

TO:	Scott Olsen, Assistant Director of Utilities
FROM:	Kevin Burnett and Michael Cronan, Willdan Financial Services
DATE:	September 14, 2022
SUBJECT:	Non-Potable Water Rate Study

The City of Brighton (City) retained Willdan Financial Services (Willdan) to complete a rate study for the Town's nonpotable water service. More specifically, the rate study identified the current (2022) and projected (through 2033) cost to provide non-potable water service.

The analysis utilized the actual number of customers and consumption (flows) currently being served. Future year projections were based on assumptions of the number of new meters by size based on anticipated developments, with flow projections extrapolated from average use by meter size for existing customers. The assumptions and summary of the analysis are discussed in the balance of this memorandum.

#### Baseline - 2022

With the non-potable water program in its infancy, Staff have decided to maintain non-potable water service as a component of the City's Water Enterprise Fund. In the future as non-potable services mature, there may be an evaluation that the non-potable service should be an enterprise fund unto itself, but for the time being it will be a component of the water utility.

As a component of the water utility, the only costs anticipated to be recovered via the non-potable rate is the cost to maintain and replace the non-potable water lines. The City currently maintains 71,000 linear feet of non-potable water lines. Through discussions with other regional municipalities and research, the range of cost to maintain a linear foot of pipe is \$60 to \$640. Our analysis assumed a cost of \$125 per linear foot for the City to maintain its non-potable water lines. At a cost of \$125 per linear foot and 71,000 linear feet of pipe, the cost to maintain or replace the system is \$8,875,000 (\$125 \* 71,000). The pipes are assumed to have a useful life of 50 years, which equates to an annual repair and replacement cost of \$177,500 (\$8,875,000 / 50). As the system expands in the future additional costs such as equipment may be included in the calculation of the non-potable rate. In addition to pipeline repair and maintenance costs there are meter maintenance costs of \$200 per meter or \$5,200 for 2022 (there are 26 meters on the system as of 2022). The total cost f operating the system for 2022 is calculated at \$182,700 (\$177,500 + \$5,200).

The City currently provides non-potable service to 26 meters with combined annual flows of 68,018,754 gallons. Thus, the current rate for non-potable water service is \$2.69 per 1,000 gallons (\$182,700 / 68,018,754 / 1,000). Currently customers pay different rates depending upon their current service. For example, some customers have two taps, one for indoor use and one for outdoor use. These customers pay a rate of \$4.90 per 1,000 gallons for their indoor use and a rate of \$8.42 for the outdoor (irrigation) use. Some customers pay a combined indoor and outdoor rate of \$6.21 per 1,000 and others have an existing non-potable connection and pay a rate of \$3.22 per 1,000 gallons.

### Future Year Projections

While the components to calculate the non-potable rate for 2022 were largely known, future year costs, accounts and flows are based on assumptions. As additional customers connect to the non-potable system, and the system grows, an assumption has been made that the number of linear feet of non-potable water lines will increase by 10% per year beginning in 2024. In addition to an increase in the number of linear feet of pipes to be maintained, the cost of



maintenance is also projected to increase over a time. Given the current inflationary environment, the current Engineering News Record (ENR) construction cost index rate of 8.70% was used as a cost escalator for 2023. For 2024 through 2033 a 5-year average construction cost index rate of 2.59% was used as a cost escalator for repair and replacement costs. Table 1 provides a summary of the projected system costs through 2026, while the projections through 2033 can be found in the attachments to this memorandum.

Metric	2022	2023	2024	2025	2026
Existing Linear Feet	71,000	71,000	71,000	78,100	85,910
Incremental Linear Feet	<u>0</u>	<u>0</u>	7,100	<u>7,810</u>	<u>8,591</u>
Total Linear Feet (a)	71,000	71,000	78,100	85,910	94,501
Cost per Linear Foot (b)	\$125.00	\$135.88	\$139.39	\$143.00	\$146.71
Inflation Factor	0.00%	8.70%	2.59%	2.59%	2.59%
Total Replacement Cost (c = a * b)	\$8,875,000	\$9,647,125	\$10,886,684	\$12,285,514	\$13,864,080
Useful Life (d)	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>
Annual Replacement Cost (e = c / d)	177,500	192,943	217,734	245,710	277,282
Meter Maintenance Cost (f)	200.00	217.40	223.03	228.81	234.73
Meters (g)	<u>26</u>	<u>31</u>	<u>84</u>	<u>177</u>	<u>266</u>
Annual Meter Maintenance (h = f * g)	5,200	6,739	18,824	40,590	62,533
Total Annual Cost (i = e + h)	\$182,700	\$199,882	\$236,558	\$286,300	\$339,815

# Table 1Projected Non-Potable System Costs 2022 - 2026

While costs are anticipated to increase in the future, so too are the number of non-potable customers and in terms non-potable flows.



#### Farmlore (14 new meters)

Additional developments for Farmlore (streetscapes and parks) have been projected in 4 Phases. For purposes of this analysis, Phase I is anticipated to begin in 2023 with Phase IV anticipated to begin in 2026. The projected flows for the new developments are assumed to be the same as for existing customers by meter size. As an example, the average non-potable water flows for a current 1-inch meter customer is 390,120 gallons annually. Therefore, all new 1-inch meter connections are expected to produce 390,120 gallons of annual non-potable water flow.

#### Prairie Center Expansion (Commercial)

It is anticipated that there will be 344 new 1-inch meters. The meters have been assumed to connect to the system in equal increments over 10 years beginning in 2024.

#### Case Farms (Commercial)

It is anticipated that there will be 12 new 1-inch meters. The meters have been assumed to connect to the system in 2024.

#### LDS Church (changing from potable system to non-potable system)

It is anticipated that there will be one new 1-inch meter. The meter is assumed to connect to the system in 2025.

#### Bromley Farms (Residential)

The developed area is proposed to encompass 135 acres. The analysis assumes 4 single family home lots per acre for a total of 540 single family lots. The City Code anticipates 2.96 persons per single family home for a total of 1,598 persons. The City Code requires 3 acres of neighborhood park space per 1,000 residents and 3 acres of community parks per 1,000 residents. Additionally, the City Code requires 15 acres of open space per 1,000 residents. Thus, the total acreage requiring non-potable service is 33.57 acres.

Per an analysis by Manhard Consulting, 36.37 acres of land requires 22,705,294 gallons of water annually. For purposes of the current analysis all new meters are assumed to be 1-inch. As better information about the development and their needs become known this assumption will be revised based on actual meter size requirements. The 33.57 acres will require 20,957,292 gallons of water annually (33.57 / 36.37 \* 22,705,294). A current 1-inch meter customer has average annual flows of 487,067 gallons; therefore, Bromley Farms is projected to need 43 new 1-inch meters (20,957,292 / 487,067).

The meters are assumed to connect to the system over a 3-year period beginning in 2025.

#### Case Farms (Residential)

The developed area is proposed to encompass 214.3 acres. The analysis assumes 4 single family home lots per acre for a total of 857 single family lots. The City Code anticipates 2.96 persons per single family home for a total of 2,537 persons. The City Code requires 3 acres of neighborhood park space per 1,000 residents and 3 acres of community parks per 1,000 residents. Additionally, the City Code requires 15 acres of open space per 1,000 residents. Thus, the total acreage requiring non-potable service is 53.28 acres.

Per an analysis by Manhard Consulting, 36.37 acres of land requires 22,705,294 gallons of water annually. For purposes of the current analysis all new meters are assumed to be 1-inch. As better information about the



development and their needs become known this assumption will be revised based on actual meter size requirements. The 53.28 acres will require 33,261,976 gallons of water annually (53.28 / 36.37 \* 22,705,294). For purposes of the current analysis all new meters are assumed to be 1-inch. As better information about the development and their needs become known this assumption will be revised based on actual meter size requirements. A current 1-inch meter customer has average annual flows of 487,067 gallons; therefore, Case Farms is projected to need 68 new 1-inch meters (33,261,976 / 487,067).

The meters are assumed to connect to the system over a 3-year period beginning in 2025.

#### Prairie Center Expansion (Residential)

The developed area is proposed to encompass 260 acres. The analysis assumes 4 single family home lots per acre for a total of 1,040 single family lots. The City Code anticipates 2.96 persons per single family home for a total of 3,078 persons. The City Code requires 3 acres of neighborhood park space per 1,000 residents and 3 acres of community parks per 1,000 residents. Additionally, the City Code requires 15 acres of open space per 1,000 residents. Thus, the total acreage requiring non-potable service is 64.65 acres.

Per an analysis by Manhard Consulting, 36.37 acres of land requires 22,705,294 gallons of water annually. For purposes of the current analysis all new meters are assumed to be 1-inch. As better information about the development and their needs become known this assumption will be revised based on actual meter size requirements. The 64.65 acres will require 40,360,112 gallons of water (64.65 / 36.37 \* 22,705,294). A current 1-inch meter customer has average annual flows of 487,067 gallons; therefore, Prairie Center is projected to need 83 new 1-inch meters (40,360,112 / 487,067).

The meters are assumed to connect to the system over a 5-year period beginning in 2025.

The projection of flows for 2022 through 2026 are summarized in Table 2.

Metric	2022	2023	2024	2025	2026
Total Annual Flows	68,018,754	76,385,848	97,365,293	136,837,549	176,602,028
Increase in Annual Flows	n/a	8,367,094	20,979,444	39,472,257	35,764,479
Percent Increase in Annual Flows	n/a	12.30%	27.47%	40.54%	26.14%

## Table 2Projected Non-Potable Flows 2022 - 2026

#### Calculated Rates

With the identification of the cost to maintain the non-potable system and projections of future connections and flows, the non-potable water rate per thousand gallons of flow for each respective year was determined. Using the analysis contained in Tables 1 and 2, Table 3 provides a summary of the projected non-potable rates through 2026.



## Table 3Projected Non-Potable Rates 2022 - 2026

Metric	2022	2023	2024	2025	2026
Total Annual Cost	\$182,700	\$199,882	\$236,558	\$286,300	\$339,815
Total Annual Flows	<u>68,018,754</u>	<u>76,385,848</u>	<u>97,365,293</u>	<u>136,837,549</u>	<u>176,602,028</u>
Rate \$/1,000 gallons	\$2.69	\$2.61	\$2.43	\$2.09	\$1.97

It is important to note the rates identified in Table 3, are based on the assumptions contained within this memorandum. They are subject to change in the future based on cost escalation factors, increase in linear feet of pipes and the projected timing and number of future customers that come online by year. The rates beyond 2023 should be reviewed and updated annually as assumptions and actual development change.

The full 10-year analysis is contained within the attachment to this memorandum.

#### BRIGHTON, CO NON-POTABLE WATER SYSTEM PROJECTED NON-POTABLE WATER SYSTEM OPERATING RESULTS & RATES

Line	Description	Inputs
1	Total Current Linear Feet of Non-Potable Water System Mains	71,000
2	Water Main Cost per Linear Foot	\$125.00
3	Life Span of Water Mains (Years)	50
4	% of Cost per Linear Foot of Water Mains to be Recovered	100%
5	Meter Maintenance Cost (Per Meter)	\$200.00

Line	Description	Estimated					Projected F	or Year Ending De	cember 31:				
Line	Description	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	Linear Feet of Water Mains												
1	Existing Linear Feet	71,000	71,000	71,000	78,100	85,910	94,501	103,951	114,346	125,781	138,359	152,195	167,414
2	Additional Linear Feet	0	0	7,100	7,810	8,591	9,450	10,395	11,435	12,578	13,836	15,219	16,741
3	Total Linear Feet of Water Mains	71,000	71,000	78,100	85,910	94,501	103,951	114,346	125,781	138,359	152,195	167,414	184,156
	Water Mains Cost per Linear Foot												
4	Existing Costs	\$125.00	\$125.00	\$135.88	\$139.39	\$143.00	\$146.71	\$150.51	\$154.41	\$158.41	\$162.51	\$166.72	\$171.03
5	Inflation	0.00%	8.70%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%
6	Total Water Main Cost per Linear Foot	\$125.00	\$135.88	\$139.39	\$143.00	\$146.71	\$150.51	\$154.41	\$158.41	\$162.51	\$166.72	\$171.03	\$175.46
7	Total System Replacement Cost	¢0.075.000.00	\$9.647.125.00	\$10.886.684.09	\$12,285,514.13	\$13.864.079.84	\$15.645.475.46	\$17,655,762.60	\$19,924,351.54	\$22,484,431.47	\$25,373,456.07	\$28,633,691.44	\$32.312.834.45
	Total Annual System Replacement Cost (50 Year Asset Life Span)	\$8,875,000.00 \$177,500.00	\$9,647,125.00	\$10,886,684.09 \$217,733.68	\$12,285,514.13	\$13,864,079.84 \$277,281.60	\$15,645,475.46 \$312,909.51	\$353,115.25	\$19,924,351.54 \$398,487.03	\$449,688.63	\$25,373,456.07 \$507,469.12	\$28,633,691.44 \$572,673.83	\$646,256.69
	Percent of Annual Replacement Cost to be Recovered	\$177,500.00	\$192,942.50	\$217,733.88	\$245,710.28	\$277,281.80	\$312,909.51	\$353,115.25	\$398,487.03	\$449,688.63	\$507,469.12	\$572,873.83	\$646,256.69
- 9	Annual Replacement Cost to be Recovered	\$177.500.00	\$192,942.50	\$217.733.68	\$245.710.28	\$277,281.60	\$312,909.51	\$353.115.25	\$398,487.03	\$449,688.63	\$507.469.12	\$572.673.83	\$646,256.69
10	Annual Replacement Cost to be Recovered	\$177,500.00	\$192,942.50	\$217,733.08	\$245,710.28	\$277,281.00	\$312,909.51	\$353,115.25	\$398,487.03	\$449,000.03	\$507,469.12	\$372,073.83	\$040,230.09
	Meter Maintenance Cost												
11	Existing Cost (Per Meter)	\$200.00	\$200.00	\$217.40	\$223.03	\$228.81	\$234.73	\$240.81	\$247.05	\$253.45	\$260.01	\$266.75	\$273.66
12	Inflation	0.00%	8.70%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%
13	Total Meter Maintenance Cost (Per Meter)	\$200.00	\$217.40	\$223.03	\$228.81	\$234.73	\$240.81	\$247.05	\$253.45	\$260.01	\$266.75	\$273.66	\$280.74
14	Total Non-Potable Water Meters to be Maintenanced	26	31	84	177	266	354	405	456	491	525	560	594
15	Total Meter Maintenance Cost	\$5,200.00	\$6,739.40	\$18,823.79	\$40,590.39	\$62,532.94	\$85,344.07	\$100,154.03	\$115,673.89	\$127,614.29	\$140,095.60	\$153,137.84	\$166,761.69
	Annual Staff Cost												
16	Current Annual Staff Cost	\$0.00	\$0.00	\$0.09	\$0.11	\$0.14	\$0.16	\$0.19	\$0.22	\$0.24	\$0.27	\$0.29	\$0.32
17	Additional Annual Staff Cost	0.00%	8.70%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%	2.59%
18	Total Annual Staff Cost	\$0.00	\$0.09	\$0.11	\$0.14	\$0.16	\$0.19	\$0.22	\$0.24	\$0.27	\$0.29	\$0.32	\$0.35
19	Total Non-Potable Water System Annual Costs	\$182,700.00	\$199,681.99	\$236,557.58	\$286,300.81	\$339,814.70	\$398,253.77	\$453,269.50	\$514,161.17	\$577,303.19	\$647,565.02	\$725,811.99	\$813,018.72
20	Total Annual Non-Potable Water Flows	68,018,754	76,385,848	97,365,293	136,837,549	172,602,028	206,932,617	226,828,754	246,724,891	260,145,031	273,565,170	286,985,310	300,405,449
21	Rate per 1,000 Gallons of Non-Potable Water Flow	\$2.69	\$2.61	\$2.43	\$2.09	\$1.97	\$1.92	\$2.00	\$2.08	\$2.22	\$2.37	\$2.53	\$2.71

### **BRIGHTON**, CO NON-POTABLE WATER SYSTEM PROJECTED ACCOUNTS AND METERED NON-POTABLE WATER FLOWS

Line	Description	Reported Flows 2021		Estimated Flows 2022	2023	2024	Project 2025	ed Non-Potable 2026	Customer Acco 2027	unts and Water F 2028	lows For Year Er 2029	nding December 2030	- 31: 2031	2032	2033
	/4 INCH METER RB AMERICAN GRP LLC - ARBY'S	343,350													
	Total Existing Customers Total Flows	1 343,350	Additional Customers Total Projected Customers	0	0	0	0	0	0	0	0	0	0	0	0
	Average Annual Usage per Account	343,350	Total Projected Flows	343,350	343,350	343,350	343,350	343,350	343,350	343,350	343,350	343,350	343,350	343,350	343,350
5	.0 INCH METER CHICK FIL A	324,363													
6 7	ALVARADO CONCEPTS LLC PRAIRIE CENTER DENTIST	649,768 196,230													
	Total Existing Customers	3	Additional Customers	0	0	49	90	88	88	51	51	34	34	34	34
	Total Flows Average Annual Usage per Account	1,170,361 390,120	Total Projected Customers Total Projected Flows	3 1,170,361	3 1,170,361	52 20,442,305	142 55,553,135	230 89,883,725	318 124,214,314	369 144,110,451	420 164,006,588	455 177,426,728	489 190,846,867	524 204,267,007	558 217,687,146
	5 INCH METER	171,875													
12	BUFFALO WILD WINGS MC DONALDS	434,125													
	RED ROBIN INTERNATIONAL INC. BRIGHTON SFR DST	549,562 2,512,440													
	BRIGHTON SFR DST PRAIRIE CENTER VILLAGE I PARK	1,647,380 1,716,300													
17	BRIGHTON PARKS (Prairie Center Parkway South)	3,299,200													
	BRIGHTON PARKS (Prairie Center Parkway Far North) BRIGHTON PARKS (Prairie Center Parkway North)	1,275,500 1,185,500													
20	BRIGHTON PARKS (Bromley Lane) BRIGHTON PARKS (Eagle and South 35th)	1,142,000 1,838,900													
22	Total Existing Customers	11	Additional Customers	0	4	0	1	1	0	0	0	0	0	0	0
	Total Flows Average Annual Usage per Account	15,772,782 1,433,889	Total Projected Customers Total Projected Flows	11 15,772,782	15 21,508,339	15 21,508,339	16 22,942,228	17 24,376,118	17 24,376,118	17 24,376,118	17 24,376,118	17 24,376,118	17 24,376,118	17 24,376,118	17 24,376,118
	.0 INCH METER														
	BRIGHTON SCHOOL DISTRICT PRAIRIE CENTER METRO DISTRICT 7	7,723,000 5,505,800													
27	SEVENTH DAY ADVENTIST CHURCH BRIGHTON PARKS (Near Texas Roadhouse)	1,288,000 1,871,030													
29	HOME DEPOT STORE #1547	1,690,841													
	BRINKER RESTAURANT BK OLD CHICAGO TAPROOM II LLC #98	294,662 47,428													
	Total Existing Customers	7	Additional Customers	0	1	0	1	0	0	0	0	0	0	0	0
	Total Flows Average Annual Usage per Account	18,420,761 2,631,537	Total Projected Customers Total Projected Flows	18,420,761	21,052,298	8 21,052,298	23,683,836	9 23,683,836	23,683,836	23,683,836	23,683,836	23,683,836	23,683,836	23,683,836	23,683,836
	.0 INCH METER BRIGHTON SCHOOL DISTRICT	296,000													
	Total Existing Customers	1	Additional Customers	0	0	3	1	0	0	0	0	0	0	0	0
	Total Flows Average Annual Usage per Account	296,000 296,000	Total Projected Customers Total Projected Flows	1 296,000	1 296,000	4	5 1,480,000	5 1,480,000	5 1,480,000	5 1,480,000	5 1,480,000	5 1,480,000	5 1,480,000	5 1,480,000	5 1,480,000
	.0 INCH METER BRIGHTON SCHOOL DIST 27J	819,500													
	Total Existing Customers Total Flows	1 819,500	Additional Customers Total Projected Customers	0	0	1	0	0	0	0	0	0	0	0	0
	Average Annual Usage per Account	819,500	Total Projected Flows	819,500	819,500	1,639,000	1,639,000	1,639,000	1,639,000	1,639,000	1,639,000	1,639,000	1,639,000	1,639,000	1,639,000
	.0 INCH METER CITY OF BRIGHTON PARKS	7,246,000													
	PRAIRIE CENTER - 6 INCH MASTER IRR METER <sup>(1)</sup>	23,950,000													
	Total Existing Customers Total Flows	2 31,196,000	Additional Customers Total Projected Customers	0	0	0	0	0	0	0	0	0	0	0	0
	Total Flows Average Annual Usage per Account	31,196,000 15,598,000	Total Projected Customers Total Projected Flows	31,196,000	31,196,000	31,196,000	31,196,000	31,196,000	31,196,000	31,196,000	31,196,000	31,196,000	31,196,000	31,196,000	31,196,000
48 T	otal Customers	26		26	31	84	177	266	354	405	456	491	525	560	594
	OTAL FLOWS	68,018,754		68,018,754	76,385,848	97,365,293	136,837,549	172,602,028	206,932,617	226,828,754	246,724,891	260,145,031	273,565,170	286,985,310	300,405,449
(1	I) Accounts served by master meter include: Freddy's, Texas Roadhouse, Chipotle, Panda Express, HZ Ops H IMO US Wext, LLC C/O Engie, Hobby Lobby Landscaping, JC I ENT Credit Union, Elements RS LLC Club House Irrigation, Bri Brighton SFR DST, Prairie Center Metro District, Prarie Center M Brighton SFR DST, Prairie Center Metro District, Prarie Center 1 Brighton Parks (Eagle and South 35th), Hobby Lobby Parking L C Penney Parking Lot, Prairie Center Metro District, Marie Retail Pa	Penney, ghton SFR DST, Metro District 7, Metro District 7, st, Open Space South of Hob	by Lobby,	Increase in Flows % Increase	8,367,094 12.30%	20,979,444 27.47%	39,472,257 40.54%	35,764,479 26.14%	34,330,589 19.89%	19,896,137 9.61%	19,896,137 8.77%	13,420,139 5.44%	13,420,139 5.16%	13,420,139 4.91%	13,420,139 4.68%

JC Penney Parking Lot, Prairie Center Fountain, Major Retail Parking Lot, Shared Parking Lot Between BWW and Dentist.

## BRIGHTON, CO NON-POTABLE WATER SYSTEM PROJECTED DEVELOPMENT

1-inch Developments         Farmlore Developments:         Tract E - Open Space         PA-4M, PA-5B, PA-5C, PA-5D, PA-5E, PA-5F,         PA-4H         Prairie Center Expansion (Commercial)         Case Farms (Commercial)         LDS Church         27th Avenue Median         Bromley Farms (Residential)         Paritie Center Expansion (Residential)         Case Farms (Residential)         Paritie Center Expansion (Residential)         Other         Other         Other         Other         I 1/2-inch Developments         Farmlore Developments         Farmlore Developments         PA2A         PA2A         PA2A         PA2A         PA2A         PA2B, PA3         PA-4B, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, PA4-F, PA4-G, PA4-H         Chambers Rd Streetscape         Prairie Center Additional Irrigation Customer         Other	0	0	0 1 1 34 12 49	0 34 1 14 23 17 90	0 34 14 23 17 88	0 34 14 23 17	0 34 17	0 34 17	0	0	0	C 34
Other       Other         Other       Total 3/4-inch Developments         1-inch Developments       Farmlore Developments:         Farmlore Developments:       Tract E - Open Space         PA-4M, PA-5B, PA-5C, PA-5D, PA-5E, PA-5F,       PA-5G         PA-4H       Prairie Center Expansion (Commercial)         Case Farms (Commercial)       LDS Church         27th Avenue Median       Bromley Farms (Residential) <sup>[1]</sup> Case Farms (Residential) <sup>[2]</sup> Prairie Center Expansion (Residential) <sup>[3]</sup> Other       Other         Other       Other         I 1/2-inch Developments       Farmlore Developments:         Farmlore Developments:       PA1-A, PA1-B         PA2-A       PA2-B, PA3         PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H       Chambers Rd Streetscape         Prairie Center Additional Irrigation Customer       Other			1 1 34 12	34 1 14 23 17	34 14 23 17	34 14 23 17	34	34				
Other         Other         Total 3/4-inch Developments         Farmlore Developments:         Farmlore Developments:         Tract E - Open Space         PA-4M, PA-5B, PA-5C, PA-5D, PA-5E, PA-5F,         PA-4H         Prairie Center Expansion (Commercial)         Case Farms (Commercial)         LDS Church         27th Avenue Median         Bromley Farms (Residential) <sup>[1]</sup> Case Farms (Residential) <sup>[2]</sup> Prairie Center Expansion (Residential) <sup>[3]</sup> Other         Other         Other         I 1/2-inch Developments         Farmlore Developments:         PA1-A, PA1-B         PA2-A         PA2-B, PA3         PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F,         PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F,         PA-5G, PA4-H         Chambers Rd Streetscape         Prairie Center Additional Irrigation Customer         Other			1 1 34 12	34 1 14 23 17	34 14 23 17	34 14 23 17	34	34				
Other         Total 3/4-inch Developments         1-inch Developments         Farmlore Developments:         Tract E - Open Space         PA-4M, PA-5B, PA-5C, PA-5D, PA-5E, PA-5F,         PA-4H         Prairie Center Expansion (Commercial)         Case Farms (Commercial)         LDS Church         27th Avenue Median         Bromley Farms (Residential) <sup>[2]</sup> Prairie Center Expansion (Residential) <sup>[3]</sup> Other         Other         Other         Total 1-inch Developments         Farmlore Developments:         PA1-A, PA1-B         PA2-B, PA3         PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F,         Pa-5C, PA4-H         Chambers Rd Streetscape         Prairie Center Additional Irrigation Customer         Other			1 1 34 12	34 1 14 23 17	34 14 23 17	34 14 23 17	34	34				
1-inch Developments         1-inch Developments         Farmlore Developments:         Tract E - Open Space         PA-4M, PA-5B, PA-5C, PA-5D, PA-5E, PA-5F,         PA-4H         Prairie Center Expansion (Commercial)         Case Farms (Commercial)         LDS Church         27th Avenue Median         Bromley Farms (Residential)         Paritie Center Expansion (Residential)         Other         Other         Other         Total 1-inch Developments         Farmlore Developments:         PA1-A, PA1-B         PA2A         PA2A         PA2A         PA2A         PA2-B, PA3         PA-4B, PA4-C, PA4-D, PA4-E, PA4-F,         PA-G, PA4-H         Chambers Rd Streetscape         Prairie Center Additional Irrigation Customer         Other			1 1 34 12	34 1 14 23 17	34 14 23 17	34 14 23 17	34	34				
1-inch Developments Farmlore Developments: Tract E - Open Space PA-4M, PA-5B, PA-5C, PA-5D, PA-5E, PA-5F, PA-5G PA-4H Prairie Center Expansion (Commercial) Case Farms (Commercial) LDS Church 27th Avenue Median Bromley Farms (Residential) <sup>[1]</sup> Case Farms (Residential) <sup>[2]</sup> Prairie Center Expansion (Residential) <sup>[3]</sup> Other Other Other Total 1-inch Developments Farmlore Developments: PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other Other			1 1 34 12	34 1 14 23 17	34 14 23 17	34 14 23 17	34	34				
Farmlore Developments:         Tract E - Open Space         PA-4M, PA-5B, PA-5C, PA-5D, PA-5E, PA-5F,         PA-5G         PA-4H         Prairie Center Expansion (Commercial)         Case Farms (Commercial)         LDS Church         27th Avenue Median         Bromley Farms (Residential)         [2]         Prairie Center Expansion (Residential)         [2]         Prairie Center Expansion (Residential)         [3]         Other         Other         Other         Total 1-inch Developments         Farmlore Developments:         PA2A         PA2A         PA2A         PA2A         PA2A         PA2B, PA3         PA-4B, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, PA4-F, PA4-G, PA4-H         Chambers Rd Streetscape         Prairie Center Additional Irrigation Customer         Other	0	0	1 1 34 12	1 14 23 17	14 23 17	14 23 17			34	34	34	34
Tract E - Open Space         PA-4M, PA-5B, PA-5C, PA-5D, PA-5E, PA-5F,         PA-5G         PA-4H         Prairie Center Expansion (Commercial)         Case Farms (Commercial)         LDS Church         27th Avenue Median         Bromley Farms (Residential)         [1]         Case Farms (Residential)         [2]         Prairie Center Expansion (Residential)         [3]         Other         Other         Other         Total 1-inch Developments         Farmlore Developments         Farmlore Developments:         PA2A         PA2A         PA2A         PA2A         PA2A         PA2A         PA2B, PA3         PA-4B, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H         Chambers Rd Streetscape         Prairie Center Additional Irrigation Customer         Other	0	0	1 1 34 12	1 14 23 17	14 23 17	14 23 17			34	34	34	34
PA-4M, PA-5B, PA-5C, PA-5D, PA-5E, PA-5F, PA-5G PA-4H Prairie Center Expansion (Commercial) Case Farms (Commercial) LDS Church 27th Avenue Median Bromley Farms (Residential) <sup>[1]</sup> Case Farms (Residential) <sup>[2]</sup> Prairie Center Expansion (Residential) <sup>[3]</sup> Other Other Total 1-inch Developments Farmlore Developments Farmlore Developments: PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other	0	0	1 1 34 12	1 14 23 17	14 23 17	14 23 17			34	34	34	34
PA-5G         PA-4H         Prairie Center Expansion (Commercial)         Case Farms (Commercial)         LDS Church         27th Avenue Median         Bromley Farms (Residential)         Bromley Farms (Residential)         Case Farms (Residential)         Prairie Center Expansion (Residential)         Other         Other         Total 1-inch Developments         Farmlore Developments:         PA1-A, PA1-B         PA2A         PA2-B, PA3         PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H         Chambers Rd Streetscape         Prairie Center Additional Irrigation Customer         Other	0	0	1 34 12	1 14 23 17	14 23 17	14 23 17			34	34	34	34
PA-4H         Prairie Center Expansion (Commercial)         Case Farms (Commercial)         LDS Church         27th Avenue Median         Bromley Farms (Residential)         Bromley Farms (Residential)         [1]         Case Farms (Residential)         [2]         Prairie Center Expansion (Residential)         [3]         Other         Other         Total 1-inch Developments         Farmlore Developments:         PA1-A, PA1-B         PA2A         PA2-B, PA3         PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H         Chambers Rd Streetscape         Prairie Center Additional Irrigation Customer         Other	0	0	1 34 12	1 14 23 17	14 23 17	14 23 17			34	34	34	34
Prairie Center Expansion (Commercial) Case Farms (Commercial) LDS Church 27th Avenue Median Bromley Farms (Residential) <sup>[1]</sup> Case Farms (Residential) <sup>[2]</sup> Prairie Center Expansion (Residential) <sup>[3]</sup> Other Other Total 1-inch Developments Farmlore Developments: PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other	0	0	34 12	1 1 14 23 17	14 23 17	14 23 17			34	34	34	34
Case Farms (Commercial) LDS Church 27th Avenue Median Bromley Farms (Residential) <sup>[1]</sup> Case Farms (Residential) <sup>[2]</sup> Prairie Center Expansion (Residential) <sup>[3]</sup> Other Other <i>Total 1-inch Developments</i> <i>1 1/2-inch Developments</i> <i>1 1/2-inch Developments</i> <i>PA1-A, PA1-B</i> <i>PA2A</i> <i>PA2-B, PA3</i> <i>PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F,</i> <i>P4-G, PA4-H</i> <i>Chambers Rd Streetscape</i> Prairie Center Additional Irrigation Customer Other Other	0	0	12	1 1 14 23 17	14 23 17	14 23 17			34	34	34	34
LDS Church 27th Avenue Median Bromley Farms (Residential) <sup>[1]</sup> Case Farms (Residential) <sup>[2]</sup> Prairie Center Expansion (Residential) <sup>[3]</sup> Other Other <i>Total 1-inch Developments</i> <i>1 1/2-inch Developments</i> <i>1 1/2-inch Developments</i> <i>PA1-A, PA1-B</i> <i>PA2A</i> <i>PA2-B, PA3</i> <i>PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F,</i> <i>P4-G, PA4-H</i> <i>Chambers Rd Streetscape</i> Prairie Center Additional Irrigation Customer Other Other	0	0		1 14 23 17	23 17	23 17	17	17				
27th Avenue Median         Bromley Farms (Residential)       [1]         Case Farms (Residential)       [2]         Prairie Center Expansion (Residential)       [3]         Other	0	0	49	1 14 23 17	23 17	23 17	17	17				
Bromley Farms (Residential) <sup>[1]</sup> Case Farms (Residential) <sup>[2]</sup> Prairie Center Expansion (Residential) <sup>[3]</sup> Other Other <i>Total 1-inch Developments</i> <i>Total 1-inch Developments</i> Farmlore Developments: <i>PA1-A, PA1-B</i> <i>PA2A</i> <i>PA2-B, PA3</i> <i>PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F,</i> <i>P4-G, PA4-H</i> <i>Chambers Rd Streetscape</i> Prairie Center Additional Irrigation Customer Other	0	0	49	14 23 17	23 17	23 17	17	17				
Case Farms (Residential) <sup>[2]</sup> Prairie Center Expansion (Residential) <sup>[3]</sup> Other Other I other I 1/2-inch Developments I 1/2-inch Developments Farmlore Developments: PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other	0	0	49	23 17	23 17	23 17	17	17				
Prairie Center Expansion (Residential) <sup>[3]</sup> Other Other Total 1-inch Developments Farmlore Developments: PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other	0	0	49	17	17	17	17	17				
Prairie Center Expansion (Residential) <sup>[3]</sup> Other Other Total 1-inch Developments Farmlore Developments: PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other	0	0	49				17	17				
Other Other Total 1-inch Developments Farmlore Developments: PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other	0	0	49	90								
Other Total 1-inch Developments 1 1/2-inch Developments Farmlore Developments: PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other	0	0	49	90	88							
Total 1-inch Developments         1 1/2-inch Developments         Farmlore Developments:         PA1-A, PA1-B         PA2A         PA2-B, PA3         PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F,         P4-G, PA4-H         Chambers Rd Streetscape         Prairie Center Additional Irrigation Customer         Other	0	0	49	90	88							
Farmlore Developments: PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other						88	51	51	34	34	34	34
Farmlore Developments: PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other												
PA1-A, PA1-B PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other												
PA2A PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other		1										
PA2-B, PA3 PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other		1										
PA-4A, PA4-B, PA4-C, PA4-D, PA4-E, PA4-F, P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other		1										
P4-G, PA4-H Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other												
Chambers Rd Streetscape Prairie Center Additional Irrigation Customer Other Other					1							
Prairie Center Additional Irrigation Customer Other Other				1								
Other Other		1										
Total 1 1/2 inch Douglanmants												
Total 1 1/2-men Developments	0	4	0	1	1	0	0	0	0	0	0	0
2-inch Developments												
Farmlore Developments: PA-4I, PA-4N				1								
Prairie Center Additional Irrigation Customer				-								
Other Other		1										
Total 2-inch Developments		1										

Non-Potable Rate Study

## BRIGHTON, CO NON-POTABLE WATER SYSTEM PROJECTED DEVELOPMENT

		Phase I	Phase II	Phase III	Phase IV							
Development	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
3-inch Developments												
Farmlore Developments:												
Tract B - Detention				1								
Tract H - Rec Center			1									
PA-4J, PA-4K			1									
Neighborhood Park			1									
Other												
Other												
Other												
Total 3-inch Developments	0	0	3	1	0	0	0	0	0	0	0	0
4-inch Developments												
Farmlore Developments:												
Tract D - Community Park			1									
Other												
Other												
Other												
Total 4-inch Developments	0	0	1	0	0	0	0	0	0	0	0	0
	0	Ū	-	0	Ū	Ŭ	Ũ	Ū	Ŭ	Ű	Ū	0
6-inch Developments												
Other												
Other												
Other												
Total 6-inch Developments	0	0	0	0	0	0	0	0	0	0	0	0
<ul> <li>[1] 135 Acres w/ 4 single family lots per acre</li> <li>2.96 persons per lot = 1,598 persons</li> <li>3 Acres of parks per 1,000 persons = 4.86</li> </ul>	-			1.80 acres o	of communit	ty parks						
15 Acres of open space per 1,000 person	ıs = 23.97 Acre	es of open	space									
[2] 214.3 Acres w/ 4 single family lots per ac	cre = 857 Singl	e family lo	ts									
2.96 persons per lot = 2,537 persons												
3 Acres of parks per 1,000 persons = 7.6	1 Acres of neig	thorhood	parks and 7	7.61 acres o	of communit	ty parks						
15 Acres of open space per 1,000 person						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
<ul> <li>[3] 260 Acres w/ 4 single family lots per acre</li> <li>2.96 persons per lot = 3,078 persons</li> <li>3 Acres of parks per 1,000 persons = 9.24</li> </ul>				).24 acres o	f communi	ty parks						
15 Acres of open space per 1,000 person						-, partie						
13 Adies of open space per 1,000 person	5 - 40.17 ACIE	Lo or open	space									