Beverly Hills Mutual Water Company

614 North Tejon Street
Colorado Springs, CO 80903

Annual Shareholders Meeting
Monday, March 11, 2024

Agenda

- Board introductions
- The basics – Beverly Hills Mutual Water Company 101
- Financials
- Significant activities this past year
- New business
- What lies ahead
- Election of one director
- Questions & Answers

Board of Directors (Term Ends)

Gene Crandall, President (2028)
7830 Coventry Drive
gmcrandall@aol.com

Aurom Mahobian(2026)
7750 Saxeborough Drive
aurommahobian@gmail.com

Mark McNary, Treasurer (2027)
7914 Saxeborough Drive
markmcnary5@gmail.com

Mark Kennedy, Vice President (2024)
7903 Coventry Drive
cr4mk@icloud.com

Orlando Zapata, Secretary (2025)
559 3rd Avenue
ojzapata@gmail.com

Beverly Hills Mutual Water Company 101

- BHMWC is a private, 501c (12) non-profit company; each homeowner owns an equal share in the company
- It was founded by the developer of Beverly Hills Estates in 1957 to serve what was then a remotely located community

- We have no employees
- We are run by an elected volunteer board made up of community members. Members serve for a five-year term.
- Facilities operated by contractor – Colorado Water Well
- Billing handled by Walker Schooler District Managers

- 118 residential customers
- 1 non-residential customer (Fire House)

Billing

- Water bills are issued six times per year for the preceding two months of service
  - January 1, March 1, May 1, July 1, September 1, November 1
- Bill is based on:
  - Flat rate ($150)
  - Usage exceeding 12,000 gallons in the period ($3 per 1,000)
- You may opt to receive bills via email (11 customers, 9.2%)
- You may opt to pay automatically (39 customers, 32.7%)
  - Funds are deducted on the 25th of the billing month
- Warning letters are sent if payment is not received by the first of the following month
- A shut off notice is posted ($50 fee) if payment is not received prior to the next bill

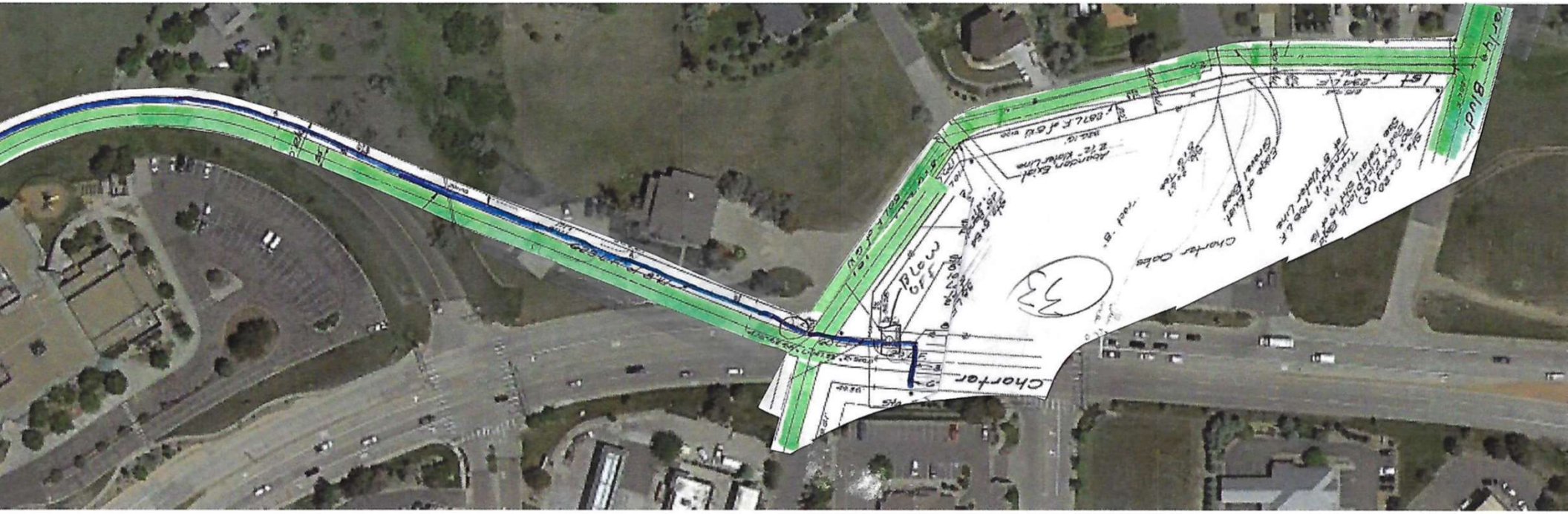
Some Historical Notes

- July 1, 1957: Articles of Incorporation filed
- 1978: BHMWC asked the county to deny additional building permits until the “Water Situation” was resolved
  - BHMWC was having trouble supplying reliable water to the 22 existing homes
- 1979: Ongoing discussions with Richard Wilson to buy remaining lots and improve and expand the water company
  - Charter Oaks replat filed December 1980
- 1980: Safeway well drilled into Denver aquifer
- June 1981: Water main expansion completed
- 1983: Initial startup of the pump house
- 1984: Charter Oaks Drive realigned and traffic moved onto newly created Castle Pines Parkway
- 1985: Dave Bomhoff of Denver Pump is named operator of record – Dave is still our operator
- 1986: 80,000 gallon reservoir completed
- 1987: Filed taxes as a non-profit
- 1990: Five new main valves installed to replace stuck valves

More Historical Notes

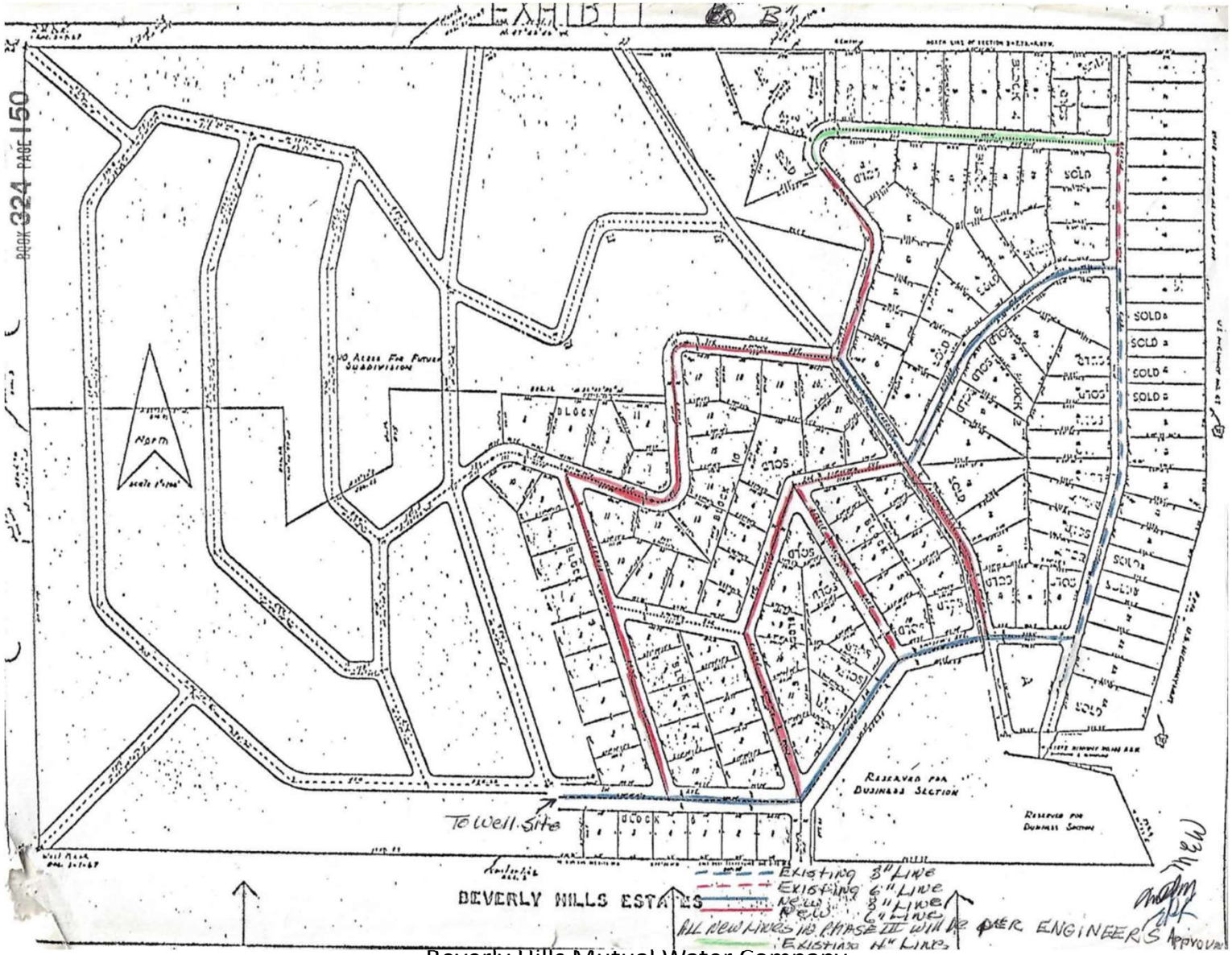
- 1992: Fence installed around pump house
- 1995: Gene Crandall elected to the board
- 1995: Special district formed to pave dirt roads in Beverly Hills
- 1996: Water company purchased rights to commercial taps back from Richard Whalen
- 2000: Installed pressure reducing valves in all homes, raised pressure in mains
- 2010: Investigated remotely readable meters – too expensive at the time
- 2012: Cleaned contact tanks of excessive sediment. Started three-year tank cleaning schedule.
- 2013: Sanitary survey found defects in 60k tank and chlorination system. Replaced tank lid, converted to liquid chlorination and incorporated tank plumbing modifications.
- 2018: Replaced all meters with remotely readable meters.
- 2018: Sanitary Survey identified tank corrosion requiring remediation
- 2019: Realigned pump house fence to the north, added fence on southern property corners.
- 2019: Moved billing to Walker Schooler District Managers
- 2020: Corrosion remediation completed
- 2021: Fire pump replaced

1984 Charter Oaks Drive Realignment



- Charter Oaks Drive was originally planned as a major thoroughfare to handle traffic into Castle Pines
- Green highlights indicate “as built” water mains

Historical Plan for Beverly Hills

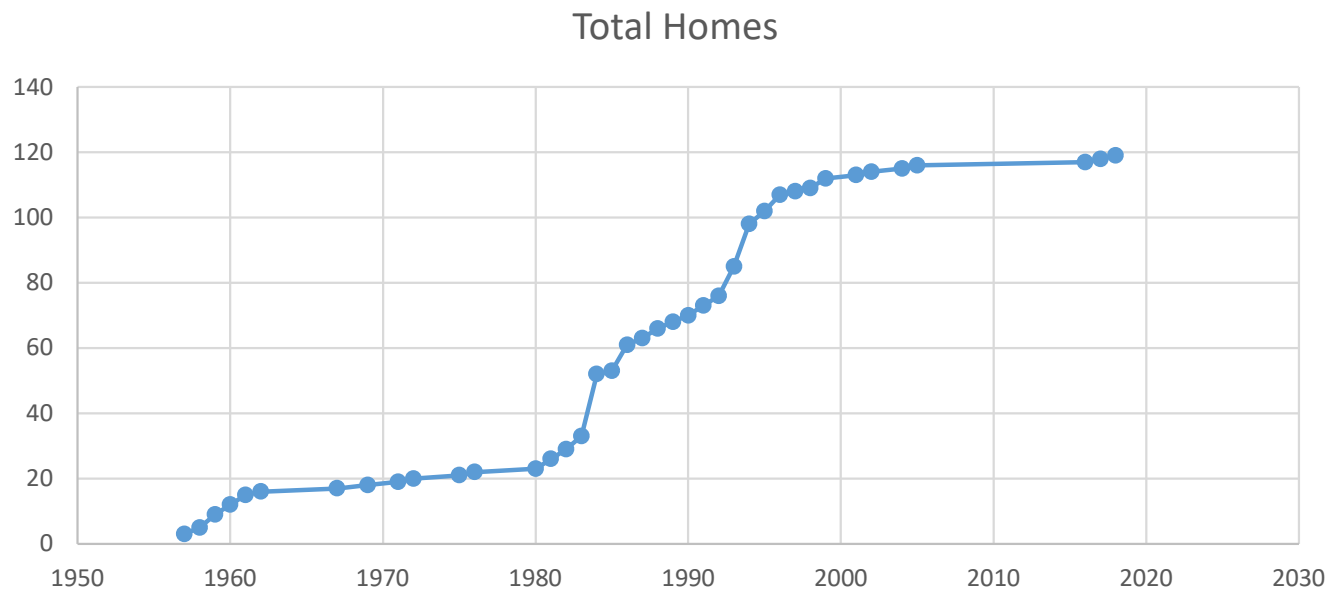


Richard Wilson Replat - 1980

Historical Growth of the BHMWC

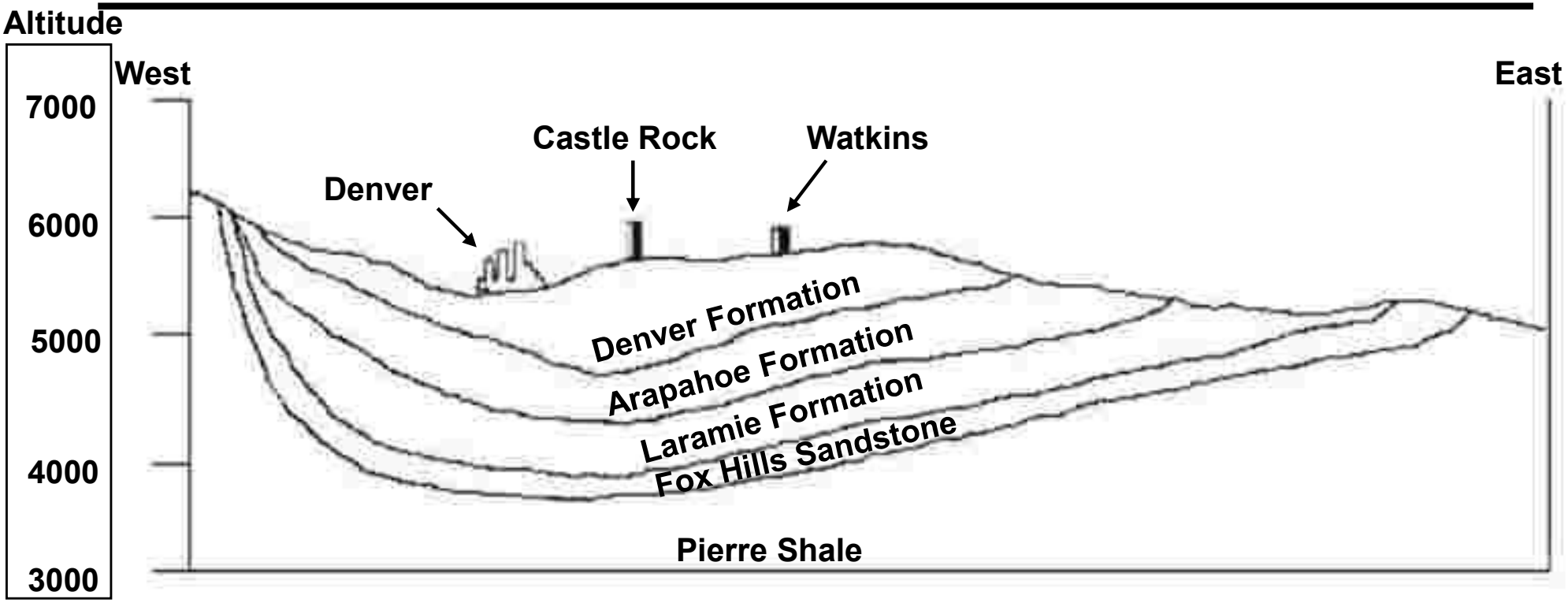
Year	Total Homes	Annual Homes	1st	2nd	3rd	Beverly	Carolyn	Castle Pines Parkway	Charter Oaks Drive	Coventry	Debbie	Saxeborough	Suffolk
1957	3	3				3							
1958	5	2		1		1							
1959	9	4				4							
1960	12	3				1	2						
1961	15	3			1	1					1		
1962	16	1			1								
1967	17	1									1		
1969	18	1		1									
1971	19	1		1									
1972	20	1				1							
1975	21	1		1									
1976	22	1			1								
1980	23	1									1		
1981	26	3								2			1
1982	29	3		1		1				1			
1983	33	4		2	1							1	
1984	52	19		1	4	1	4			6		1	2
1985	53	1								1			
1986	61	8		1	1	1		1		1	1	2	
1987	63	2		1			1						
1988	66	3			1	1	1						
1989	68	2								2			
1990	70	2							1	1			
1991	73	3		1						1		1	
1992	76	3		2								1	
1993	85	9	1				1				1	4	2
1994	98	13		2	1	2	3		1		1	2	1
1995	102	4		1	1							2	
1996	107	5		1		2						1	1
1997	108	1		1									
1998	109	1				1							
1999	112	3				2							1
2001	113	1									1		
2002	114	1				1							
2004	115	1											1
2005	116	1				1							
2016	117	1					1						
2017	118	1				1							
2018	119	1	1										
Totals =			2	18	12	25	13	1	2	15	7	15	9
			119										

Home Construction Growth Curve

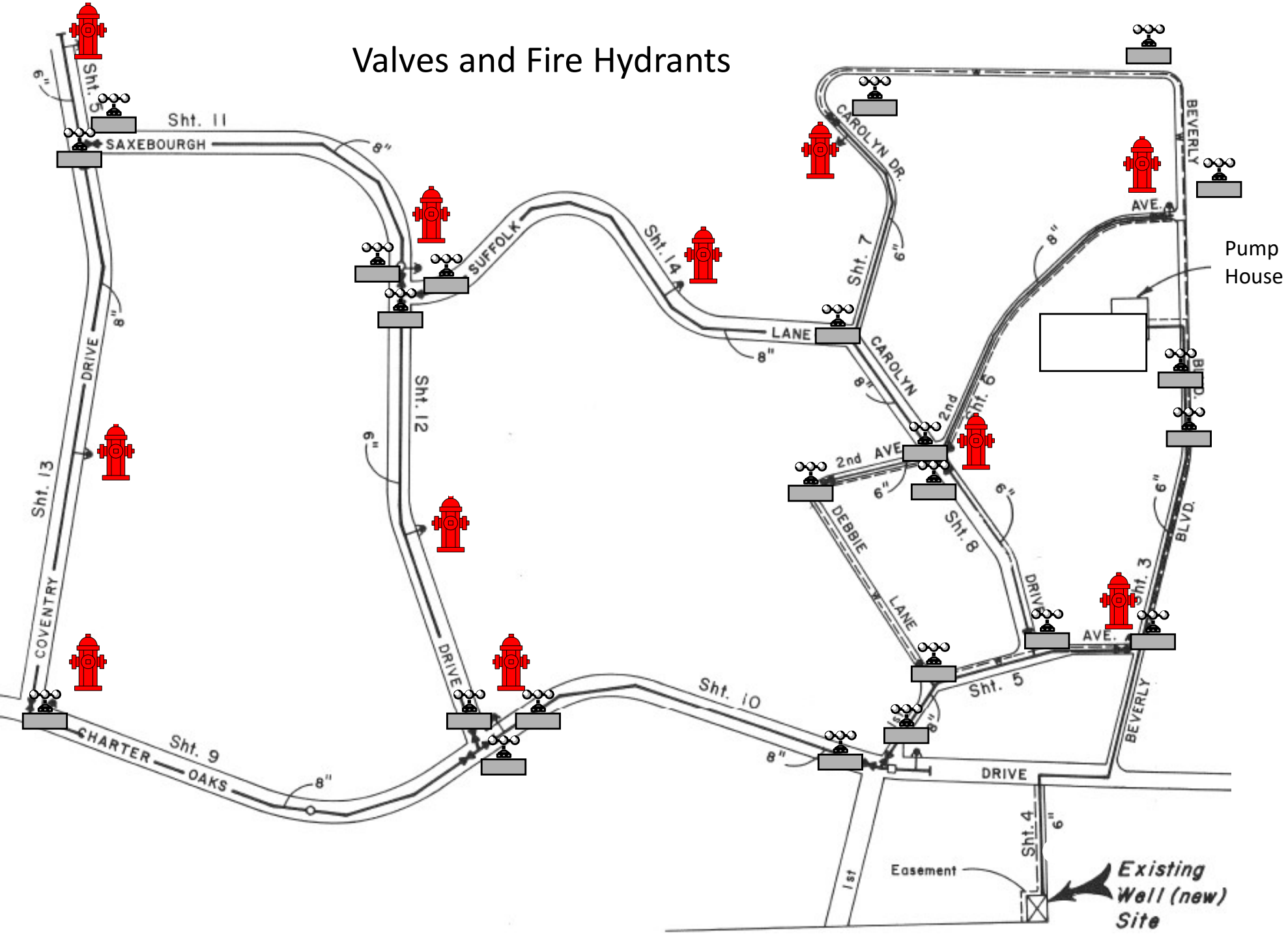


- The last house is currently under construction at 7866 Beverly Boulevard

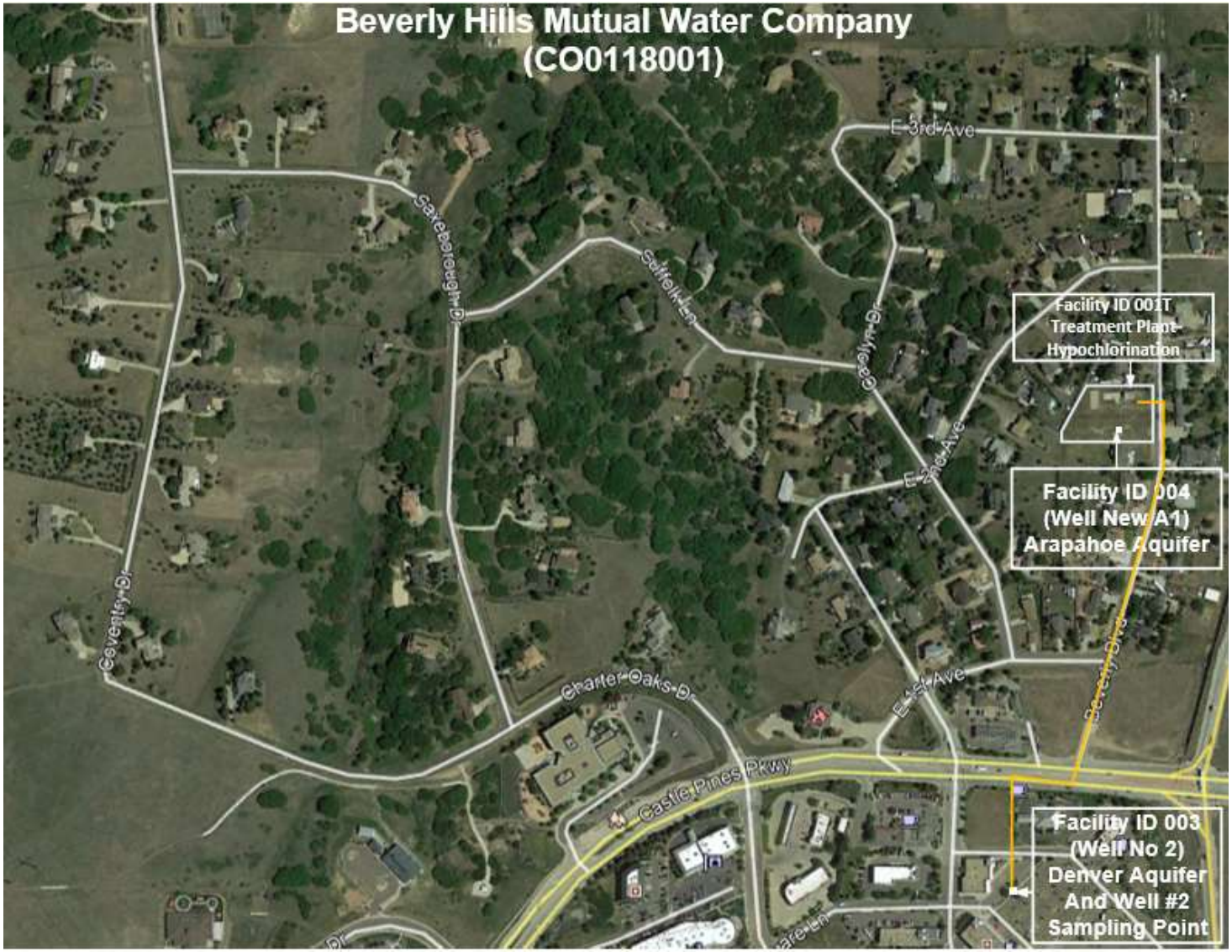
Denver Basin



Valves and Fire Hydrants

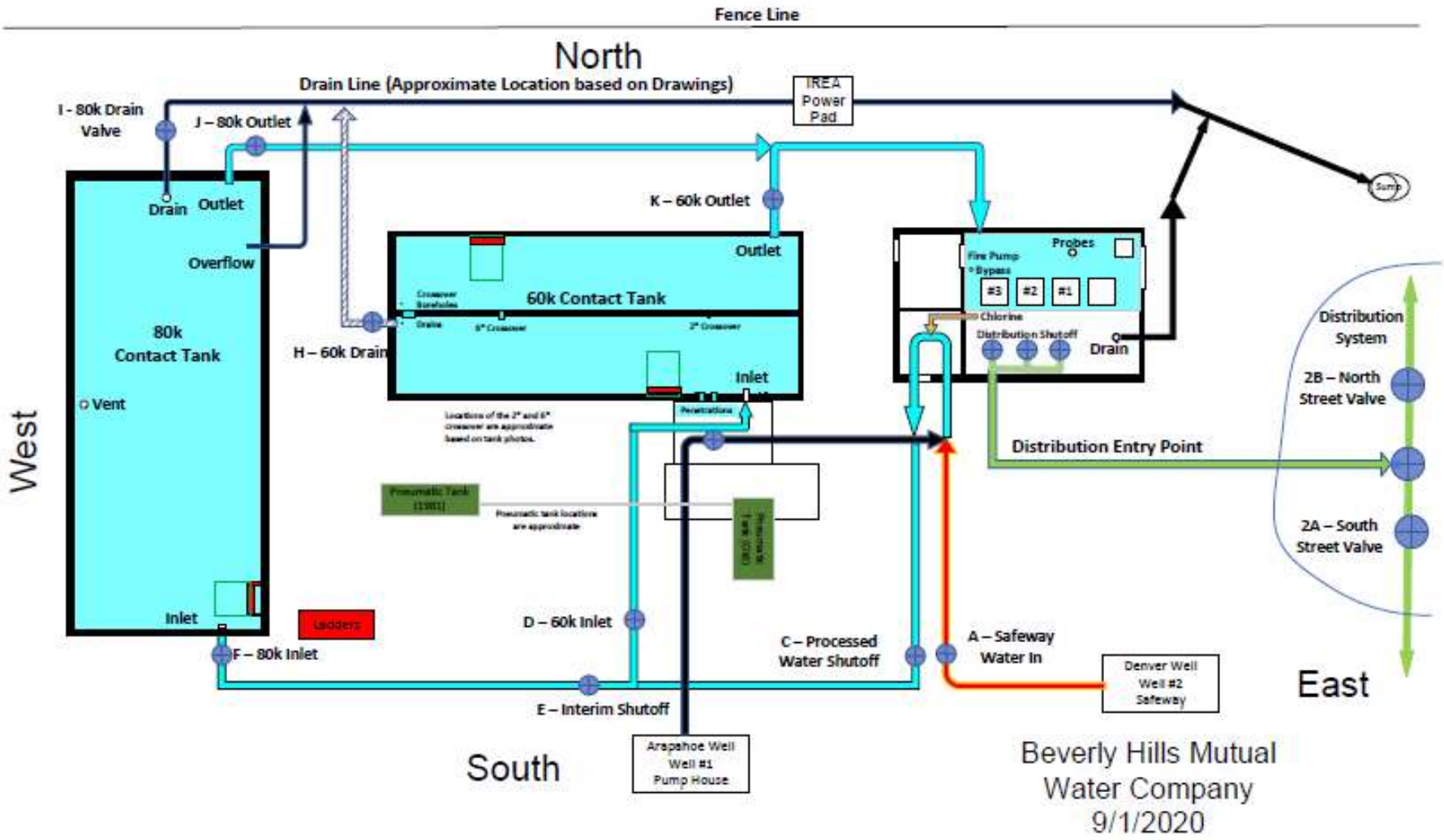


Booster Pump Station, Contact Tanks, Well #1 and Well #2 Locations



7801 Beverly Boulevard

Processing Flow



Wells and Water Rights

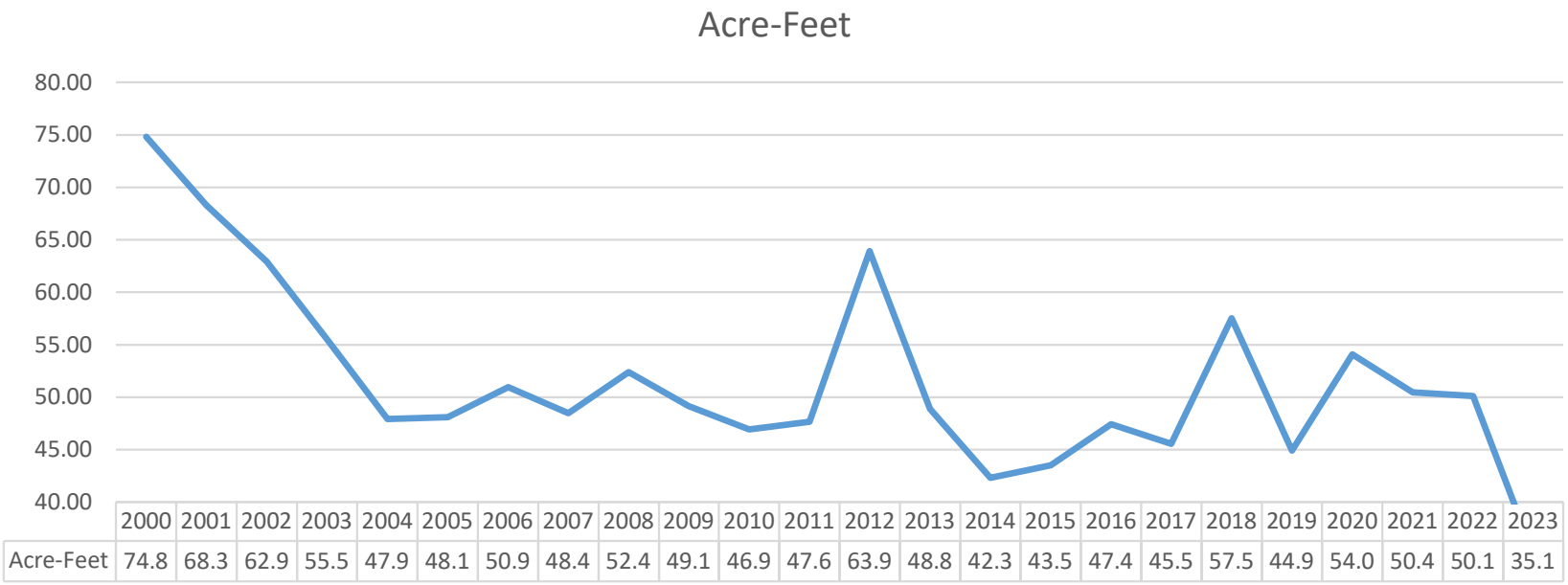
- Arapahoe Well (RF-7778)
  - Completed 2003
  - Depth = 2200 feet
  - Arapahoe Aquifer
  - 10 inches in diameter
  - Tested to 250 gpm
  - Permitted for 125 gpm
  - Old well = 60 gpm
  - Average usage = 120 gpm
  - Peak usage = 230 gpm (Total 141.14 acre feet)
  - Rehab/Motor/Pump replaced Spring 2023
- Denver (Safeway) Well (RF-7779)
  - Redrilled 1980
  - Depth = 1100 feet
  - Denver Aquifer
  - 8 5/8 inches in diameter
  - Tested to 150 gpm
  - Permitted for 125 gpm (Total 201 acre feet)
- Motor/Pump replaced 2019

Combined not to exceed 260 acre feet

Water Usage – Year Ending 11/30/23

Year	7778-RF Arapahoe (Acre-Feet)	7779-RF Denver (Acre-Feet)	7778-F Arapahoe (Acre-Feet)	Acre-Feet	# Users	Average Gallons per Home per Month	Expenses (Including Depreciation)	Cost per 1000 Gallons
2000		46.25	28.57	74.82	112	18,140	$ 43,608	$ 1.79
2001		43.40	24.90	68.30	113	16,413	$ 54,702	$ 2.46
2002		22.61	40.33	62.94	114	14,992	$ 64,793	$ 3.16
2003	9.84	25.19	20.50	55.53	114	13,227	$ 70,782	$ 3.91
2004	33.16	14.78		47.94	115	11,320	$ 110,280	$ 7.06
2005	32.12	15.99		48.11	116	11,262	$ 71,032	$ 4.53
2006	47.46	3.51		50.97	116	11,931	$ 71,605	$ 4.31
2007	3.10	45.38		48.48	116	11,349	$ 74,592	$ 4.72
2008	4.70	47.70		52.40	116	12,266	$ 107,385	$ 6.29
2009	22.11	27.06		49.17	116	11,510	$ 140,813	$ 8.79
2010	20.51	26.42		46.93	116	10,986	$ 93,064	$ 6.09
2011	14.84	32.84		47.68	116	11,161	$ 86,724	$ 5.58
2012	4.15	59.77		63.92	116	14,963	$ 105,716	$ 5.08
2013	9.96	38.92		48.88	116	11,442	$ 104,088	$ 6.54
2014	10.10	32.24		42.34	116	9,911	$ 97,664	$ 7.08
2015	10.80	32.72		43.52	116	10,188	$ 94,888	$ 6.69
2016	12.40	35.03		47.43	117	11,008	$ 107,244	$ 6.94
2017	11.48	34.10		45.58	118	10,489	$ 143,229	$ 9.64
2018	29.49	28.05		57.54	119	13,130	$ 95,794	$ 5.11
2019	22.72	22.22		44.93	119	10,253	$ 80,271	$ 5.48
2020	26.65	27.43		54.08	119	12,340	$ 154,629	$ 8.77
2021	31.13	19.35		50.48	119	11,519	$ 115,168	$ 7.00
2022	14.14	35.98		50.12	119	11,437	$ 102,352	$ 6.27
2023	10.92	24.18		35.10	119	8,009	$ 98,865	$ 8.64
An acre foot (Gallons) =	325,851							

Water Usage Trend



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Acre-Feet	74.8	68.3	62.9	55.5	47.9	48.1	50.9	48.4	52.4	49.1	46.9	47.6	63.9	48.8	42.3	43.5	47.4	45.5	57.5	44.9	54.0	50.4	50.1	35.1

- Very low water consumption last year – it was extremely wet
- High historical usage occurred when BHMWC supplied water to the Total station on Castle Pines Parkway.
- Neither the Safeway nor Soopers developments existed when that gas station was originally built
- That gas station is now the Starbucks

FY 2023 Income Statement

Income Statement	1/31/2024	1/31/2023	1/31/2022	1/31/2021	1/31/2020	1/31/2019	1/31/2018	1/31/2017	1/31/2016
Revenue									
6010 - Residential	$116,813	$138,188	$129,123	$137,024	$149,043	$113,461	$110,851	$112,233	$92,510
Commercial					673	1,050	980	840	8,820
Late Charges		$720	$900	$700	1,290	770	650	950	1,020
Water Tap Fee						20,000	20,000	20,000	
Miscellaneous Income			$631	$1,234		1,284	7,258	1,371	1,738
6400 - Interest Income	$12,635	$1,779	$619	$4,606	4,567	768	786	683	648
Transfer Fees						75	400	225	200
Total Revenues	$129,448	$140,687	$131,273	$143,564	$155,573	$137,408	$140,925	$136,301	$104,936
Expenses									
8020 - Accounting and Audit	$675	$825	$0	$415	$7,375	$11,949	$14,064	$11,470	$8,875
8050 - Bank Charges	$1,205	$1,188	$1,180	$1,339	2,008	2,100	2,118	2,268	1,968
Consultant Fees							5,000		
8080 - Depreciation	$32,698	$28,850	$29,035	$29,328	29,000	35,895	38,406	38,406	38,406
Directors Fees									
8090 - Dues & Memberships		$734	$200	$275	275	175	175	175	175
Engineering Fees									
8110 - Insurance	$3,338	$3,922	$3,754	$3,537	754	2,984	2,889	2,801	2,720
8115 - Inspection Fees	100	100	100			730	80		
Lawn Service									375
Legal Fees									
8130 - Meter Repairs	$718				13	28	37,967		
8140 - Meter Reading	$1,373	$773	$2,099	$1,185	1,718	236	928	1,160	414
8145 - State Health Lab Tests	520	1,343	4,286						744
8150 - Office Expense	$6,223	$4,100	$4,417	$3,600	3,529	421	399	365	162
8170 - Postage	$1,012	$839	$953	$901	691	16			
8190 - Repairs & Maintenance	$33,420	$36,297	$44,169	$49,471	42,620	16,220	20,925	28,290	22,614
8195 - Supplies for Repairs	$276	$1,045	$144	$1,426					
Survey Fee						1,968	745		
8230 - Taxes & Licenses	$191	-$200	$151	$150	301	152	150	250	150
8270 - Telephone	$747	$605	$696	$650	635	609	600	597	542
8280 - Utilities	$16,368	$21,931	$23,983	$30,808	20,351	21,327	18,726	21,462	17,742
Miscellaneous						984	58		
Total Expenses	$98,865	$102,352	$115,168	$123,086	$109,271	$95,794	$143,229	$107,244	$94,888
Net Income	$30,583	$38,335	$16,106	$20,479	$46,302	$41,613	($2,304)	$29,057	$10,048

FY 2023 Balance Sheet

- Redacted in Web version

2023 Cash Expense Summary

• Arapahoe Well Repair (74.4%)	$192,393
• Operations & Maintenance (13.5%)	$34,933
• Utilities – Electricity (6.3%)	$16,368
• Billing/Banking Expenses (3.3%)	$8,441
• Insurance (1.3%)	$3,338
• Meter Reading (0.5%)	$1,373
• Everything Else (0.7%)	$1,713
• Grand Total	$258,559

- This is all cash expenses (Does not include depreciation $32,698)
- Everything else:
  - Accounting/audit (tax prep $675)
  - Inspection fees ($100)
  - Taxes/licenses ($191)
  - Telephone ($747.15)

Arapahoe Well Repair Totals

Invoice Date	Invoice Number	Vendor	Activity	Amount
6/7/2023	894962	Hydro resources	Well replacement	$184,079.00
5/8/2023	23-0195	Colorado Water Well	Video to review Arapahoe well cleaning	$ 2,000.00
6/1/2023	23-0263	Colorado Water Well	Well activation related charges	$ 520.00
6/1/2023	23-0263	Colorado Water Well	Install line bypass to flush well line before activation	$ 1,730.63
6/1/2023	23-0263	Colorado Water Well	Well activation activities	$ 2,304.96
7/1/2023	NA	Crandall	Supplies to repair well field damage	$ 816.90
7/18/2023	NA	Kennedy	Supplies to repair well field damage	$ 158.51
8/1/2023	NA	Crandall	Hoses and top soil for well site repair	$ 782.66
			Total Arapahoe Wwell repair costs =	$192,392.66

- These costs were moved to the depreciation schedule

2023 Operation & Maintenance Breakdown

• Colorado Water Well (Non-well repair)	$21,443
• Canyon Dirt Works (Culvert Installation)	$6,690
• Crandall/Kennedy Activities	$3,149
• Change Electric (Electrical Repair)	$1,200
• Sierra Highway Safety (Valve Markers)	$889
• Utility Technical Services (Leak Detection)	$717
• Water Testing	$520
• Supplies for Repairs	$325
• Grand Total	$34,933

2023 Colorado Water Well (Non-Well Repair)

• Monthly Checks	$9,465
• Flush Mains	$3,887
• Chlorine Pump Repair	$1,810
• Bleach/Bleach Delivery	$1,320
• Respond to Alarms	$1,020
• Other	$360
• Double Payments (To be credited)	$3,580
• Total	$21,442

Crandall/Kennedy Activities

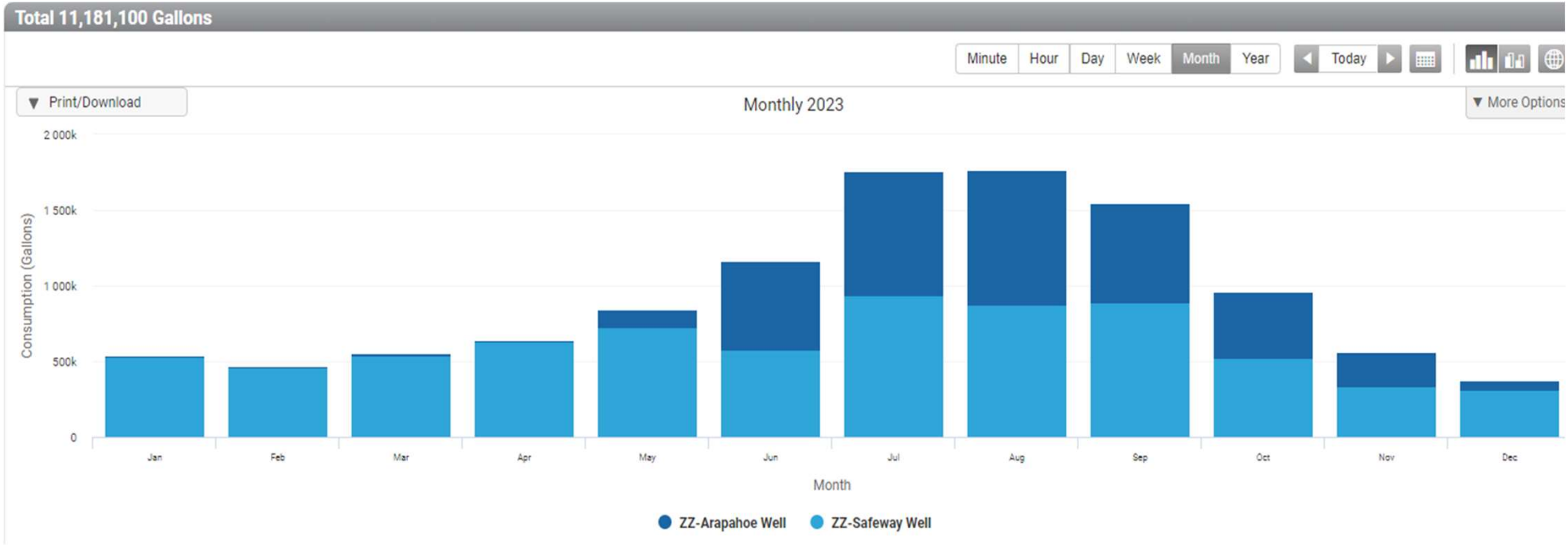
- Non-Arapahoe Well Related ($3,149)
  - Guard shack enclosure for well head
  - Mowing (8x)
  - Pit reclamation (3 pits on Charter Oaks Drive)
  - Supplies and fees
- Well related Expenses ($1,758)
  - Topsoil (30 tons)
  - Hoses, sprinkler timer, batteries
  - Field grass seed

Water Consumption

Month Ending	Acre-Feet Pumped	Arapahoe Gallons	Safeway Gallons	Gallons Pumped	Gallons Metered at Houses	Pumped - Metered Gallons	Adjustment (See Notes)	Adjusted Pumped - "Metered" Gallons	% Adjusted "Metered"/Pumped	Days	Leakage (Gallons per Day)	Average Gallons Pumped per Day
1/31/23	1.63	-	530,200	530,200	485,724	44,476	9,348	35,129	6.6%	31	1133	17,103
2/28/23	1.42	-	462,700	462,700	426,176	36,524	9,348	27,177	5.9%	28	971	16,525
3/31/23	1.66	-	541,500	541,500	507,673	33,827		33,827	6.2%	31	1091	17,468
4/30/23	1.94	-	631,300	631,300	571,477	59,823		59,823	9.5%	30	1994	21,043
5/31/23	2.60	121,300	724,300	845,600	833,399	12,201		12,201	1.4%	31	394	27,277
6/30/23	3.57	584,700	578,700	1,163,400	1,041,821	121,579	83,675	37,904	3.3%	30	1263	38,780
7/31/23	5.40	823,100	937,800	1,760,900	1,676,574	84,326		84,326	4.8%	31	2720	56,803
8/31/23	5.41	886,300	875,700	1,762,000	1,701,087	60,913		60,913	3.5%	31	1965	56,839
9/30/23	4.75	655,700	892,000	1,547,700	1,502,053	45,647		45,647	2.9%	30	1522	51,590
10/31/23	2.94	430,900	527,300	958,200	935,134	23,066		23,066	2.4%	31	744	30,910
11/30/23	1.72	227,500	333,200	560,700	522,045	38,655		38,655	6.9%	30	1289	18,690
12/31/23	1.16	69,200	309,100	378,300	568,246	(189,946)	(239,900)	49,954	13.2%	31	1611	12,203

- Adjustments:
  - 9,348 (2x) = failed meters
  - 83,675 = gallons consumed while flushing the mains
  - -239,900 = Failed Arapahoe well endpoint. Assumed Arapahoe pumped gallons equal to Safeway pumped gallons

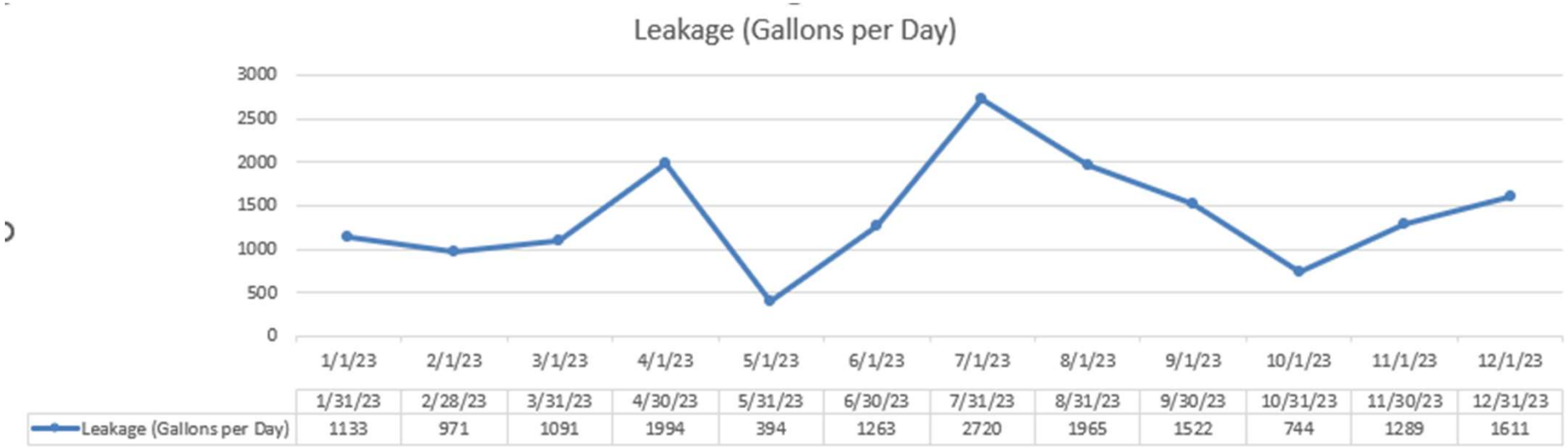
Water Comes from Both Wells



- These statistics all come directly from the “beaconama.net” web site
- The Arapahoe well failed in July 2022 and was restored to service in May 2023
- Arapahoe endpoint that reports readings failed 12/7/23. Actual Arapahoe pumping assumed to be equal to Safeway well pumping for December.

Water Leakage

- We meter water pumped from each well and all water delivered to users
- The difference between these two values is the leak rate



	1/31/23	2/28/23	3/31/23	4/30/23	5/31/23	6/30/23	7/31/23	8/31/23	9/30/23	10/31/23	11/30/23	12/31/23
Leakage (Gallons per Day)	1133	971	1091	1994	394	1263	2720	1965	1522	744	1289	1611

Eye On Water

- Every user can monitor water consumption via EyeOnWater.com or mobile App
- Every user can set an alarm and be notified if their meter detects a leak
  - Default leak threshold is one gallon per hour (8,760 gallons per year)
- Several homeowners have detected leaks via the App
- Only 72 of 119 users have activated the App (~60%)
- As of 3/11/24 there are four active leaks
  - 21*, 7.6, 1.8, and 1.2*gallons per hour
  - * homes have Eye On Water Accounts
- Number of leaks increases to double digits in the summer due to sprinkler systems

Significant Activities

- Arapahoe well returned to service
  - New pump, motor, electrical cable, air line and substantial pipe installed
  - Re-landscaped areas around well head with 30 tons of topsoil and grass seed
  - Replaced old closed metal cover with Guard Shack enclosure
- Culvert installed on Arapahoe well lot top improve access
- Electrical failure in power cabinet
  - Change electric provided interim repair
  - Awaiting parts to complete permanent fix
- Installed valve markers to identify location of main line valves
- Performed full main leak detection
  - No leaks found

System Reliability

- System electrical failure
  - Caused by corrosion/pitting where the contacts grab the main bus bar
  - Completed interim repair to get system back on line
  - Final corrective action is to replace the original aged power cabinet
  - Awaiting parts to complete this repair
- Two cellular endpoints failed
  - Both replaced under warranty
  - Still awaiting receipt of Arapahoe well replacement (2nd endpoint)

Historical Leak Repairs

- Since the start of 2019 we have averaged 1.4 leak repairs per year
- Each of those repairs has averaged $6,670 each
- Preferred provider is Elite Pipe MD which has given us excellent service
- We had no leaks in 2023

Date	Location	Vendor Cost	Notes
2004	Main leaking near 422 Suffolk	$ 7,600	
2007	594 Second	$ 4,582	tbd Leak
2012	Charter Oaks Drive	$ 15,341	Major leak on Charter Oaks drive. Failed service line to open space to the south.
May 2014	Charter Oaks Drive	$ 2,228	Second service line leak to open space
October 2014	Charter Oaks Drive	$ 4,857	Third service line leak to open space. Proactively terminated fourth service line.
2/9/2016	585 2nd	$ 8,841	
4/26/2019	7751 Saxeborough (Watervoort)	$ 2,500	Service line leak - local repair
9/17/2019	7751 Saxeborough (Watervoort)	$ 9,350	Service line leak complete replacement from main to pit.
10/21/2020	7651 Carolyn (Turnbull)	$ 8,850	Poly service line failed. Water pooling on 1st Avenue
12/29/2020	7665 Saxeborough (Zamani)	$ 6,950	Poly service line failed.
11/10/2021	7956 Beverly	$ 6,950	North Beverly main failure
8/23/2022	North Carolyn	$ 4,925	Abandoned service line failed
12/20/2022	507 2nd Avenue	$ 7,175	Poly service line failed

Meter/Endpoint Reliability Since Meter Replacement in 2018

- Four meter failures (One warranty)
- Eleven endpoint failures
  - Ten replaced under warranty
  - One replaced due to physical damage
- Four Encoder failures (All warranty)

- Given that the 119 home meters and two well meters were installed in 2018, this system has been extremely reliable

Planned Activity – Hydrant Replacement

- We have received bids for the replacement of the two hydrants on Beverly Boulevard several years back
  - 1957 Pacific States Hydrant – parts no longer available
  - 1959 Mueller standard hydrant – We cannot locate the hydrant isolation valve
- All other hydrants were installed in 1981
- This replacement activity is still pending
- Considering adding a hydrant at Beverly and 3rd
  - Would allow us to better flush the dead-end of that line

Combined Radium-226/228 Testing

- We have successfully exited from quarterly Radium-226/228 testing
- New testing requirement is every three years
- Next sample due by 12/31/2025

Sample Date	Pump House Radium-226	Pump House Radium-228	Pump House Combined	Average of last 4 Quarters
10/1/2019	1.2	4.8	6.0	
1/17/2020	1.2	0.7	1.9	
4/5/2020	1.1	2.7	3.8	
9/25/2020	2.1	3.5	5.6	4.33
11/1/2020	0.9	2.4	3.3	3.65
1/14/2021	1.3	4.4	5.7	4.60
4/30/2021	1.5	4.7	6.2	5.20
7/16/2021	1.7	2.5	4.2	4.85
10/10/2021	1.4	3.8	5.2	5.33
2/1/2022	0.9	2.7	3.6	4.80
5/27/2022	1.3	1.6	2.9	3.98
7/14/2022	0.6	1.9	2.5	3.55
11/11/2022	0.7	1	1.7	2.68

Major Infrastructure Risks

- Major Risks
  - Motor/Well failure. Motor/pump replaced on the Denver aquifer well (Safeway) in 2019
  - Arapahoe well motor/pump/refurb Spring 2023
  - Service line failures – Two failures in 2020. None in 2021.
  - Main leaks - Beverly main leak in 2021
- Expect continued service line failures (No service line failures in 2023)
- Valve functionality
  - Several valves do not work and prevent us from easily isolating parts of the system for system flushing
  - Need to prepare and execute a valve replacement plan
- All distribution pipelines were replaced during the 1980 system expansion except:
  - Beverly Boulevard
  - Debbie Lane
  - 3rd Avenue (including Beverly Blvd to 2nd Avenue and the northernmost part of Carolyn Drive)
  - No failures yet, but we believe this may be cast iron pipe.
- Each of these items represent a significant repair cost
- Current cash reserves are rebounding since the Arapahoe well repair was completed

How Clean is the Water?

- The system is operated in accordance with a Monitoring Plan filed with the state
- We pass state required tests for bacteria, heavy metals, nitrates and nitrites

Item	Frequency
Bac-T	Monthly
TTHMs and HAA5s	3 years
Lead and Copper	3 years
Nitrate	Annual
Fluoride	3 years
Inorganics Group	3 years
Synthetic Organics Group	3 years
Volatile Organics Group	3 years
Combined Radium	3 years
Combined Uranium	6 year
Gross Alpha, without Radon & Uranium	6 years
Nitrite	9 years

- Denver Basin is the source – water is high quality
- Source water is high in dissolved iron and manganese, resulting in occasional brown water
  - Periodic flushing decreases the problem
  - A system-wide filter would require an operator

Election of One Director

- Mark Kennedy is retiring from the board
- Mark has been on the board since 2005
- He has been a significant leader and participant in all significant system activities
  - 2012 – First significant tank cleaning
  - 2013 – Sanitary survey driven 60k tank roof replacement and tank interconnect updates
  - 2018 - System-wide meter replacement
  - 2018 - Sanitary survey driven tank corrosion remediation
  - 2023 – Arapahoe well repair and lot leveling/seeding

Questions?