

## WATER OPERATIONS SUMMARY FOR APRIL 2018

May 7, 2018

### General Operations

During the month of April, the South Well operated for approximately 11 days. The average flow rate was approximately 285 gpm and a total of 4.6 million gallons was delivered to the HEB irrigation pond. Based on the last well pumping cycle in April, 7 days elapsed from pump shut-off and allowed the static water level to recover from 228.7 feet to 352.1 feet before pump start-up again.

The North Well static water level cycled between 332.5 and 335 feet above well pump for the entirety of the month of April and did not operate. Prior to irrigation season, the North Well was consistently reading a static water level of 333.4 feet.

### Action Items

#### Aurora Water Raw Water Pipeline

Date	Status Update
<b>4-13-18</b>	TZA participated in a progress meeting hosted by Jim Kriss at Carollo. Discussion included the Gun Club Pump Station, Saddle Rock Vault, HEB Vault Connection, and Water Operations. Jim Kriss provided meeting meetings to all parties.
3-30-18	TZA participated in a site visit coordinated by Carollo Engineers. The Gun Club pump station, Saddle Rock Golf Course and EBMD vaults were visited. TZA provided answers as necessary to Carollo. Next meeting is at HEB on April 13.

#### Installation of HEB Irrigation Flow Monitoring

Date	Status Update
<b>5-4-18</b>	Browns Hill was unable to visit HEB as previously scheduled and is scheduled to conduct the same scope of work on May 10, 2018.
3-30-18	Browns Hill is attempting to log into HEB FlowTronex irrigation control system during the week of April 9 in attempts to access the PLC. Access will allow Browns Hill to program the system to output an irrigation flow signal to the Mission Communication system for remote flow monitoring and totalizing. This will allow the District to forecast irrigation water demand more accurately.

#### HEB Stilling Well Transducer Signal Fix

Date	Status Update
<b>5-4-18</b>	Browns Hill was unable to visit HEB as previously scheduled and is scheduled to conduct the same scope of work on May 10, 2018.
3-30-18	The level transducer provides pond level readings to the Mission Communications system. The Mission unit reports skewed level readings each time an irrigation pump is running. Browns Hill suspects the transducer is affected by being located directly in the middle of all three irrigation pumps. Browns Hill/TZA will relocate the transducer in attempt to fix the skewed readings.

## Utility Notification Center of Colorado (UNCC)

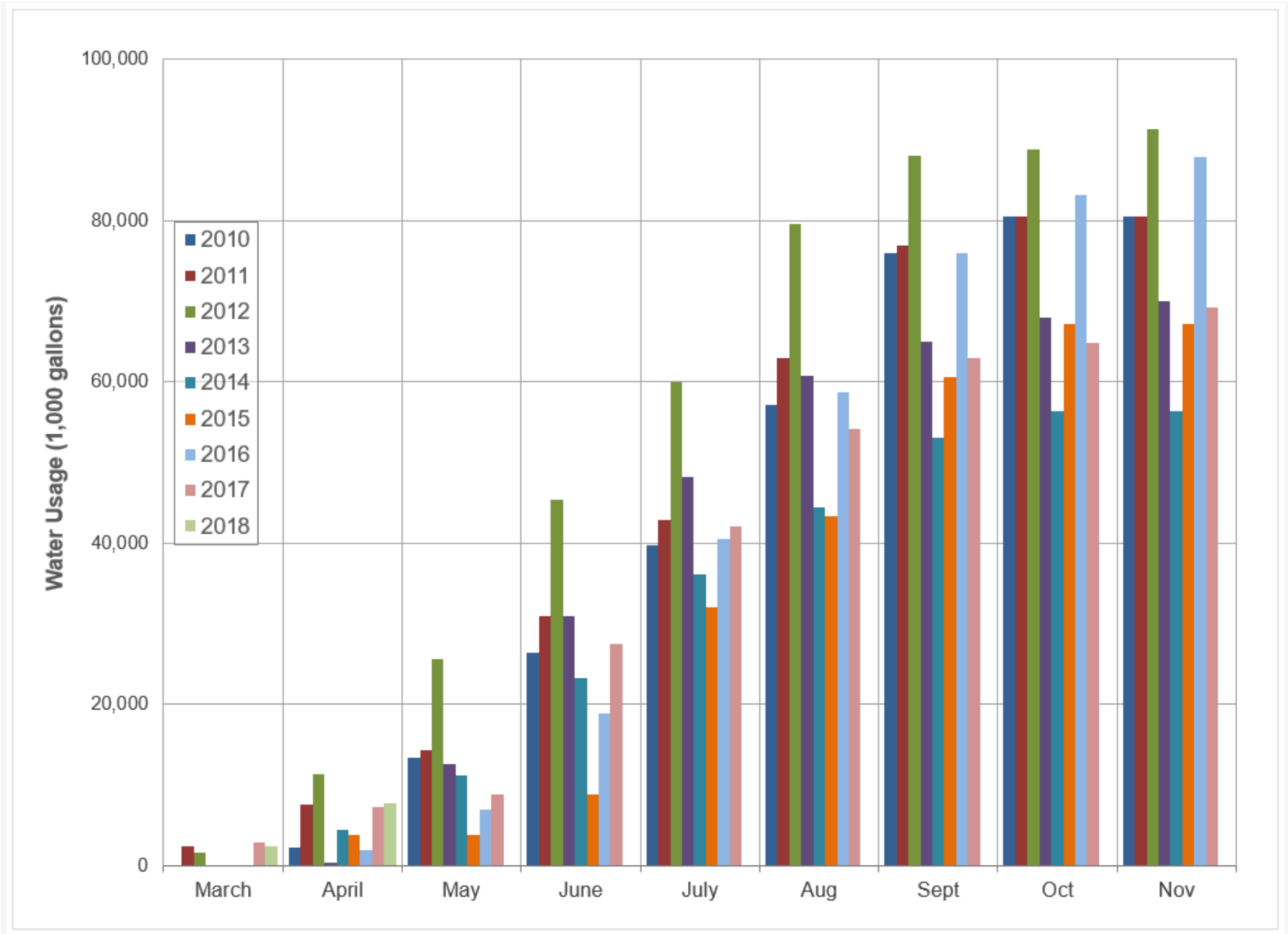
In the month of April, TZA has responded to 46 utility locate tickets.

### Water Usage

PLEASE NOTE: This section is current through May 7, 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	0		7,773	100	37		7,810
Average (2010-2017)	23,268	32	42,049	56	9,319	12	74,635



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

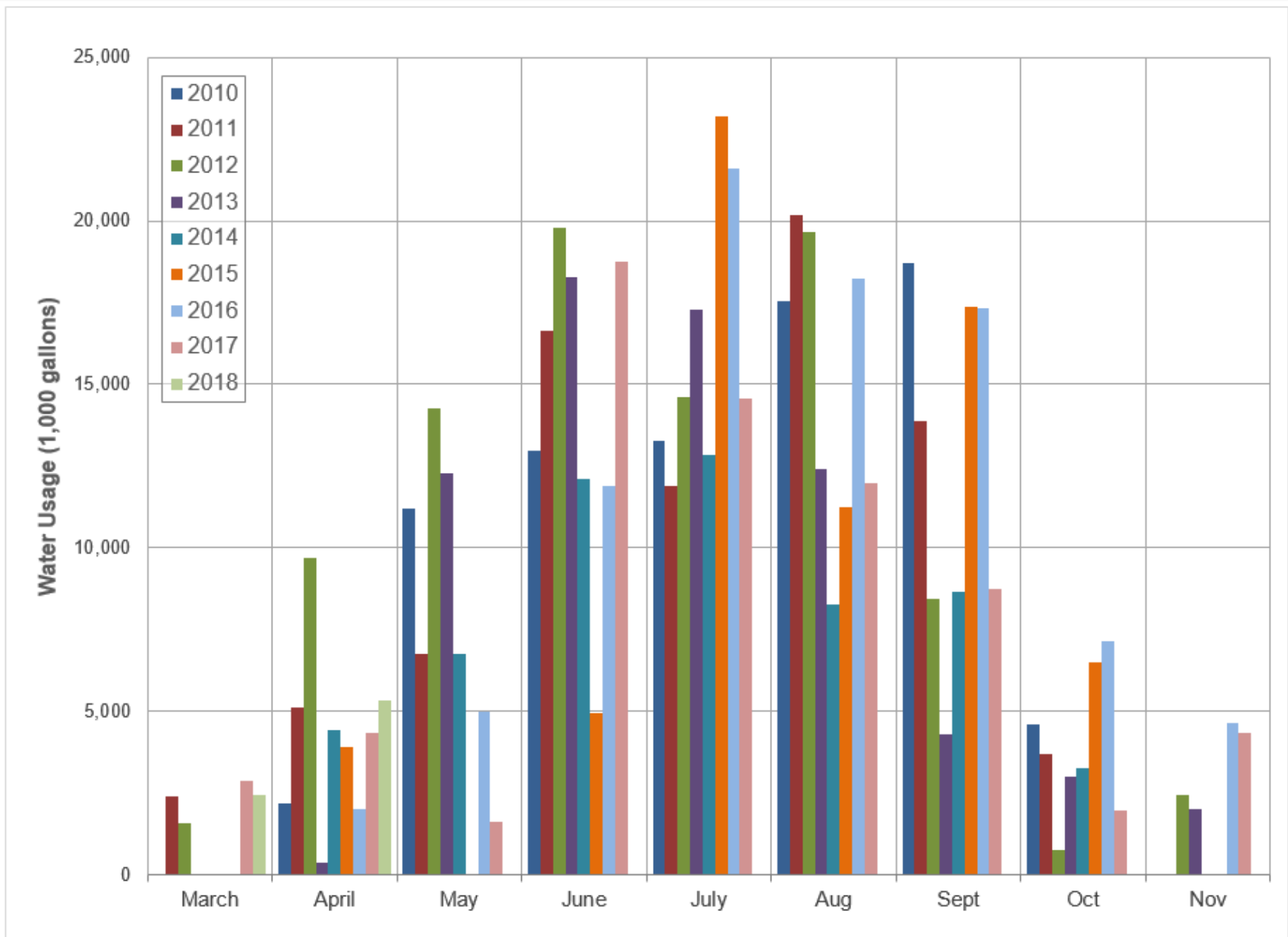


Figure 2 – Current and Historic Monthly Water Usage (2010 - Apr 2018)

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

<b>Eagle Bend Water and Energy Utilities (2018) - through Apr 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									
South Well	12,031	12,031	12,031	14,487	19,804									
ECCV		9,695	9,695	9,695	9,695									
Aurora (Buchanan Way)	25,297	25,297	25,297	25,297	25,297									
Aurora (Aurora Pky)	5,484	5,484	5,484	5,484	5,521									
<b>kgal</b>														
North Well		0	0	0	0									0
South Well		0	0	2,456	5,317									7,773
ECCV		0	0	0	0									0
Aurora (Buchanan Way)		0	0	0	0									0
Aurora (Aurora Pky)		0	0	0	37									37
Total - kgal		0	0	2,456	5,354									7,810
Total - af		0.0	0.0	7.5	16.4									24.0
<b>COA Billing*</b>														
* Late fees not included														
North Well	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00									\$0.00
South Well	\$0.00	\$0.00	\$0.00	\$1,056.08	\$2,286.31									\$3,342.39
ECCV	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00									\$0.00
Aurora (Buchanan Way)	\$0.00	\$65.82	\$65.82	\$65.82	\$65.82									\$263.28
Aurora (Aurora Pky)	\$0.00	\$17.07	\$17.07	\$17.07	\$267.56									\$318.77
Total	\$0.00	\$82.89	\$82.89	\$1,138.97	\$2,619.69									\$3,924.44
<b>Xcel Energy Billing</b>														
North Well	\$803.92	\$401.89	\$399.15	\$401.96	\$396.56									\$2,403.48
South Well	\$7,299.22	\$535.80	\$541.27	\$3,649.61	\$4,538.60									\$16,564.50
Total	\$8,103.14	\$937.69	\$940.42	\$4,051.57	\$4,935.16									\$18,967.98
<b>Xcel S/kgal (approx., some time lag)</b>														
North Well	\$0.00	-	-	-	-									-
South Well	\$0.00	-	-	\$1.49	\$0.85									\$2.13
Combined	\$0.00	-	-	\$1.65	\$0.85									\$2.44
HOA Billing	\$0.00	\$0.00	\$0.00	\$31,754.00	\$39,872.24									\$71,626.24
Net to District	\$0.00	-	-	\$26,563.46	\$32,317.39									\$58,880.85
Credit towards ECCV SL	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00									\$0.00