

## WATER OPERATIONS SUMMARY FOR NOVEMBER 2018

December 5, 2018

### General Operations

During the month of November, the South Well operated for 0 days due to cold weather and low irrigation demands. The average flow rate when running was 0 GPM as the well was off and a total of 0 gallons was delivered to the HEB irrigation pond. During this month when the well wasn't needed, the static water level would recover from approximately 283 feet to 311 feet. Recovery periods were longer than the preceding summer months due to colder weather, less irrigation, and snow/rainfall.

The North Well operated for 0 days due to cold weather and low irrigation demands. The average flow rate was 0 GPM as the well was off and a total of 0 gallons was delivered to the HEB irrigation pond. During this month when the well wasn't needed, the static water level would recover from approximately 272 feet to 293 feet. Recovery periods were longer than the preceding summer months due to colder weather, less irrigation, and snow/rainfall.

Despite the ECCV Line being available, it was not used to supplement the North and South Well as irrigation demands did not require more than what the wells could pump. The line and associated Back Flow Valve (BFV) were winterized on November 13, 2018.

The Buchanan Tap was not operated this month as it was winterized in the previous month (October).

### Action Items

#### Board Meeting and ECCV

Date	Status Update
11/19/2018	Attended HEB site with AM West and WISE staff to fix communications issue. Issue solved though they mentioned it could happen again and to try to open the WISE line long before needed. Additionally, another relay may help to prevent the problem in the future. Discussed 3rd well locations with Roe and gathered GPS coordinates for possible sites as well as North Well, South Well, WISE Vault, Pond House, and Buchanan Tap.
11/15/2018	Tom attended monthly board meeting. Proposal for cost analysis of a third supply well was approved.
11/13/2018	Winterized ECCV Line successfully. Communication system down; had to perform BFV opening and closing manually. Contacting AM West to fix issue. Final Aurora Water read was 013360733.

#### Analog Data and South Well Operations

Date	Status Update
11/12/2018	During a moderate to heavy snowfall, the dBM was lowered on the south well, supporting the theory it is the tree causing a block of the signal. However, the dBM has not raised past -95

dBM at any point yet, despite the dropping of most leaves. At this point, all of the leaves have fallen and the signal rarely improves over -95 dBm. A recommendation to remove the tree during the winter season will most likely be made.
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## Utility Notification Center of Colorado (UNCC)

In the month of November, TZA responded to 64 utility locate tickets.

## Water Usage

PLEASE NOTE: This section is current through December 5th, 2018. An updated draft will be sent once invoices are received for the month of November. Water Usage data is collected from invoices received from Xcel Energy and Aurora Water. For historical water usage, please refer to Table 1 as well as Figure 1 and Figure 2. For monthly water usage and billing for 2018, refer to Table 2.

**Table 1 – Historic Annual Water Usage, to Date**

Year	North Well		South Well		ECCV Line, Buchanan Tap, Aurora Pkwy Tap		Total
	kgal	%	kgal	%	kgal	%	kgal
2011	29,408	37	38,888	48	12,273	15	80,569
2012	25,416	28	55,493	61	10,368	11	91,277
2013	26,223	38	38,791	55	4,982	7	69,996
2014	18,472	33	33,808	60	4,036	7	56,316
2015	20,510	30	37,999	57	8,650	13	67,159
2016	21,569	25	55,478	63	10,824	12	87,871
2017	21,277	31	33,884	49	14,097	20	69,258
2018	22,971	28	50,100	62	8,147	10	81,218
Average (2010-2017)	23,268	32	42,049	56	9,319	12	74,635

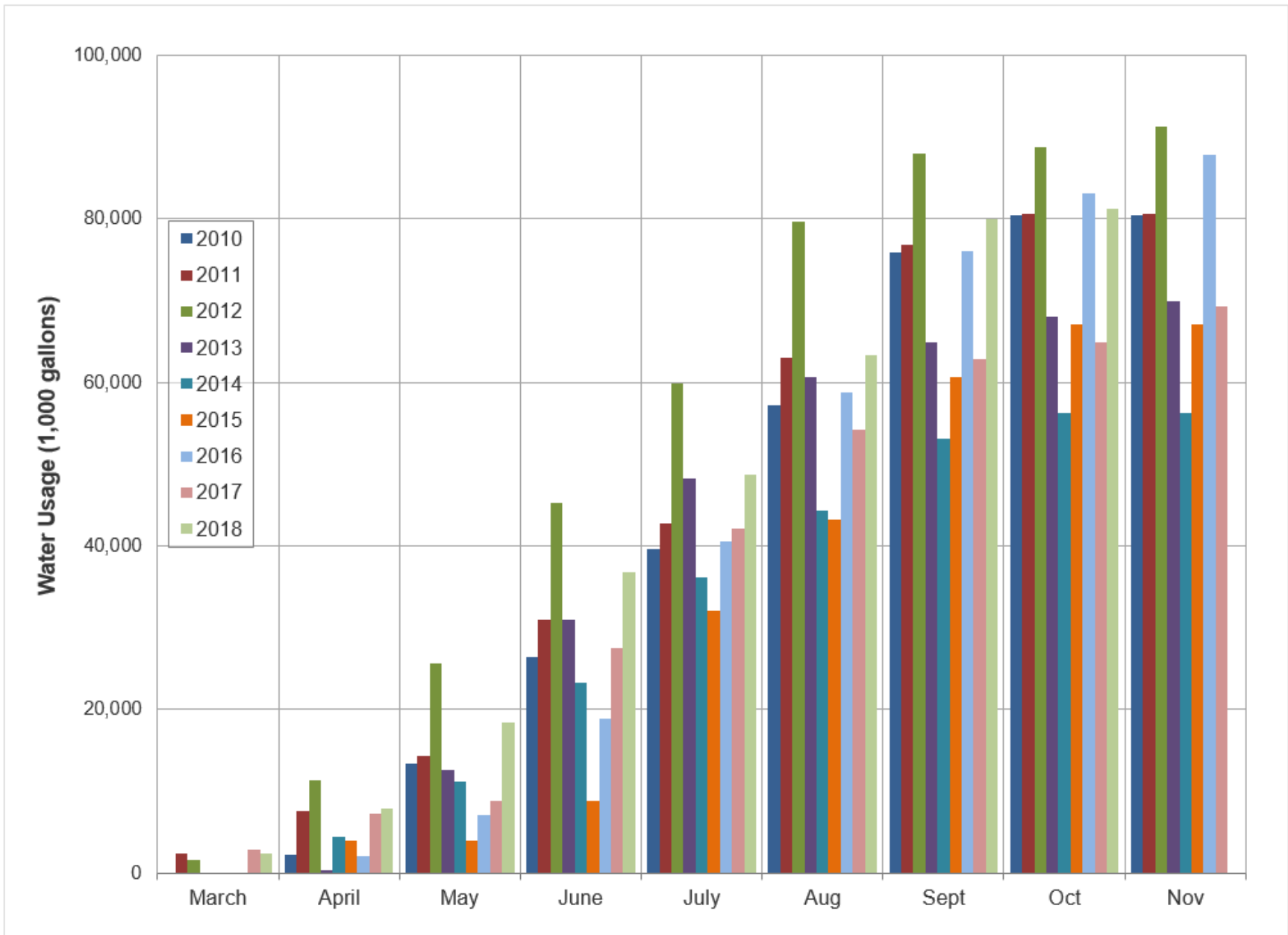


Figure 1 – Current and Historic Cumulative Annual Water Usage (2010 - October 2018)

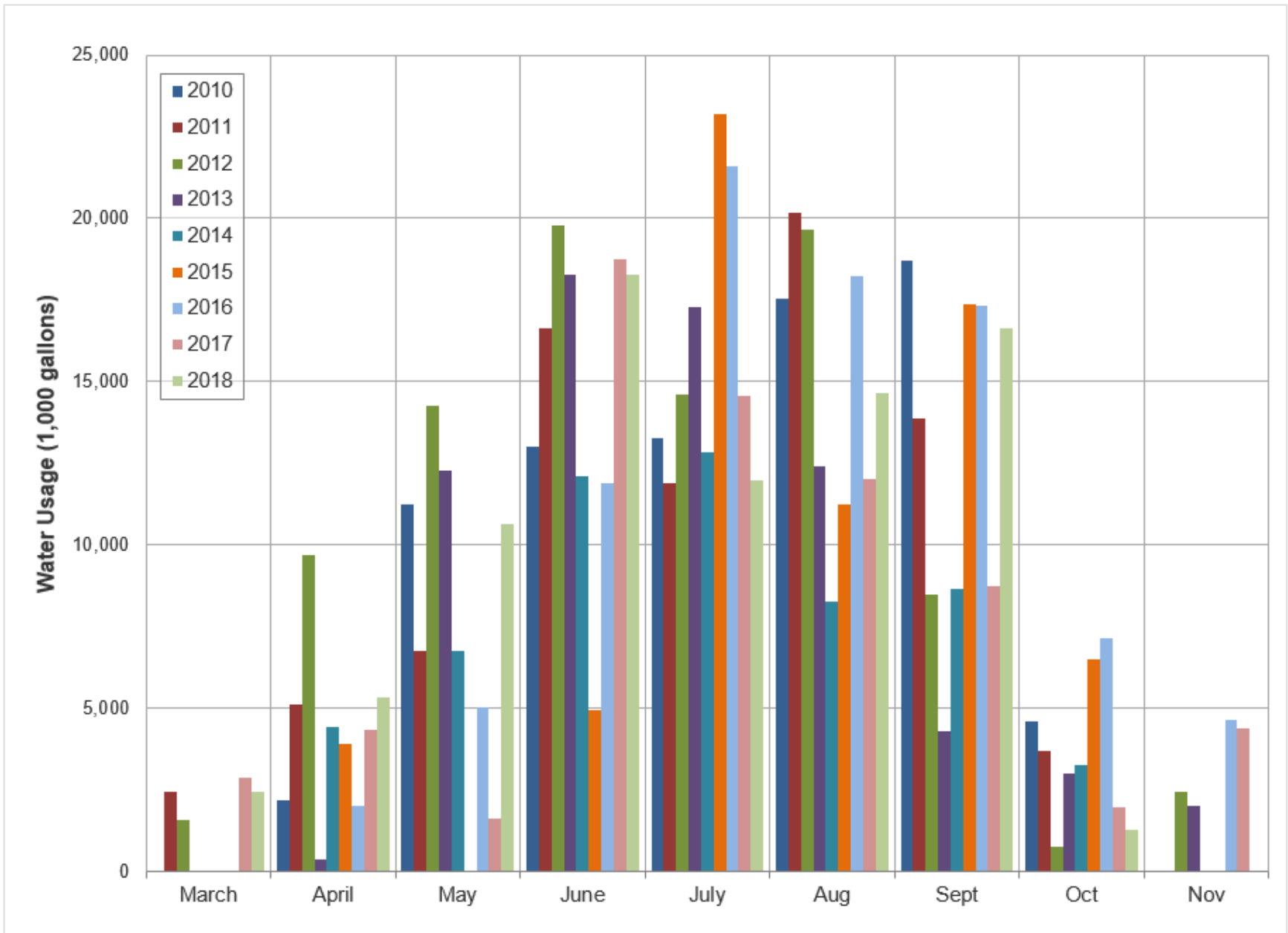


Figure 2 – Current and Historic Monthly Water Usage (2010 – September 2018)

**Table 2 – Monthly water usage and billing for Eagle Bend Metro District January - October 2018**

<b>Eagle Bend Water and Energy Utilities (2018) - through October 2018</b>														
Service Month (nominal)	Initial	January	February	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	YTD
<b>Meter Reads</b>														
North Well	7,292	7,292	7,292	7,292	7,292	10,805	16,104	19,811	24,421	29,572	30,263			
South Well	12,031	12,031	12,031	14,487	19,804	26,874	36,503	43,134	51,736	61,584	62,131			
ECCV	11,109	11,109	11,109	11,109	11,109	11,109	13,360	13,360	13,360	13,360	13,360			
Aurora (Buchanan Way)	25,297	25,297	25,297	25,297	25,297	25,297	26,287	27,814	29,139	30,697	30,697			
Aurora (Aurora Pky)	5,484	5,484	5,484	5,484	5,521	5,586	5,670	5,761	5,857	5,934	5,980			
<b>kgal</b>														
North Well		0	0	0	0	3,513	5,299	3,707	4,610	5,151	691			22,971
South Well		0	0	2,456	5,317	7,070	9,629	6,631	8,602	9,848	547			50,100
ECCV		0	0	0	0	0	2,251	0	0	0	0			2,251
Aurora (Buchanan Way)		0	0	0	0	0	990	1,527	1,325	1,558	0			5,400
Aurora (Aurora Pky)		0	0	0	37	65	84	91	96	77	46			496
Total - kgal		0	0	2,456	5,354	10,648	18,253	11,956	14,633	16,634	1,284			81,218
Total - af		0.0	0.0	7.5	16.4	32.7	56.0	36.7	44.9	51.0	3.9			249.2
<b>COA Billing*</b>														* Late fees not included
North Well	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,510.59	\$2,278.57	\$1,594.01	\$1,982.30	\$2,214.93	\$297.13			\$9,877.53
South Well	\$0.00	\$0.00	\$0.00	\$1,056.08	\$2,286.31	\$3,040.10	\$4,140.47	\$2,851.33	\$3,698.86	\$4,234.64	\$235.21			\$21,543.00
ECCV	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14,586.48	\$0.00	\$0.00	\$0.00	\$0.00			\$14,586.48
Aurora (Buchanan Way)	\$0.00	\$65.82	\$65.82	\$65.82	\$65.82	\$65.82	\$6,768.12	\$10,403.61	\$9,036.07	\$10,613.48	\$65.82			\$37,216.20
Aurora (Aurora Pky)	\$0.00	\$17.07	\$17.07	\$17.07	\$267.56	\$457.12	\$585.75	\$633.14	\$666.99	\$538.36	\$328.49			\$3,528.62
Total	\$0.00	\$82.89	\$82.89	\$1,138.97	\$2,619.69	\$5,073.63	\$28,359.39	\$15,482.09	\$15,384.22	\$17,601.41	\$926.65			\$86,751.83
<b>Xcel Energy Billing</b>														
North Well	\$803.92	\$401.89	\$399.15	\$401.96	\$396.56	\$3,718.65	\$4,895.74	\$4,046.84	\$4,356.36	\$4,937.27	\$2,799.73			\$27,158.07
South Well	\$7,299.22	\$535.80	\$541.27	\$3,649.61	\$4,538.60	\$5,099.28	\$6,315.49	\$5,132.85	\$5,560.61	\$6,540.25	\$2,977.29			\$48,190.27
Total	\$8,103.14	\$937.69	\$940.42	\$4,051.57	\$4,935.16	\$8,817.93	\$11,211.23	\$9,179.69	\$9,916.97	\$11,477.52	\$5,777.02			\$75,348.34
<b>Xcel S/kgal (approx., some time lag)</b>														
North Well	\$0.00	-	-	-	-	\$1.06	\$0.92	\$1.09	\$0.94	\$0.96	\$4.05			\$1.18
South Well	\$0.00	-	-	\$1.49	\$0.85	\$0.72	\$0.66	\$0.77	\$0.65	\$0.66	\$5.44			\$0.96
Combined	\$0.00	-	-	\$1.65	\$0.85	\$0.72	\$0.75	\$0.89	\$0.75	\$0.77	\$4.67			\$1.03
HOA Billing	\$0.00	\$0.00	\$0.00	\$31,754.00	\$39,872.24	\$54,543.30	\$87,909.46	\$64,383.36	\$70,953.17	\$77,316.20	\$28,715.92			\$455,447.65
Net to District	\$0.00	-	-	\$26,563.46	\$32,317.39	\$40,651.74	\$48,338.84	\$39,721.58	\$45,651.98	\$48,237.27	\$22,012.25			\$303,494.51
Credit towards ECCV SL	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,791.85	\$0.00	\$0.00	\$0.00	\$0.00			\$9,791.85