

# Beverly Hills Mutual Water Company

614 North Tejon Street  
Colorado Springs, CO 80903

Annual Shareholders Meeting  
Monday, March 6, 2023

# Agenda

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- 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)

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**Gene Crandall, President (2023)**  
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 3<sup>rd</sup> Avenue  
ojzapata@gmail.com

# Beverly Hills Mutual Water Company 101

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- 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

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- 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 25<sup>th</sup> 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

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- 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

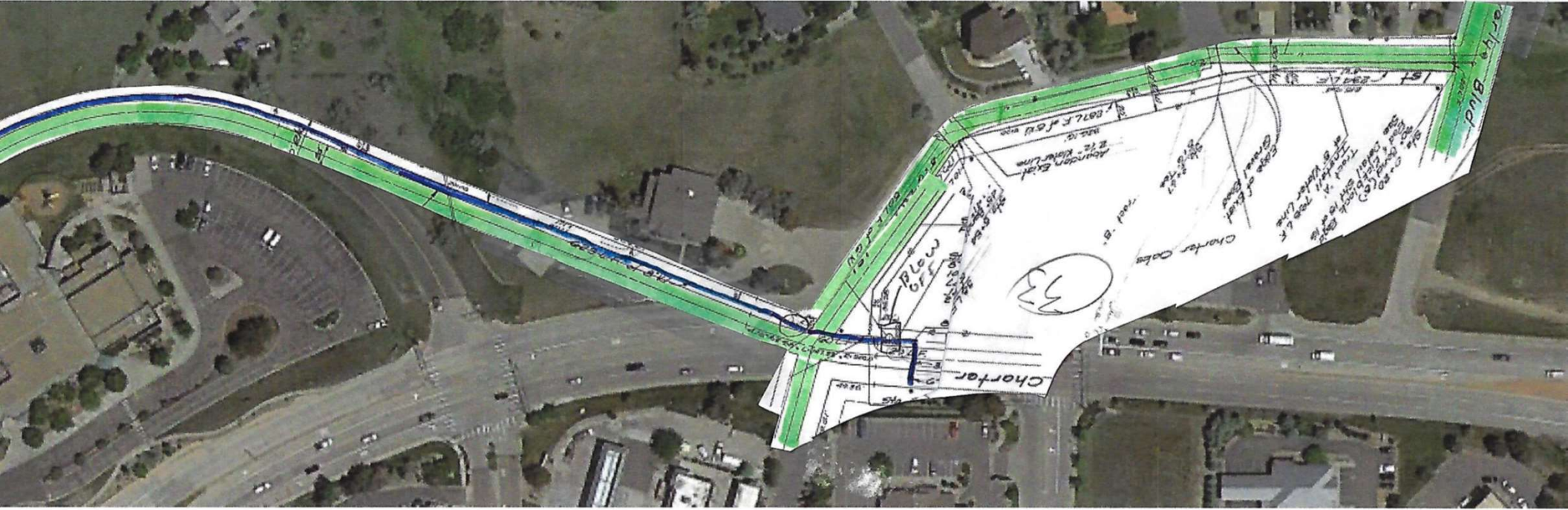
# More Historical Notes

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- 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

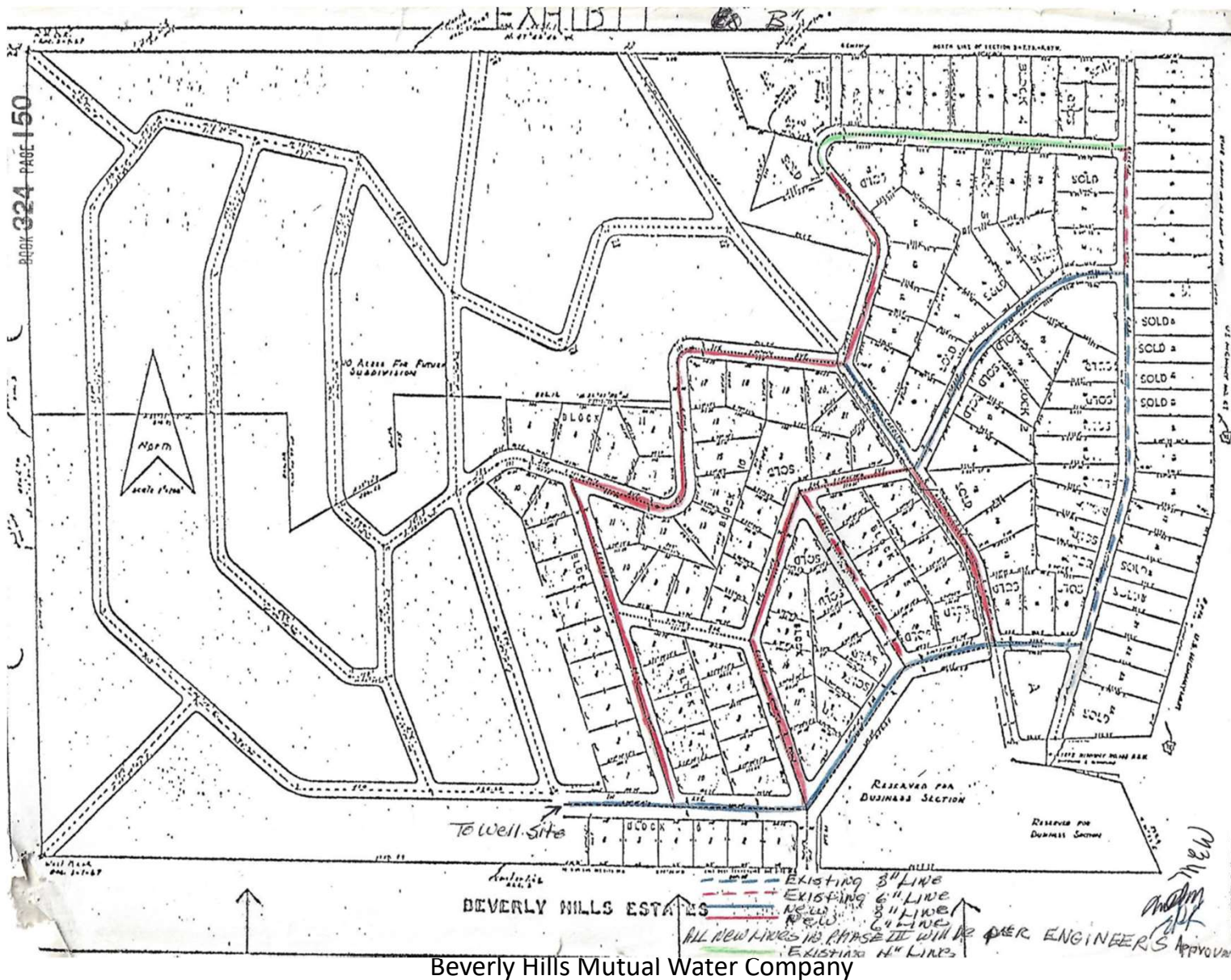
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- Charter Oaks Drive was originally planned as a major thoroughfare to handle traffic into Castle Pines
- Green highlights indicate “as built” water mains



# Historical Plan for Beverly Hills



Beverly Hills Mutual Water Company

# Richard Wilson Replat - 1980

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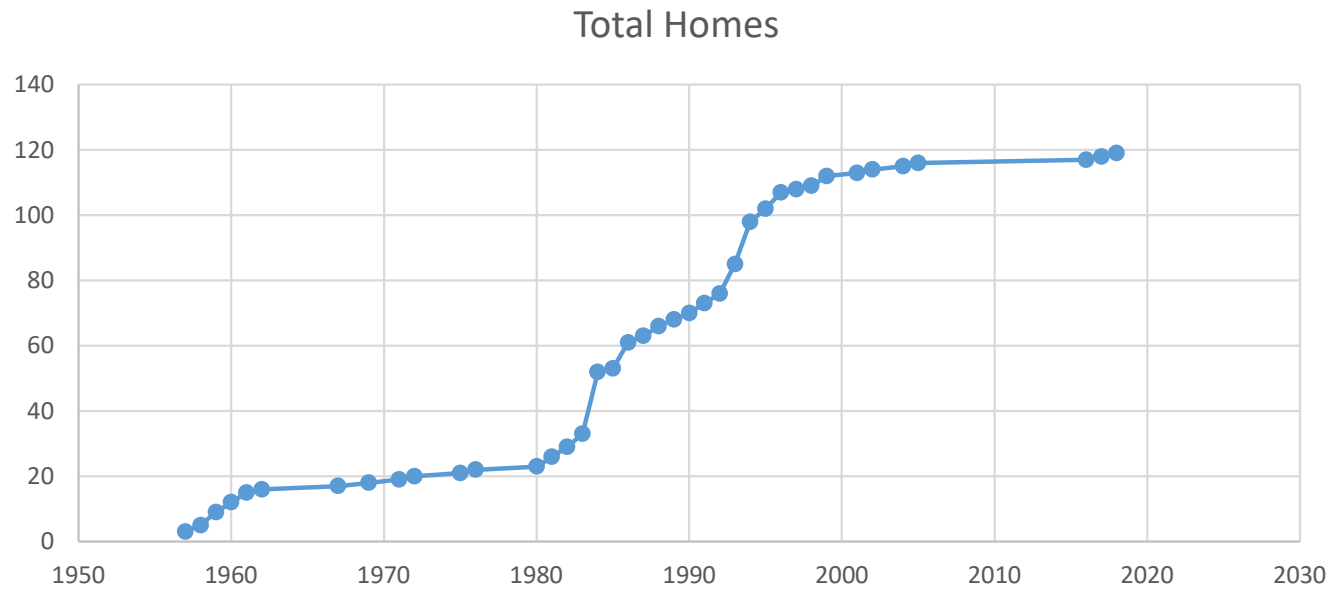


# Historical Growth of the BHMWC

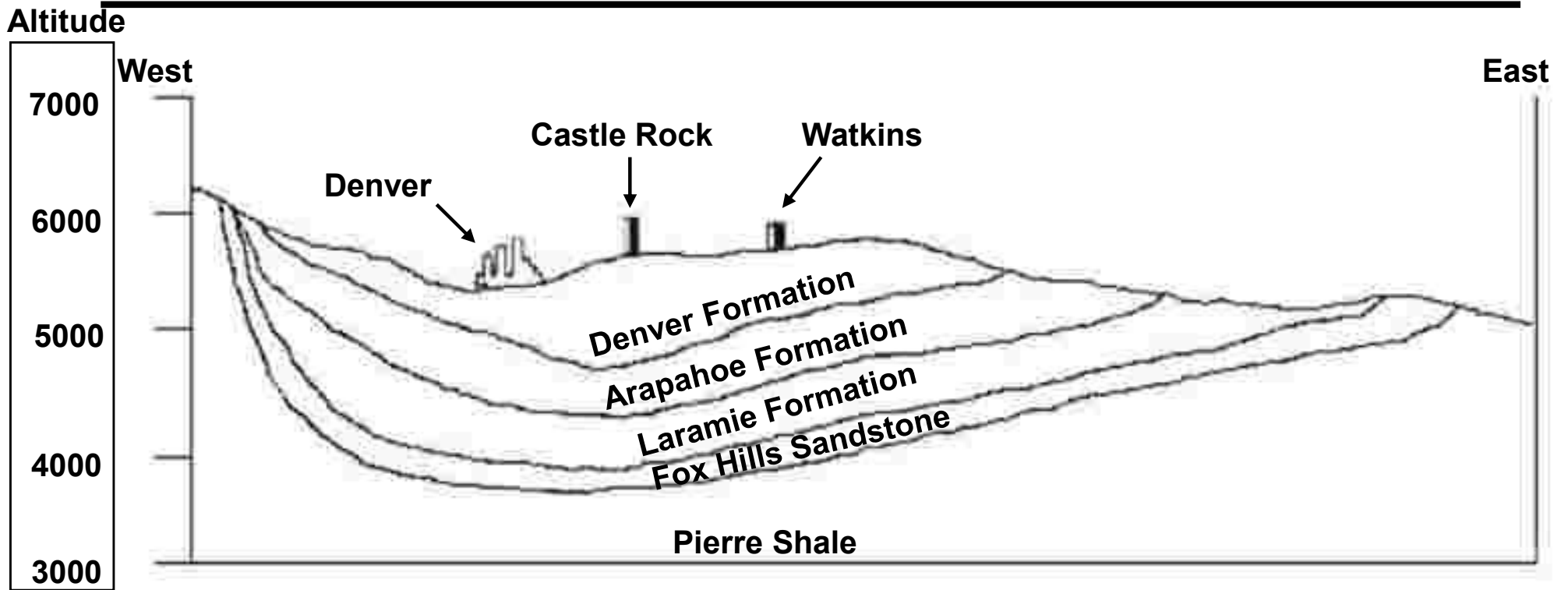
Year	Total Homes	Annual Homes	1st	2nd	3rd	Beverly	Carolyn	Castle Pines Parkway	Charter Oaks Drive	Coventry	Debbie	Saxeborough	Suffolk
1957	3	3				3							
1958	5	2		1		1							
1959	9	4				4							
1960	12	3				1	2						
1961	15	3			1	1					1		
1962	16	1			1								
1967	17	1									1		
1969	18	1		1									
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

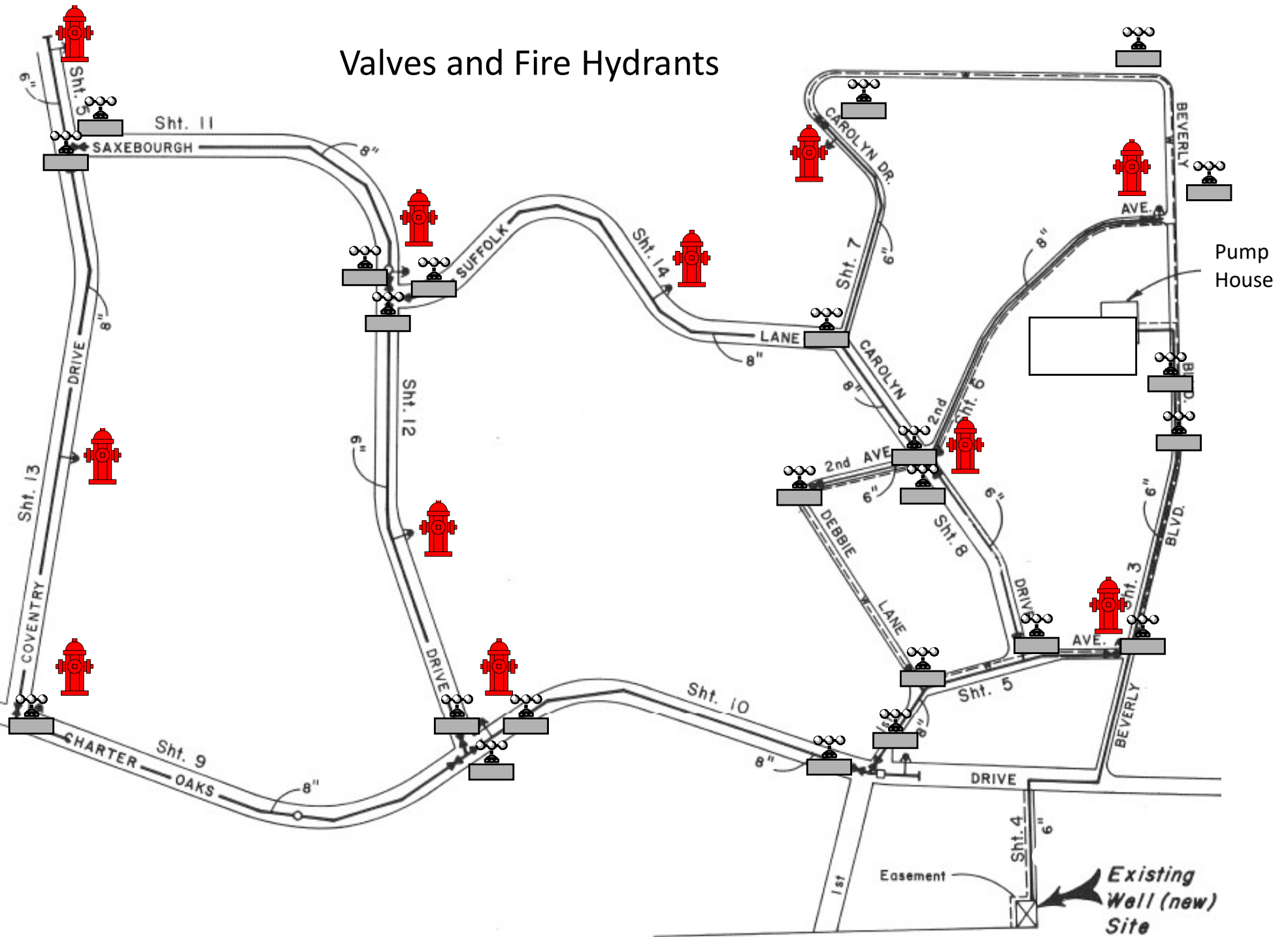
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# Denver Basin

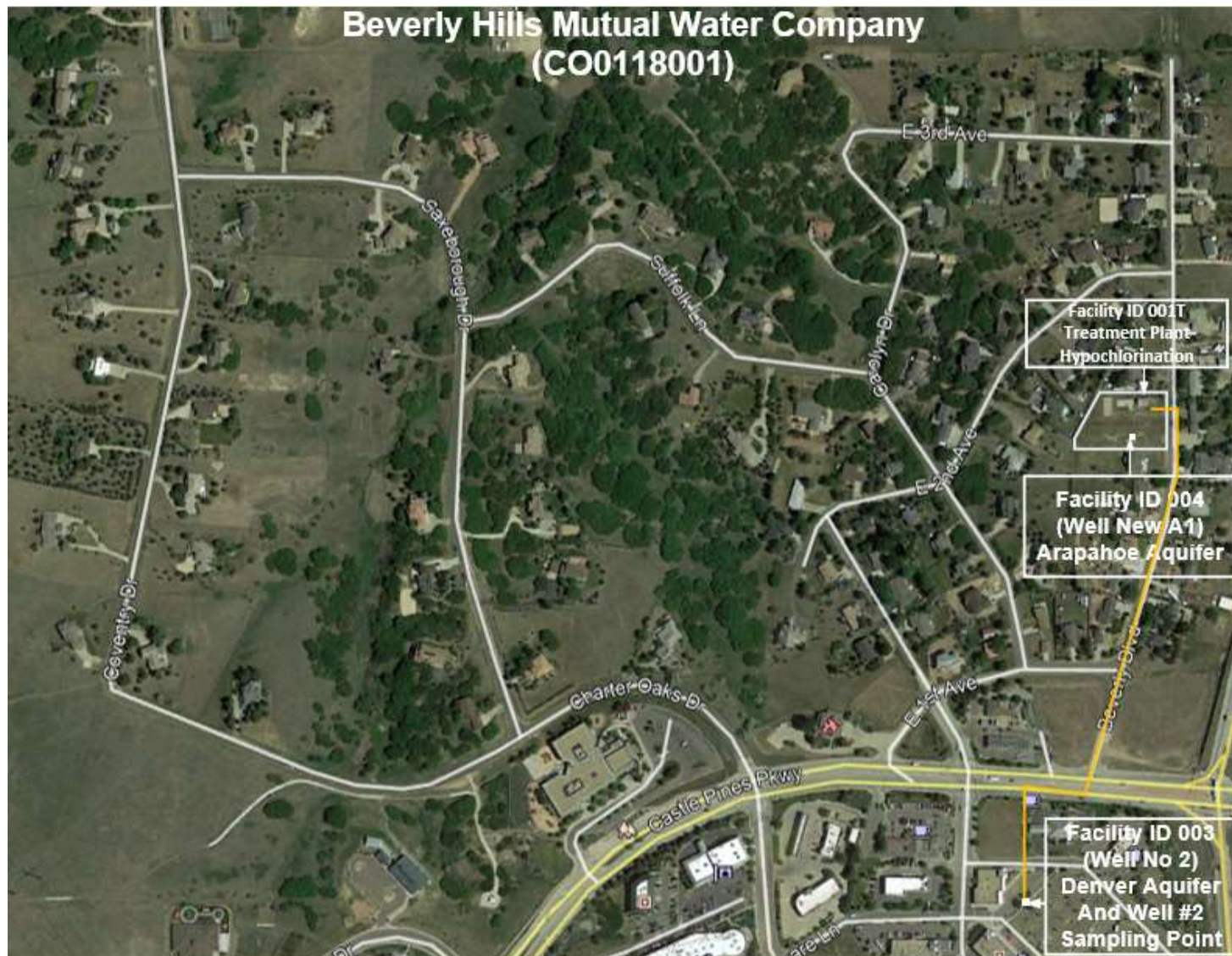


## Valves and Fire Hydrants





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



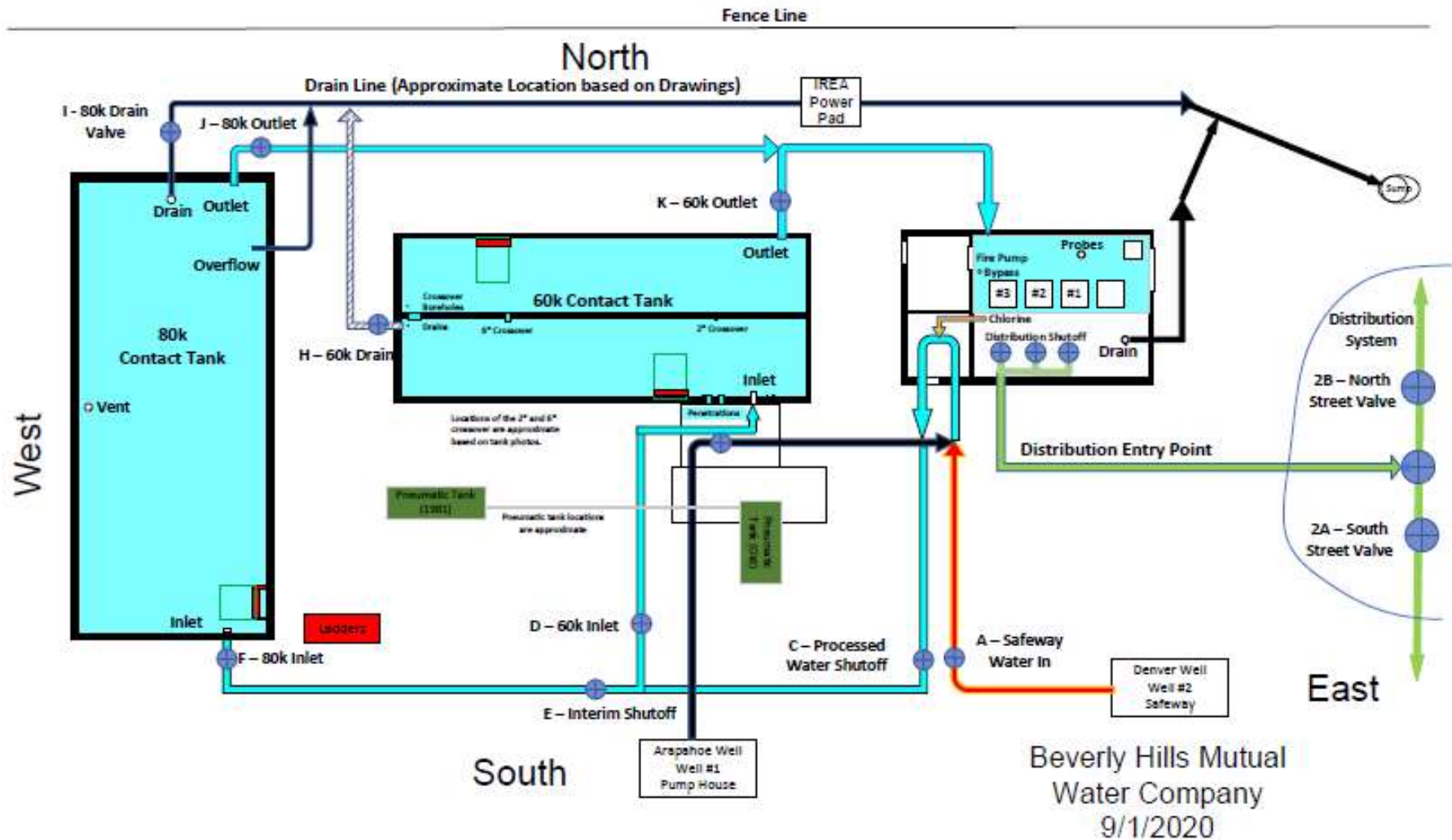


# 7801 Beverly Boulevard





# Processing Flow



# Wells and Water Rights

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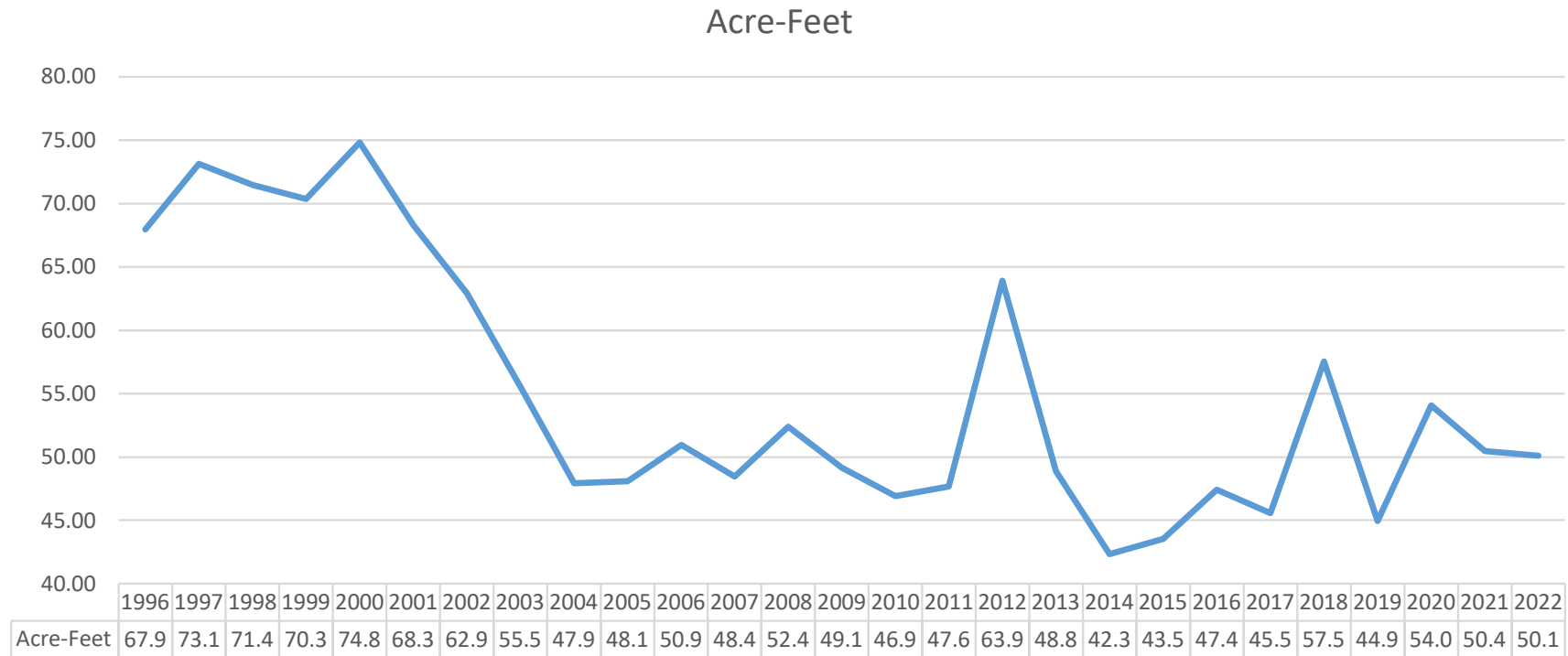
- Arapahoe Well (RF-7778)
  - Completed 2003
  - Depth = 2200 feet
  - Arapahoe Aquifer
  - 10 inches in diameter
  - Tested to 250 gpm
  - Permitted for 125 gpm
  - Old well = 60 gpm
  - Average usage = 120 gpm
  - Peak usage = 230 gpm (Total 141.14 acre feet)
- Rehab/Motor/Pump replaced Spring 2023
- 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 11/30/22

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
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
2022	14.14	35.98		50.12	119	11,437	\$ 102,352	\$ 6.27
An acre foot (Gallons) =	325,851							

# 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 2022 Income Statement

Income Statement	1/31/2023	1/31/2022	1/31/2021	1/31/2020	1/31/2019	1/31/2018	1/31/2017	1/31/2016
<b>Revenue</b>								
Residential	\$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
Interest Income	\$1,779	\$619	\$4,606	4,567	768	786	683	648
Transfer Fees					75	400	225	200
<b>Total Revenues</b>	<b>\$140,687</b>	<b>\$131,273</b>	<b>\$143,564</b>	<b>\$155,573</b>	<b>\$137,408</b>	<b>\$140,925</b>	<b>\$136,301</b>	<b>\$104,936</b>
<b>Expenses</b>								
8020 - Accounting and Audit	\$825	\$0	\$415	\$7,375	\$11,949	\$14,064	\$11,470	\$8,875
8050 - Bank Charges	\$1,188	\$1,180	\$1,339	2,008	2,100	2,118	2,268	1,968
Consultant Fees						5,000		
8080 - Depreciation	\$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	\$3,922	\$3,754	\$3,537	754	2,984	2,889	2,801	2,720
Inspection Fees	100	100			730	80		
Lawn Service								375
Legal Fees								
Meter Repairs				13	28	37,967		
8140 - Meter Reading	\$773	\$2,099	\$1,185	1,718	236	928	1,160	414
8145 - State Health Lab Tests	1,343	4,286						744
8150 - Office Expense	\$4,100	\$4,417	\$3,600	3,529	421	399	365	162
8170 - Postage	\$839	\$953	\$901	691	16			
8190 - Repairs & Maintenance & Supplies for Repairs	\$36,297	\$44,169	\$49,471	42,620	16,220	20,925	28,290	22,614
8195 - Supplies for Repairs	\$1,045	\$144	\$1,426					
Survey Fee					1,968	745		
Taxes & Licenses	-\$200	\$151	\$150	301	152	150	250	150
Telephone	\$605	\$696	\$650	635	609	600	597	542
Utilities	\$21,931	\$23,983	\$30,808	20,351	21,327	18,726	21,462	17,742
Miscellaneous					984	58		
<b>Total Expenses</b>	<b>\$102,352</b>	<b>\$115,168</b>	<b>\$123,086</b>	<b>\$109,271</b>	<b>\$95,794</b>	<b>\$143,229</b>	<b>\$107,244</b>	<b>\$94,888</b>
<b>Net Income</b>	<b>\$38,335</b>	<b>\$16,106</b>	<b>\$20,479</b>	<b>\$46,302</b>	<b>\$41,613</b>	<b>(\$2,304)</b>	<b>\$29,057</b>	<b>\$10,048</b>

# FY 2022 Balance Sheet

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- Redacted from Web version

# 2023 Cash Expense Summary

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• Operations & Maintenance (52.6%)	\$38,685
• Utilities – Electricity (29.8%)	\$21,931
• Billing/Banking Expenses (9.5%)	\$6,952
• Insurance (5.3%)	\$3,922
• Meter Reading (1.1%)	\$773
• <u>Everything Else (1.7%)</u>	<u>\$1,239</u>
• Grand Total	\$73,502

- This is all expenses except for depreciation (\$28,850)
- Everything else: dues/memberships, inspection fees, taxes/licenses, telephone

## 2023 Operation & Maintenance Breakdown

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• Colorado Water Well	\$21,964
• Elite Pipe (Line repairs)	\$12,100
• Water Testing	\$1,343
• Supplies for Repairs	\$1,045
• UNCC	426
• <u>Crandall/Kennedy Repairs</u>	<u>\$1,807</u>
• Grand Total	\$38,685



# 2023 Colorado Water Well Breakdown

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• Monthly Checks	\$9,580
• Leak Repair Support (2)	\$3,448
• Flush Mains	\$3,410
• Bleach/Bleach Delivery	\$2,205
• Safeway Radio Repair	\$1,020
• Arapahoe Well debug	\$910
• Line Locates	\$455
• <u>Other</u>	<u>\$936</u>
• Total	\$21,964

# 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
1/31/22	1.63	258,900	271,800	530,700	491,221	39,479	2,500	36,979	7.0%	31	1193	17,119
2/28/22	1.38	238,200	212,000	450,200	428,454	21,746	2,500	19,246	4.3%	28	687	16,079
3/31/22	1.53	186,500	312,000	498,500	470,183	28,317	2,500	25,817	5.2%	31	833	16,081
4/30/22	2.64	380,800	481,000	861,800	837,075	24,725	2,500	22,225	2.6%	30	741	28,727
5/31/22	5.65	967,800	872,400	1,840,200	1,743,988	96,212	68,362	27,850	1.5%	31	898	59,361
6/30/22	7.68	1,403,000	1,100,600	2,503,600	2,419,552	84,048		84,048	3.4%	30	2802	83,453
7/31/22	8.20	430,500	2,243,000	2,673,500	2,575,376	98,124		98,124	3.7%	31	3165	86,242
8/31/22	7.36	-	2,398,500	2,398,500	2,201,332	197,168	40,000	157,168	6.6%	31	5070	77,371
9/30/22	6.28	-	2,047,300	2,047,300	1,981,858	65,442		65,442	3.2%	30	2181	68,243
10/31/22	3.65	-	1,189,100	1,189,100	1,140,658	48,442		48,442	4.1%	31	1563	38,358
11/30/22	1.72	-	561,400	561,400	511,310	50,090	3,289	46,801	8.3%	30	1560	18,713
12/31/22	1.89	-	617,400	617,400	534,531	82,869	53,289	29,580	4.8%	31	954	19,916

- Adjustments:
  - 2,500 = failed meter
  - 68,362 = gallons consumed while flushing the mains
  - 40,000 = north Beverly main leak
  - 3,289 = Failed meter on Carolyn
  - 53,289 = failed meter on Carolyn and north Carolyn service line leak

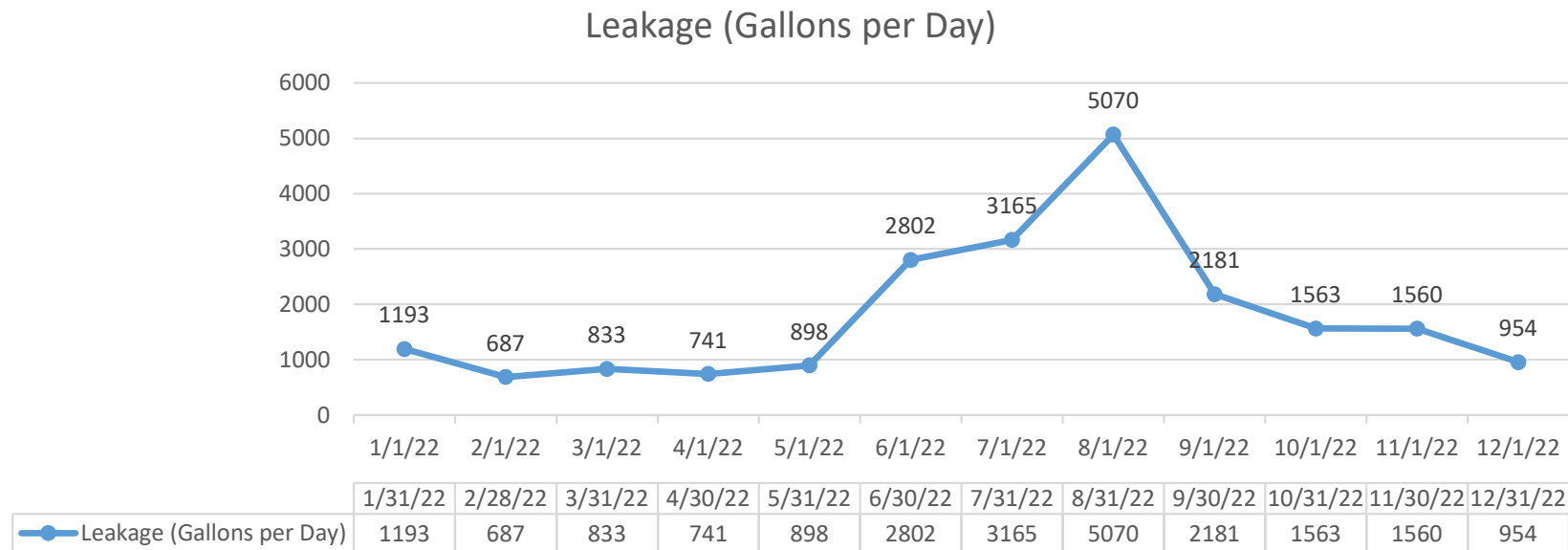
# Water Comes from Both Wells



- 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
- The Arapahoe well failed in July 2022

# 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



# Eye On Water

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- 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

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- Main leak on North Beverly Boulevard (August 23)
- Service line failure at 507 2<sup>nd</sup> Avenue (December 20)
- Arapahoe well failure
  - Well has been pulled
  - Awaiting parts to complete the repair

# Arapahoe Well Repair Cost

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- The pump failed
- Once the well was pulled, we determined additional rehab of the well needed to be performed
- Due to the costs to pull/replace the well, we decided to replace the motor as well
- The Arapahoe well is 2200 feet deep. Twice as deep as the Safeway well. That effectively doubles repair costs

# Well Repair Costs

Item	Cost Source	Contract Cost	Notes
Mobilization & Pump Removal	Original Contract	\$ 8,650	Complete
Mobilization, Furnish & Install Pump Equipment to include Start Up	Original Contract	\$ 9,525	This mobilization will still be required. This covers the reinstallation of the well and start up.
Replacement Pump	Original Contract	\$ 21,766	
Replacement Motor	Original Contract	\$ 25,642	
Replacement Seal	Original Contract	\$ 16,372	
Replacement Motpr Leads Extension	Original Contract	\$ 5,196	
Mobilization/Demobilization	2nd Agreement	\$ 7,175	This mobilization covers delivery of the new pipe, removal of old pipe and all handling associated with the new items on the second contract.
1147 feet of new pipe	2nd Agreement	\$ 33,263	
(2) Flomatic check valve	2nd Agreement	\$ 5,220	
200 feet of PVC	2nd Agreement	\$ 600	
Nylon Airline	2nd Agreement	\$ 4,100	
#4 Armored Cable	2nd Agreement	\$ 31,500	
Well video survey	2nd Agreement	\$ 2,200	Complete
Total Costs to Complete =		\$ 171,209	



# Well Cleaning/Rehabilitation Costs

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Following the initial Color Video Survey of the well, below is a cost for the requested Rehabilitation/Cleaning of Well A-1 at Beverly Hills Mutual Water Co

The below cost includes the Daily Travel for the Crew, and Materials:

- Removal of Approximately 90' of Fill/Debris = \$4,970.00
- Acid Treatment to include: = \$32,700.00
  - Brushing of Well Screens, 4 hrs
  - Installation of Tremmie Pipe
  - Spot Chemicals into Screened Zones, using Cotey Liquid Acid Descaler
  - Removal of Tremmie Pipe
- Installation and Removal of Temporary Pump to Neutralize Chemistry in the well. = \$12,650.00
- Disposal of Neutralized Chemicals, 4,000 Gal. Load = \$750.00/Load
- Frac Tank Rental (Qty 2- 20,000 Gal. Tanks) = \$5,300.00
- Post Cleaning Well Video Survey = \$2,200.00
- Total estimated costs of \$58,750

# System Reliability

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- 12/21/22 – Subzero cold wave
  - One meter froze but was not damaged
- Two meters replaced (non-warranty)
- Three endpoints replace
  - Two warranty, one physical damage

Date	Event	Address
4/26/2022	Meter Replacement	7705 Saxeborough (Mackey)
4/26/2022	Meter Replacement	361 Suffolk (Shaffner)
7/11/2022	ENCODER Failure (Last read 5/11/22)	7711 Carolyn Drive
11/1/2022	Damaged encoder (Homeowner)	7689 Carolyn Drive
12/27/2022	Failed encoder	7945 Coventry (Fields)

# Historical Leak Repairs

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- Since the start of 2019 we have averaged just under two 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

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

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- Four meter failures (One warranty)
- Ten endpoint failures (Nine warranty)
- Two Encoder failures (Both warranty)

Date	Event	Address	Original Install Date	Years to Failure
1/26/2019	Endpoint Failure (1/27/19 - ??)	594 2nd Avenue (Givant)	1/10/2018	1.04
1/27/2019	Endpoint Failure (1/28/19 - 1/31/19)	7845 Boulevard (Morrison)	1/8/2018	1.05
7/19/2019	Warranty repair - Nutating disc	7705 Saxeborough (Mackey)	12/30/2017	1.55
11/4/2019	Endpoint Failure	585 2nd Avenue (Smith)	1/10/2018	1.82
4/23/2020	Endpoint Failure (3/17 - 4/23)	7844 Beverly Boulevard (Schroth)	1/18/2018	2.26
5/8/2020	Endpoint Failure (4/24/20 - tbd)	454 Suffolk Lane (DeBane)	2/15/2018	2.23
6/15/2020	Endpoint failure	631 3rd Avenue (Stuart)	1/18/2018	2.41
2/15/2021	Meter froze	390 Suffolk (Schmitz)	1/18/2018	3.08
5/4/2021	Endpoint Failure (4/15/21)	449 2nd Avenue (Fong)	1/30/2018	3.26
5/4/2021	Endpoint Failure (4/20/21)	7705 Saxeborough (Mackey)	12/30/2017	3.35
5/6/2021	Endpoint Failure	7729 Beverly Boulevard	1/13/2018	3.31
4/26/2022	Meter Replacement	7705 Saxeborough (Mackey)	12/30/2017	4.32
4/26/2022	Meter Replacement	361 Suffolk (Shaffner)	2/1/2018	4.23
7/11/2022	ENCODER Failure (Last read 5/11/22)	7711 Carolyn Drive	1/27/2018	4.45
11/1/2022	Damaged endpoint (Homeowner)	7689 Carolyn Drive	3/16/2018	4.63
12/27/2022	Failed encoder	7945 Coventry (Fields)	12/30/2017	4.99

# Planned Activity – Hydrant Replacement

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- 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 3<sup>rd</sup>
  - Would allow us to better flush the dead-end of that line



# Combined Radium-226/228 Testing

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- 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

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- 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
- 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
  - 3<sup>rd</sup> Avenue (including Beverly Blvd to 2<sup>nd</sup> Avenue and the northernmost part of Carolyn Drive)
  - No failures yet, but we believe this may be cast iron pipe.
- Arapahoe well pump was last pulled circa 2009 (Layne-Western arbitration incident)
  - Major rehab/equipment replacement in progress
- 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?

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- 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	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

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- Gene Crandall's term expires this year

# Questions?

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