

Beverly Hills Mutual Water Company

614 North Tejon Street
Colorado Springs, CO 80903

Annual Shareholders Meeting
Monday, March 14, 2022

Zoom Link:

<https://us02web.zoom.us/j/89856479179?pwd=ZVV1RXNUZFhOajREUExzSExJQWJQdz09>

Zoom Meeting Details

- Gene Crandall is inviting you to a scheduled Zoom meeting.
- Topic: Beverly Hills Mutual Water Company Annual Meeting
- Time: Mar 14, 2022 07:00 PM Mountain Time (US and Canada)
- Join Zoom Meeting
- <https://us02web.zoom.us/j/89856479179?pwd=ZVV1RXNUZFhOajREUExzSExJQWJQdz09>
- Meeting ID: 898 5647 9179
- **Passcode: 091226**
- One tap mobile
- +16699009128,,89856479179#,,,*091226# US (San Jose)
- +12532158782,,89856479179#,,,*091226# US (Tacoma)
- Dial by your location
- +1 669 900 9128 US (San Jose)
- +1 253 215 8782 US (Tacoma)
- +1 346 248 7799 US (Houston)
- +1 646 558 8656 US (New York)
- +1 301 715 8592 US (Washington DC)
- +1 312 626 6799 US (Chicago)
- Meeting ID: 898 5647 9179
- Passcode: 091226
- Find your local number: <https://us02web.zoom.us/u/kb6IT2zZWO>

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 (2023)
7830 Coventry Drive
gmcrandall@aol.com

Mark Kennedy, Vice President (2024)
7903 Coventry Drive
cr4mark@q.com

Aurom Mahobian(2026)
75500 Saxeborough Drive
aurommahobian@gmail.com

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

Mark McNary, Treasurer (2022)
7914 Saxeborough Drive
markmcnary5@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
 - 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

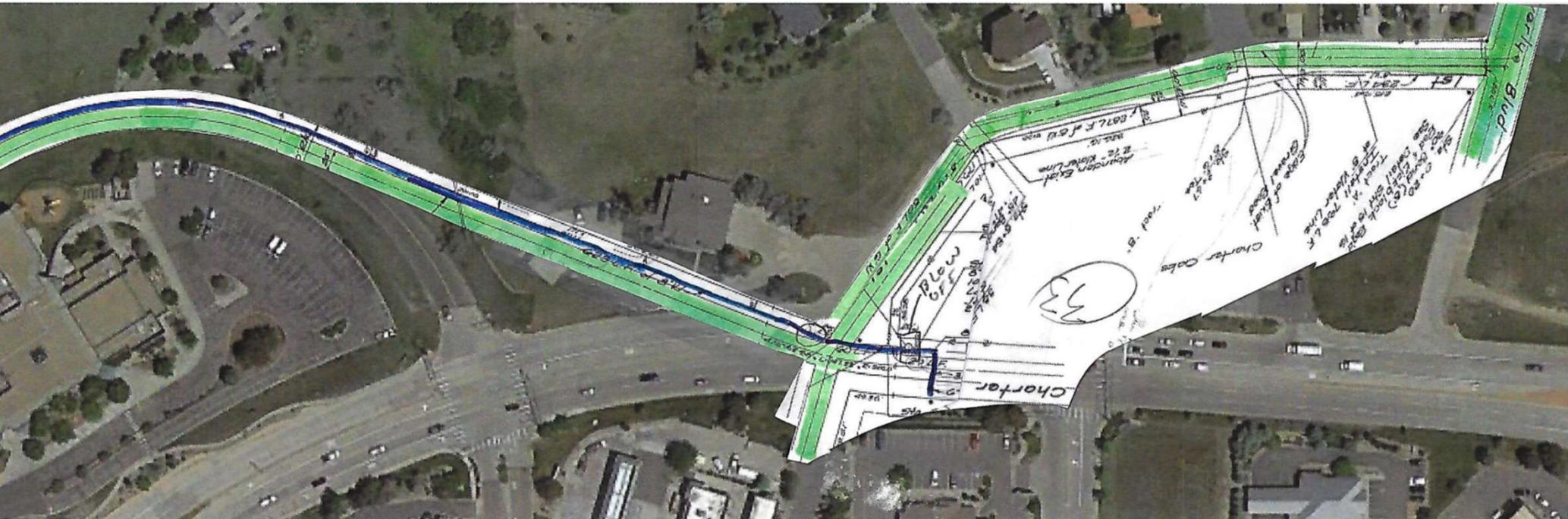
Some Historical Notes

- 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
- 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

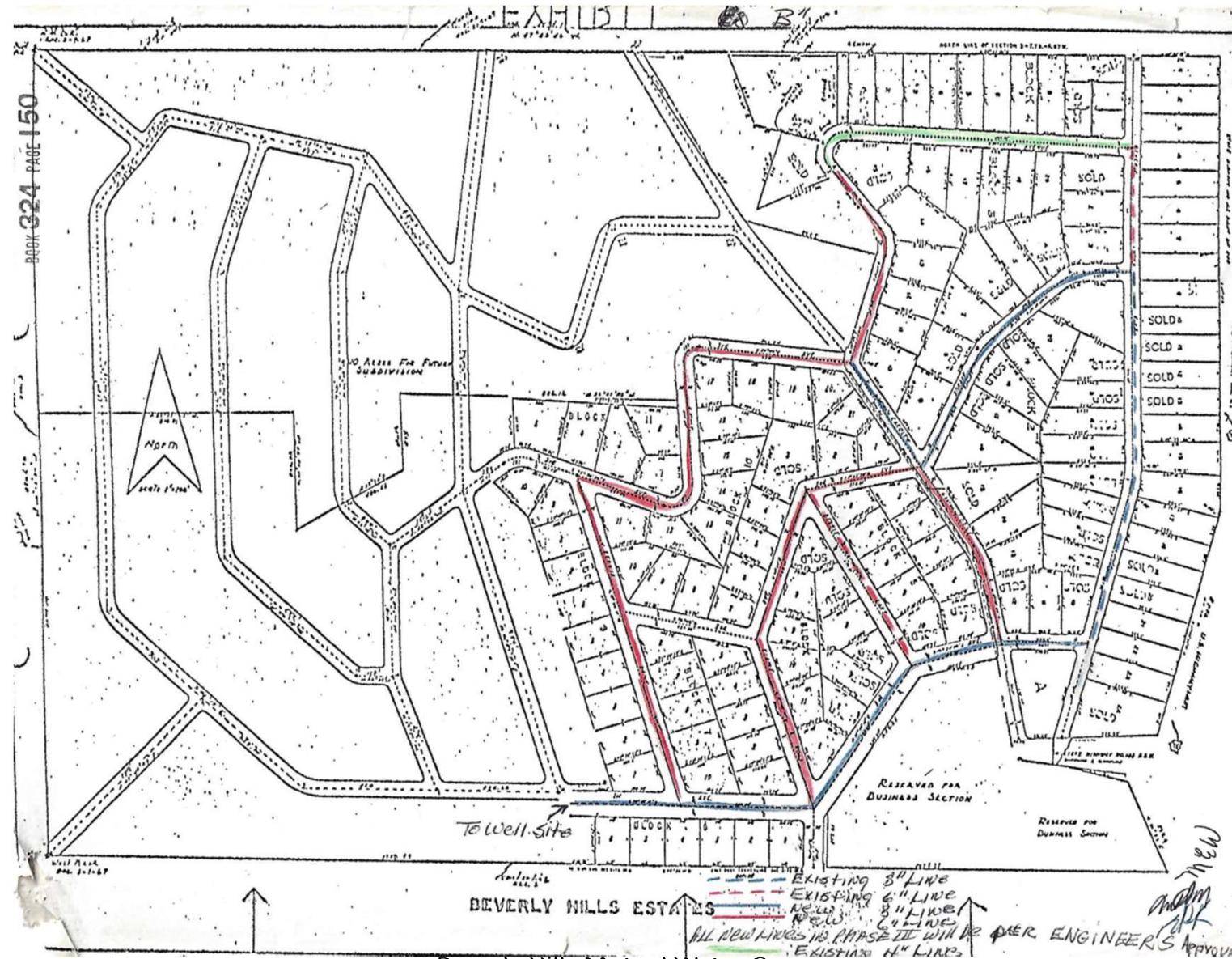
- 1992: Fence installed around pump house
- 1995: Gene Crandall elected to the board
- 1995: Special district formed to pave roads in Beverly Hills
- 1996: Purchased rights to commercial taps back from Richard Whalen
- 2000: Installed pressure reducing valves in all homes, raised pressure in mains
- 2010: Investigated remotely readable meters – too expensive
- 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



Beverly Hills Mutual Water Company

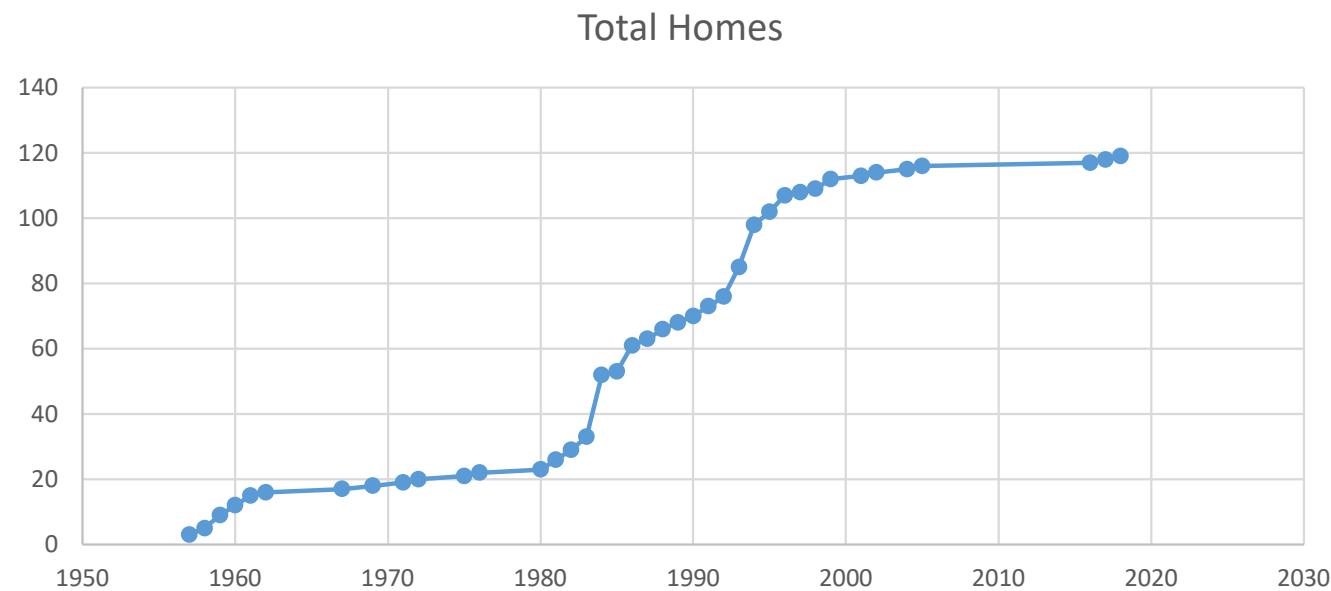
Richard Wilson Replat - 1980



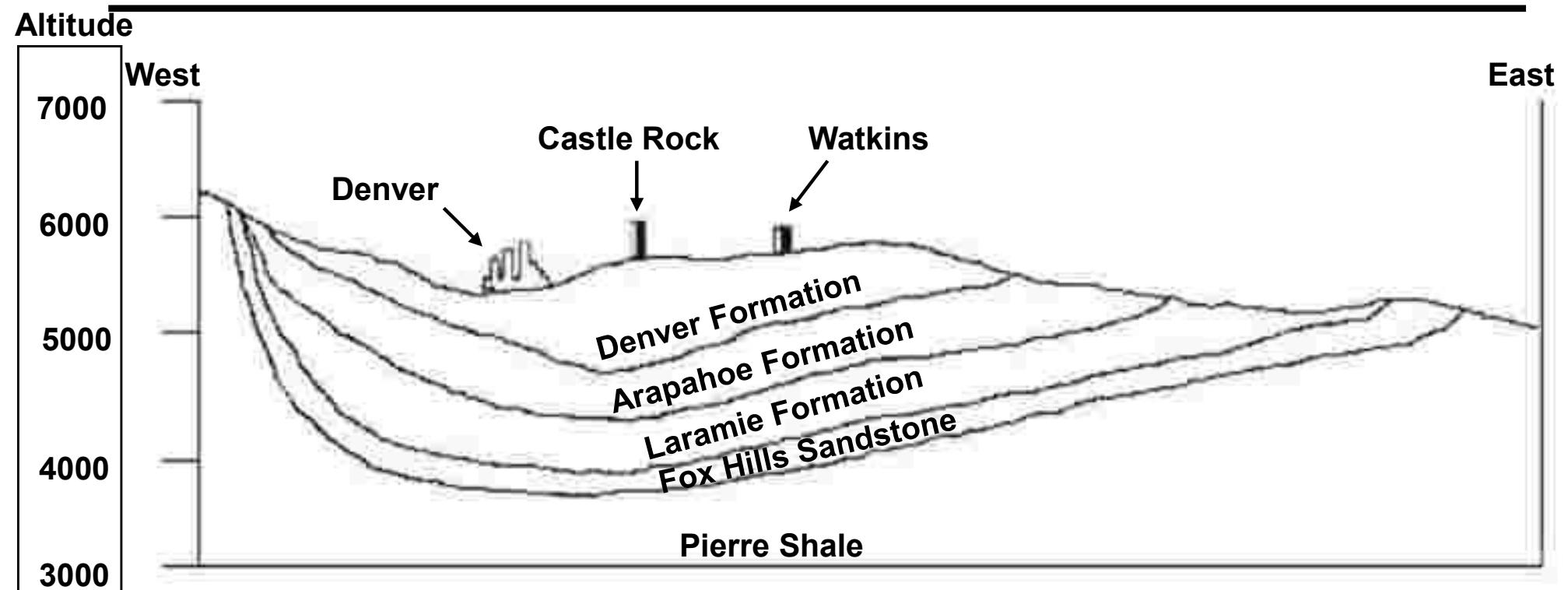
Historical Growth of the BHMWC

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						1		
1980	23	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		
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									1
1998	109	1				1							
1999	112	3				2							
2001	113	1									1		
2002	114	1				1							1
2004	115	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										

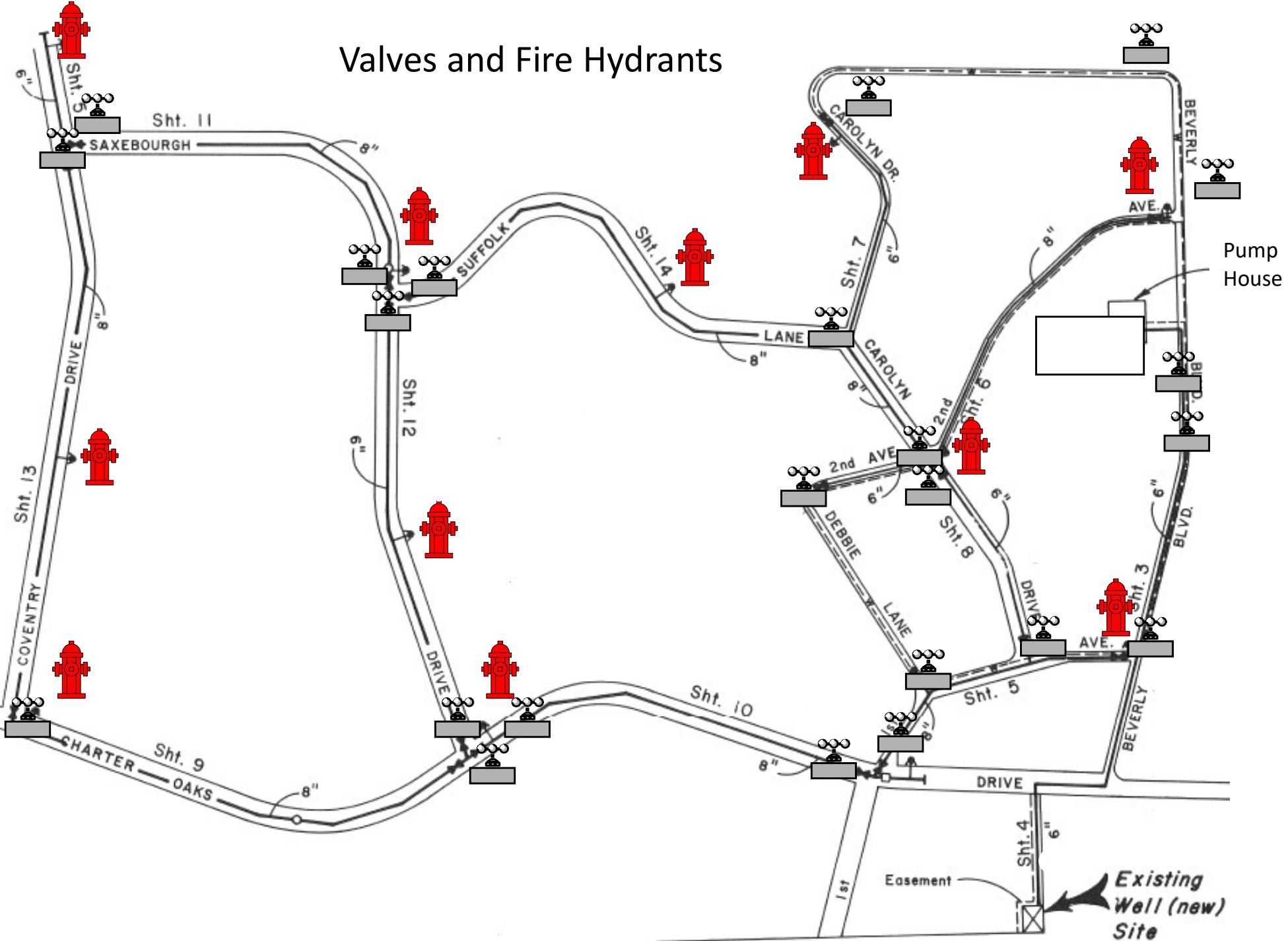
Home Construction Growth Curve



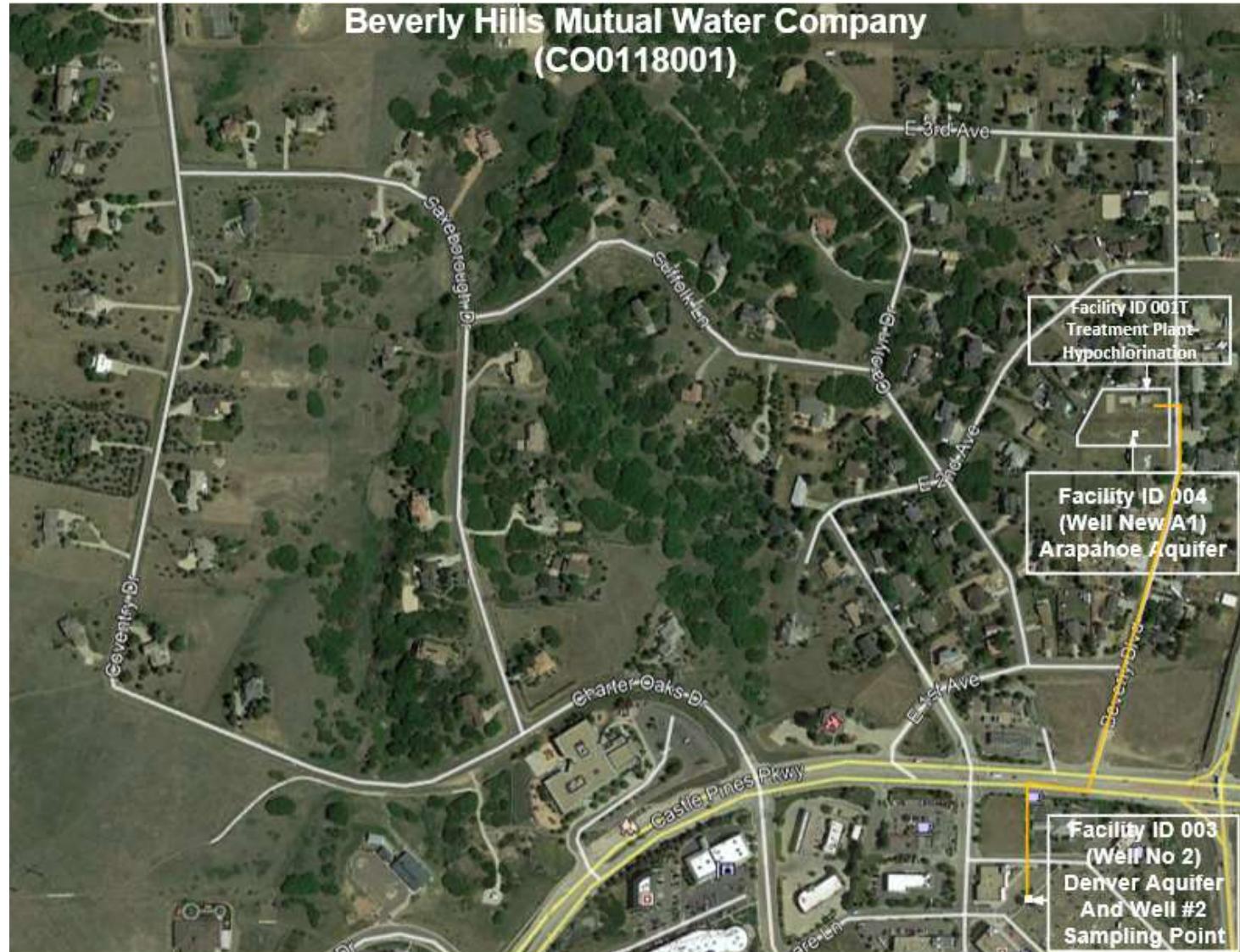
Denver Basin



Valves and Fire Hydrants



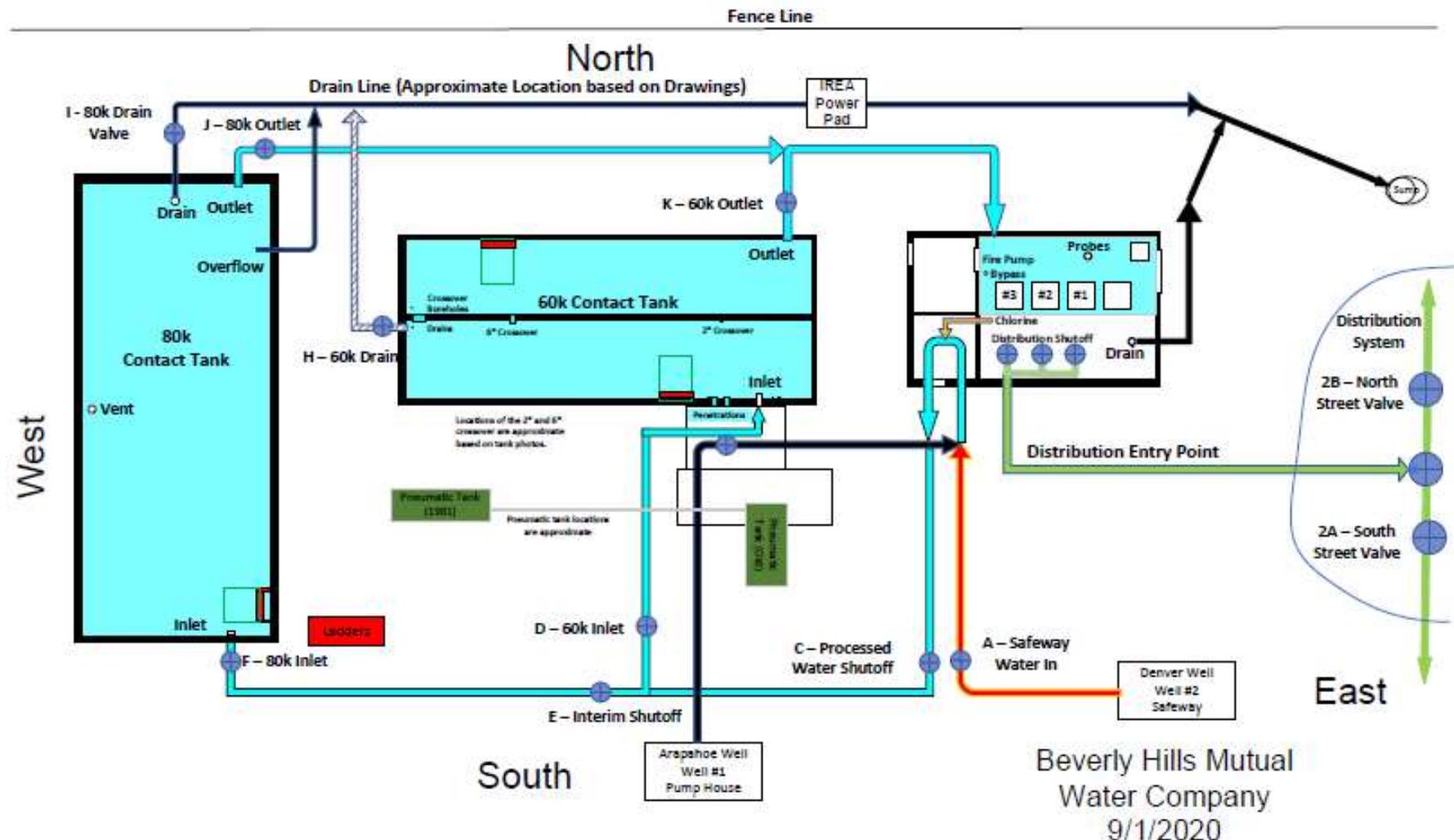
Booster Pump Station, Contact Tanks, Well #1 and Well #2 Locations



7801 Beverly Boulevard



Processing Flow



Wells and Water Rights

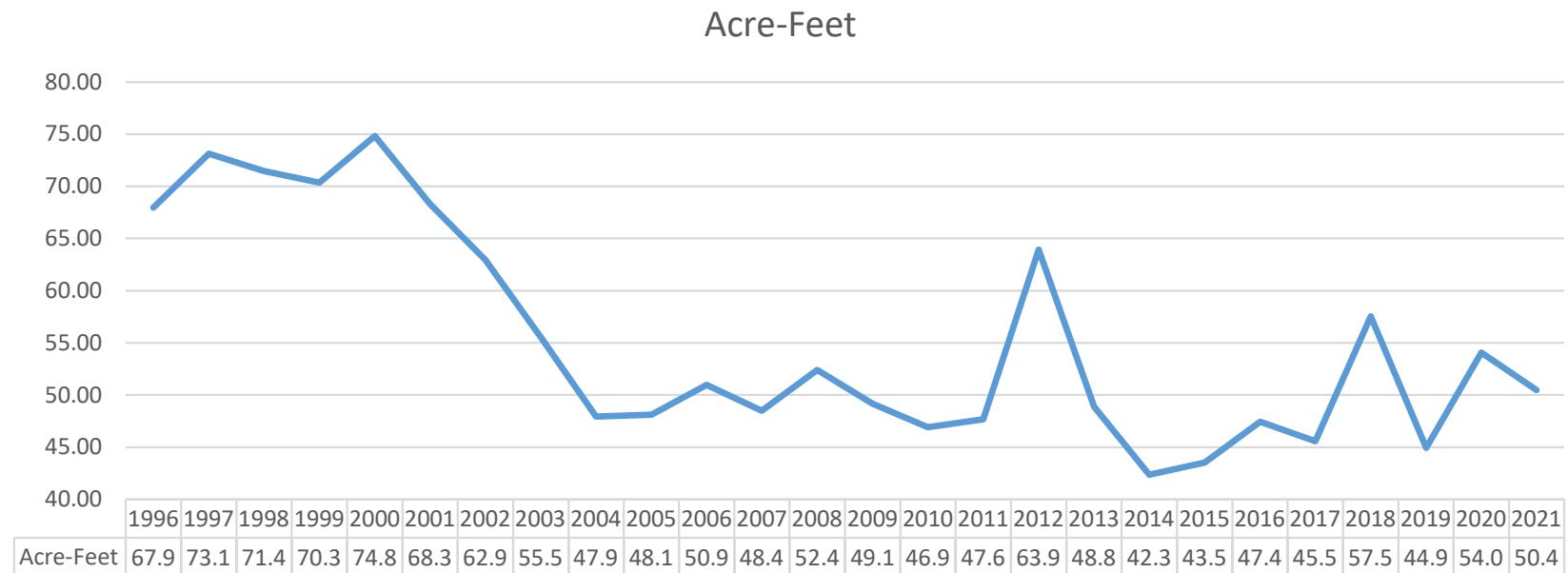
- Arapahoe Well (RF-7778)
 - Completed 2003
 - Depth = 2200 feet
 - Arapahoe Aquifer
 - 10 inches in diameter
 - Tested to 250 gpm
 - Permitted for 125 gpm
 - Old well = 60 gpm
 - Average usage = 120 gpm
 - Peak usage = 230 gpm (Total 141.14 acre feet)
- Denver (Safeway) Well (RF-7779)
 - Redrilled 1980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

Combined not to exceed 260 acre feet

Water Usage – Year Ending 11/30/21

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	Cost per 1000 Gallons
1996		43.71	24.26	67.97	107	17,249		
1997		46.80	26.33	73.13	108	18,387		
1998		44.68	26.79	71.47	109	17,805		
1999		46.25	24.11	70.36	112	17,059		
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

Water Usage Trend



- 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 2021 Income Statement

Income Statement	1/31/2022	1/31/2021	1/31/2020	1/31/2019	1/31/2018	1/31/2017	1/31/2016	1/31/2015
Revenue								
Residential	\$129,123	\$137,024	\$149,043	\$113,461	\$110,851	\$112,233	\$92,510	\$108,520
Commercial	\$0	\$0	673	1,050	980	840	8,820	1,117
Late Charges	\$900	\$700	1,290	770	650	950	1,020	1,180
Water Tap Fee				20,000	20,000	20,000		
Miscellaneous Income	\$631	\$1,234		1,284	7,258	1,371	1,738	1,982
Interest Income	\$619	\$4,606	4,567	768	786	683	648	606
Transfer Fees				75	400	225	200	125
Total Revenues	\$131,273	\$143,564	\$155,573	\$137,408	\$140,925	\$136,301	\$104,936	\$113,530
Expenses								
Accounting	\$0	\$415	\$7,375	\$11,949	\$14,064	\$11,470	\$8,875	\$10,179
8050 - Bank Charges	\$1,180	\$1,339	2,008	2,100	2,118	2,268	1,968	600
Consultant Fees					5,000			532
8080 - Depreciation	\$29,035	\$29,328	29,000	35,895	38,406	38,406	38,406	37,522
Directors Fees								700
8090 - Dues & Memberships	\$200	\$275	275	175	175	175	175	175
Engineering Fees								344
8110 - Insurance	\$3,754	\$3,537	754	2,984	2,889	2,801	2,720	2,525
Inspection Fees	100			730	80			
Lawn Service							375	250
Legal Fees								315
Meter Repairs			13	28	37,967			
8140 - Meter Reading	\$2,099	\$1,185	1,718	236	928	1,160	414	928
8145 - State Health Lab Tests	4,286						744	5,273
8150 - Office Expense	\$4,417	\$3,600	3,529	421	399	365	162	276
8170 - Postage	\$953	\$901	691	16				
8190 - Repairs & Maintenance & Supplies for Repairs	\$44,313	\$50,897	42,620	16,220	20,925	28,290	22,614	19,138
Survey Fee				1,968	745			
Taxes & Licenses	\$151	\$150	301	152	150	250	150	150
Telephone	\$696	\$650	635	609	600	597	542	584
Utilities	\$23,983	\$30,808	20,351	21,327	18,726	21,462	17,742	18,159
Miscellaneous				984	58			13
Total Expenses	\$115,168	\$123,086	\$109,271	\$95,794	\$143,229	\$107,244	\$94,888	\$97,664
Net Income	\$16,106	\$20,479	\$46,302	\$41,613	(\$2,304)	\$29,057	\$10,048	\$15,866

FY 2021 Balance Sheet (Deleted from Web Version)

Cash Expense Summary

• Operations & Maintenance (56.5%)	\$48,599
• Utilities – Electricity (27.9%)	\$23,983
• Billing/Banking Expenses (7.6%)	\$6,551
• Insurance (4.4%)	\$3,754
• Meter Reading (2.4%)	\$2,099
• <u>Everything Else (1.2%)</u>	<u>\$1,047</u>
• Grand Total	\$86,033

- This is all expenses except for depreciation
- Everything else: telephone, taxes, licenses, dues/memberships

Operation & Maintenance Breakdown

- Colorado Water Well \$30,990
- Elite Pipe (Service line repairs) \$6,950
- Change Electric (Transformer) \$4,456
- Water Testing \$4,286
- Everything Else \$1,917
- Grand Total \$48,599

- Rest = Repairs by Crandall and Kennedy + UNCC fees

Colorado Water Well Breakdown

• Fire Pump Replacement (26.9%)	\$8,322
• Periodic Service (25.9%)	\$8,031
• Respond to Alerts (12.5%)	\$3,880
• Replace Well #1 Soft Start Control (11.7%)	\$3,622
• Flush Mains (11.1%)	\$3,430
• Sodium Hypochlorite (4.6%)	\$1,425
• <u>Other (7.3%)</u>	<u>\$2,280</u>
• Total	\$30,990

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
1/31/21	1.77	380,000	198,200	578,200	533,480	44,720		44,720	7.7%	31	1443	18,652
2/28/21	1.58	257,400	257,200	514,600	473,552	41,048		41,048	8.0%	28	1466	18,379
3/31/21	1.63	268,000	264,600	532,600	492,050	40,550		40,550	7.6%	31	1308	17,181
4/30/21	1.79	297,200	287,100	584,300	548,590	35,710		35,710	6.1%	30	1190	19,477
5/31/21	2.95	511,800	451,000	962,800	810,985	151,815	60,996	90,819	9.4%	31	2930	31,058
6/30/21	7.21	1,352,900	998,100	2,351,000	2,165,699	185,301		185,301	7.9%	30	6177	78,367
7/31/21	8.12	1,693,100	953,600	2,646,700	2,324,360	322,340		322,340	12.2%	31	10398	85,377
8/31/21	8.06	2,232,800	392,300	2,625,100	2,463,445	161,655		161,655	6.2%	31	5215	84,681
9/30/21	7.70	1,568,100	939,800	2,507,900	2,306,214	201,686		201,686	8.0%	30	6723	83,597
10/31/21	3.70	552,700	654,200	1,206,900	1,063,504	143,396	22,500	120,896	10.0%	31	3900	38,932
11/30/21	2.04	430,100	234,500	664,600	540,517	124,083	32,500	91,583	13.8%	30	3053	22,153
12/31/21	2.06	311,100	360,300	671,400	601,014	70,386	2,500	67,886	10.1%	31	2190	21,658

- Adjustments:
 - 60,996 gallons consumed while flushing the mains
 - $22,500 = 2500$ failed meter + 20,000 Beverly main leak
 - $32,500 = 2500$ failed meter + 30,000 Beverly main leak
 - 2,500 = failed meter

Water Comes from Both Wells



- These statistics all come directly from the “beaconama.net” web site
- They were made possible by the remotely readable meters we installed on the wells

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 76 of 119 users have activated the App (~64%)
- As of 2/28/21 there are five active leaks
 - 1.2*, 1.6, 2.0*, 2.4, 9.2* 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

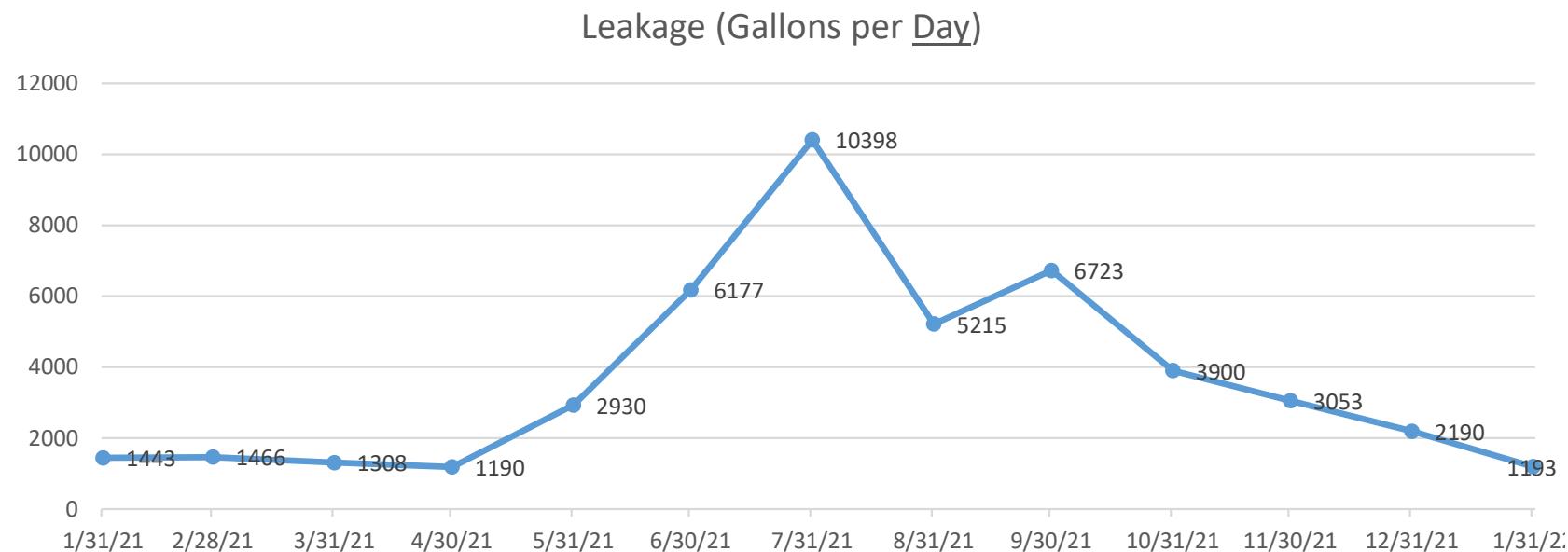
- Completed fire pump install – which completed tank remediation required by the 2018 Sanitary Survey
- Repaired a leak in the water main near 7956 Beverly Boulevard
- Completed annual flushing of the water mains
- We located and raised Valve #5 which had been buried under the asphalt on north Carolyn Drive

System Reliability

- 2/15/21 – Subzero cold wave
 - One meter froze and cracked
 - Meter body replaced
 - We are adding dirt and insulation to prevent reoccurrence
 - Second meter also froze but was not damaged
 - Will add dirt and insulation to prevent reoccurrence
- Three cellular endpoints failed
 - All replacements provided free under warranty
- Water main leak
 - Homeowner reported a leak in front of his house
 - Turned out to be small leak in old portion of Beverly Boulevard main

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



Planned Activity – Hydrant Replacement

- We have received bids for the replacement of the two hydrants on Beverly Boulevard
 - 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

- Normally monitored every six years
 - Our 2019 test showed a level of 6.0 pCi/L that is higher than the 5.5 pCi/L limit defined by the state
 - The State required us to test quarterly starting in 2020
- The State changed us to 3 year monitoring 2/8/21
 - Last 4 quarters averaged 3.65 and 11/1/21 test reflected 3.3 total
- Additional sample taken 1/14/21 exceeded limits, so they placed us back on quarterly sampling

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

Major Infrastructure Risks

- Major Risks
 - Motor/Well failure. Motor/pump replaced on the Denver aquifer well (Safeway) in 2019
 - Service line failures – Two failures in 2020. None in 2021.
 - Combined Uranium level – Still a work in progress
 - Main leaks - Beverly main leak in 2021
- Expect continued service line failures
- 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.
- Arapahoe well pump has not been pulled since circa 2009 (Layne-Western arbitration incident)
- Each of these items represent a significant repair cost
- Current cash reserves would be stressed by a well failure which required redrilling and leave few additional funds in case of a second major need.

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	Annual
Nitrate	Annual
Fluoride	3 years
Inorganics Group	3 years
Synthetic Organics Group	3 years
Volatile Organics Group	3 years
Combined Radium	Quarterly
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 McNary's term expires this year

Questions?
