inc.		1,059.57				1,059.57	Sprayfield Meter Calibration
Nassco		295.00				295.00	Membership Dues
Weber Ghio and Associates, Inc		225.00				225.00	Engineering
TOTAL	1,004.10	8,502.04			-0.02	9,506.12	

BVWD
A/R Aging Summary

As of January 19, 2018

	<u>Current</u>	<u>1 - 30</u>	<u>31 - 60</u>	<u>61 - 90</u>	<u>> 90</u>	<u>TOTAL</u>
TOTAL	\$ 141,230.49	\$ 1,407.32	\$ (1,622.89)	\$ (19,246.54)	\$ 121,768.38	
TOTAL CREDITS	\$0.00	-620.89	-1,958.22	-30,332.84	-\$32,911.95	
TOTAL DEBITS	141,230.49	2,028.21	335.33	11,086.30	\$154,680.33	
TOTAL	\$141,230.49	\$ 1,407.32	\$ (1,622.89)	\$ (19,246.54)	\$121,768.38	

Accounts Receivable as of January 19, 2017

TOTAL	\$ 141,140.51	\$ (35.25)	\$ (1,908.03)	\$ (10,651.74)	\$ 128,545.49
TOTAL CREDITS	-50.51	-733.00	-2,450.36	-22,158.04	-25,391.91
TOTAL DEBITS	\$141,191.02	697.75	542.33	11,506.30	\$153,937.40
TOTAL	141,140.51	-35.25	-1,908.03	-10,651.74	\$128,545.49



BEAR VALLEY WATER DISTRICT

BOARD MEETING

October 23, 2017 - 9 A.M.

Conference Room

441 Creekside Drive, Bear Valley, CA 95223

Call-In Info: 605-475-5920 Access Code: 475-0045

MINUTES

REGULAR BOARD MEETING

DECLARATION OF A QUORUM

President James Bissell called the meeting to order at 9:10 A.M. Directors present were Vice President Stefaniya Becking, Secretary Ken Brown, Treasurer John Boyle, and Director Gunnar Thordarson. Staff present were General Manager Jeff Gouveia and Office Manager Judi Silber. Public present was Mr. John Dralla.

PUBLIC FORUM

Any member of the public may address and ask questions of the Board relating to any matter within the Board's jurisdiction provided the matter is not on the agenda or pending before the Board.

The Minutes are presented as they appeared on the agenda. The actual meeting began with item 2. Reserve Funds in order to accommodate Mr. Robert W. Johnson, Certified Public Accountant, who attended the meeting remotely via telephone. Mr. Johnson is the District's auditor.

BOARD BUSINESS

1. The Board will consider adoption of the July 24, 2017 Board Meeting minutes

Motion Boyle Second Thordarson to approve the July 24th, 2017 Minutes as presented.
ALL AYES; MOTION CARRIED

2. Reserve Funds - Discussion and Possible Action Item

Robert W. Johnson joined the meeting by phone at the request of the General Manager to discuss the District's interest in establishing a reserve fund policy as well as establishing several initial fund types. The Board of Directors had many questions for Mr. Johnson. Treasurer Boyle asked if it was reasonable to hold cash verses paying off debt. Mr. Johnson recommended having a minimum of 3-6 months operating expenses on hand in cash. GM stated that the District's cash position is close to the annual operating expenses. Mr. Johnson suggested the District begin reserving for future asset repair and replacement. He recommended that the District drill down on immediate needs for capital funds. Mr. Johnson stated that there are three types of common reserve funds: Contingency Reserves, Emergency Reserves and Capital Reserves. Mr. Johnson noted that many Districts set aside reserves at the same time that they setup their annual fiscal budget. Mr. Johnson suggested setting up a separate bank account for each reserve and a savings account for future infrastructure. He recommended that the Board establish their priorities and the amount of money to be setup for each fund. GM recommended that the District initially consider funding the emergency reserve fund with \$100K. Mr. Johnson stated that the District can setup funds without funding them as well. Mr. Johnson gave the General Manager a C+ to a B- on the overall fiscal health of the District. President Bissell thought that the rate payers would think that was a good score.

Motion Boyle Second Becking to accept the Reserve Fund Policy as presented.
ALL AYES; MOTION CARRIED

3. FY 17 – 18 Budget - Employee Benefits - Discussion and Possible Action Item

GM stated that the District hasn't yet received notification of approval from CalPERS. Effective July 1, 1988, the District entered into a voluntary Section 218 agreement providing coverage of state and local employees for Social Security benefits. This allows District employees to receive both Social Security benefits and well as public retirement plan benefits such as a defined benefit plan (e.g. CalPERS) or a defined contribution plan. Director's Thordarson, Boyle and Brown expressed reservations about the CalPERS program in favor of a defined contribution plan noting rising mandatory contribution rates as well as concerns that once the District commits to a contract with CalPERS termination is costly. GM Gouveia presented defined contribution plan options for the Board to consider with a recommendation for a 3% "grant" to qualifying employees plus up to a 3% match of each qualifying employees contribution to their own retirement plan. GM also presented several scenarios of cash-in-lieu of other benefits for the Board to consider. Mr. Johnson suggested that a good "Plan B," for the District would be a defined contribution plan instead of CalPERS. Mr. Johnson shared that many of his clients are Special District's and have standard contribution rates of 6 – 8 % of each qualifying employee's salary or wage. After further discussion, the GM was directed to bring retirement management service options back to the next meeting.

Motion Boyle Second Thordarson to initiate a defined contribution program effective January 1, 2018 to include a 3% "grant" plus up to a 3% match of each qualifying employees' contribution to their retirement plan. In addition, to adopt, effective November 1st, 2017, a 50% cash-in-lieu program for employees who opt out in writing of other benefits.

ALL AYES; MOTION CARRIED

Operations Report – General Manager

See attachment

4. Financial Report – General Manager

4.1 P&L and Balance Sheet Reports - Discussion and Possible Action Item

Motion Bissell Second Brown to accept the P&L and Balance Sheet Reports as presented.
ALL AYES; MOTION CARRIED

4.2 Accounts Payable Report - Discussion and Possible Action Item

Motion Thordarson Second Brown to accept the Accounts Payable Reports as presented.
ALL AYES; MOTION CARRIED

4.3 A/R & Aging Reports – Discussion

The Accounts Receivable balance as of October 20th, 2017 was \$117,340.53. The balance on October 20th, 2016 was \$78,888.97.

4.4 FY 2016-17 Audit - Discussion and Possible Action Item

Discussion and possible action postponed until January meeting.

5. Board Member Reports

The next board meeting was set for Monday, January 22nd, 2018 at 9:00 a.m.

AGENDA ITEM

DATE: OCTOBER 23, 2017

TO: BVWD BOARD OF DIRECTORS

FROM: JEFF GOUVEIA, DISTRICT GENERAL MANAGER

RE: MONTHLY OPERATIONS REPORT

1. Collections, Treatment & Disposal Operations - Update

a. Flows - Influent Flows & Pond Transfers

The influent flows (MG) for October were .466 MG / 68.8 % change previous year.

Transferred to PR (MG) in October was .623 MG

a. Volumes - Storage, Capacity & Disposal

Land application Annual Total for 2017 was 16.051 MG / 30.5% change in previous year.

Land application began July 1 and ended September 29th, 2017.

Discharge effluent flow totals – MG - Total Surface Discharge for 2017 was 92.3 MG

Storage Reservoir Elevations and Volumes highest level 2017 – 3/8/17 was 65.67% MG = 85.9%.

Current Storage Volume was .686 MG = 9% on 10/22/2017.

2. Permit Compliance & Monitoring & Reporting Programs (MRPs) - Update

a. WDR MRP - Land Discharge Permit – Compliance & Reporting Update

i. Tri-Annual Groundwater Monitoring –

i. 2nd Tri Annual Sampling Performed August 24 – Report Due Nov 1

ii. 3rd Tri Annual Sampling Performed September 28 – Report Due February 1

b. NPDES MRP – Surface Water Discharge Permit – Compliance & Reporting Update

i. R5-2016-0054 – Updated Dilution/Mixing Zone Study – Report Submitted September 20 (See Att)

3. 2017 Cap Ex Projects – Update

a. Surface Discharge Monitoring System – New Residual Chlorine and Bisulfite Monitoring Units Installed

b. Treatment > Storage Transfer System – New 375 GPM Pumps – Installation in Progress

c. Headworks Magnetic Flow Meter Replacement – New Submersible Flow Meter Installed

d. New Hydro Jetter – Received and Put Into Use in August and September – Approx. 7000' cleaned

4. 2017 Repair and Maintenance Projects – Update

5. Other

a. Dept. of Water Resources - Emergency Action Plan & Inundation Map – Discussion and Possible Action Item

Bear Valley SH Dam No. 1088.000 has been classified as a "significant" hazard. Newly enacted state law effective July 1, 2017, requires dam owners to prepare an emergency action plan for their dams.

The EAP must be completed and submitted for the subject dam by January 1, 2021. Prior to this date, An inundation map must be submitted for review and approval by the Division. Pursuant to the Public

Records Act and the State's effort to bolster transparency in government, the (DSOD) will publicly release information related to all dams under the state's jurisdiction. The information that will be made public is the downstream hazard classification, reservoir restriction status, and condition assessment.

- b. 2017 System Capacity Update – Discussion
Engineer Gary Ghio sent GM an email on August 2, 2017 stating that there is no change over what he calculated in 2016, i.e. 1196 additional connections.
- c. BVWD October 2017 Newsletter
The October Newsletter covered the 5 -year NPDES permit adopted on June 24, 2016.
2017-18 Budget Targets Preparing for Future "Atmospheric River" Events.
The Collection System Maintenance and the purchase of the new hydro jetter.
Reminder of alternatives to dispose of fats, oils, and grease.
The District welcomes three incumbents for another four years.
- d. Worker's Compensation – Certificate of Consent Resolution – Discussion and Possible Action Item
Cal Mutuals JPRIMA, required the District Board of Directors to approve a Certificate of Consent Resolution and complete a questionnaire for the District's new Worker's Compensation Insurance Policy.
- e. BVWD Election – Boyle, Becking, Bissell
The three incumbents were appointed by the Alpine County Board of Supervisors at their December 3rd, 2017 meeting, as there was no opposition, saving the District the expense of an election. The appointed Directors terms will be from December 1, 2017 to December 3, 2021.