



2024 SCHEDULE 22 SUMMARY REPORT

ANGUS
DRINKING WATER SYSTEM

For the period of
January 1st, 2024 to December 31st, 2024

Prepared for the Corporation of the Township of Essa by the Ontario Clean Water Agency



This report was prepared in accordance with the requirements of [O.Reg 170/03, Schedule 22, Summary Reports for Municipalities](#) for the following system and reporting period:

Drinking-Water System Number:	260001026
Drinking-Water System Name:	Angus Drinking Water System
Drinking-Water System Owner:	The Corporation of the Township of Essa
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2024 – December 31, 2024

1. Issue(s) of Non-Compliance

A Ministry of Environment, Conservation and Parks (MECP) Drinking Water System Inspection was conducted on May 30, 2024, for the period covering June 1, 2023 to June 1, 2024. On September 24, 2024, the Inspection Report with an Inspection Summary Rating Record (IRR) of 100% was received.

The following is a summary of non-compliances noted in the MECP Inspection Report, as well as the duration and the measures taken to correct the non-compliance. If any self-reported non-compliances were included in the inspection report, they will be noted in Table 1.

Table 1. Non-Compliances and Corrective Actions noted in the 2023/2024 MECP Inspection Report

Non-Compliance(s)	Duration	Required Actions & Corrective Actions
N/A	N/A	N/A

The following table (Table 2) is a summary of any incidents that the Operating Authority interpreted as instances where any requirements of the Act, the regulations, the system's approval, drinking water works permit (DWWP), municipal drinking water licence (MDWL), and any orders applicable were not met. The Operating Authority reported the following incidents to the MECP and confirmation of whether the incidents are considered non-compliances are noted in the MECP Inspection Report and included in Table 1.

Table 2. Self-Reported Incidents and Corrective Actions for the Reporting Period

Incident	Duration	Corrective Actions
Non-compliance with O.Reg. 170/03 – Loss of continuous monitoring data • February 11, 2024 – Red Lion equipment malfunction at Mill Street Pumphouse caused a loss of continuous monitoring data	February 11, 2024, at 1811 hrs to June 17, 2024	<ul style="list-style-type: none">OCWA tested and confirmed alarms were operationalThe online treated water chlorine analyzer was unaffected by the incident; no concerns for adverse water being sent to the distribution systemNo alarms were received during data loss event.

		<ul style="list-style-type: none"> Verbal and written notification provided to MECP on February 29, 2024. No further actions required.
Non-compliance with PTTW #0244-CU4QCG – Flowrate exceedances at Well #5 Brownley Pumphouse – August 17 and 18, 2024 <ul style="list-style-type: none"> The allowable limits as per the PTTW for Brownley Well #5 is 654.62 m³/day at 7.58 L/s On August 17, 2024 – the maximum flowrate recorded was 12.29 L/s and daily amount taken was 830.96 m³, overage of 4.71 L/s and 176.34 m³ On August 18, 2024 – the maximum flow rate recorded was 12.04 L/S and 663.80 m³, overage of 4.46 L/s and 9.18 m³. 	N/A	<ul style="list-style-type: none"> OCWA responded to a high/low reservoir alarm at the Brownley Pumphouse. Well 4 was already out of service and Well 6 had tripped out and was placed out of service; only well 5 was available for use causing the exceedance of daily takings. Running the well in hand caused the exceedance of daily flowrate. OCWA returned Well 6 to service ensuring two supply wells were available to the pumphouse Verbal and written notice provided to MECP on August 19 and 20, 2024 respectively. No further actions advised.

For information on any Adverse Water Quality Incident(s) that may have occurred during the reporting period, please refer to the Angus Drinking Water System Annual Report (Section 11).

2. Assessment of Flowrates and Quantity of Water Supplied

The following tables (Table 3 to 21) summarize the quantities and flowrates of water supplied during the reporting period, including monthly averages and maximum daily flows as well as a comparison to the rated capacity and flowrates approved in the system's approval, DWWP or MDWL.

As required by the MDWL, regulatory flow measuring devices are checked/verified and where necessary calibrated. To ensure flow measuring devices are within acceptable deviation limits, checks/verifications/calibrations are performed annually by a third party.

2.1 Treated Water

Municipal Drinking Water License (MDWL):	118-103 (Issue Number: 6)
Allowable Rated Capacity for Mill Street Well Supply System:	3,932 m ³ /day
Allowable Rated Capacity for McGeorge Street Well Supply System:	2,592 m ³ /day
Allowable Rated Capacity for Brownley Well Supply System:	4,251 m ³ /day
Allowable Flowrate into Treatment System:	N/A

As per the MDWL, the maximum daily volume of treated water that flows from the treatment subsystem to the distribution system shall not exceed the listed rated capacity. However, the MDWL allows a system to be operated temporarily at a maximum daily volume and/or a maximum flowrate above the values set out in the MDWL for the purposes of fighting a large fire or for the maintenance of the drinking water system.

Table 3. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for Mill Street Well Supply System in 2024

Treated Water Flow- Mill Street Well Supply System					
Timeframe	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
January	1,512.74	38.47%	1,752.00	44.56%	46,895.00
February	1,669.35	42.46%	1,818.00	46.24%	48,411.00
March	1,319.10	33.55%	1,756.00	44.66%	40,892.00
April	1,269.18	32.28%	1,625.00	41.33%	35,537.00
May	1,976.32	50.26%	2,603.00	66.20%	61,266.00
June	2,065.63	52.53%	2,890.00	73.50%	61,969.00
July	2,005.00	50.99%	2,892.00	73.55%	62,155.00
August	2,256.10	57.38%	2,445.00	62.18%	69,939.00
September	2,029.50	51.61%	2,382.00	60.58%	60,885.00
October	1,354.32	34.44%	1,570.00	39.93%	41,984.00
November	2,019.57	51.36%	2,164.00	55.04%	60,587.00
December	1,832.58	46.61%	2,205.00	56.08%	56,810.00
2024	1,778.39	45.23%	2,892.00	73.55%	647,330.00

A review of Mill Street Well Supply System flow information for the reporting period indicates it operated within the rated capacity specified in the MDWL (3,932 m³/day), for the maximum volume of treated water to the distribution system.

Table 4. Treated Water Annual and Monthly Average and Maximum Flowrates for Mill Street Well Supply System in 2024

Treated Water Flowrate- Mill Street Well Supply System		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	17.48	70.70
February	19.51	117.60
March	15.03	52.96
April	14.78	68.90
May	23.19	51.40
June	26.94	137.00
July	23.73	86.20
August	26.29	53.10
September	23.46	59.00
October	15.63	54.60
November	23.47	63.90
December	21.25	59.00
2024	20.90	137.00

A summary of flowrates of water that flows out of the Mill Street treatment subsystem to the distribution system can be found in the above table. A summary of flowrates of water that flows into the Mill Street treatment subsystem can be found in Table 10. The applicable MDWL for the reporting period did not list a maximum allowable limit for the flowrate of water that flows into the treatment subsystem.

Table 5. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for McGeorge Well Supply System in 2024

Treated Water Flow- McGeorge Well Supply System					
Timeframe	Average Flow (m ³ /day)	Percent of Rated Capacity	Maximum Flow (m ³ /day)	Percent of Rated Capacity	Total Volume (m ³)
January	6.52	0.25%	81.27	3.14%	202.00
February	56.33	2.17%	101.92	3.93%	1,633.67
March	35.82	1.38%	67.97	2.62%	1,110.33
April	49.04	1.89%	131.99	5.09%	1,471.31
May	185.24	7.15%	268.03	10.34%	5,742.58
June	187.78	7.24%	409.57	15.80%	5,633.50
July	164.94	6.36%	230.44	8.89%	5,113.28
August	175.30	6.76%	264.45	10.20%	5,434.43
September	172.23	6.64%	208.66	8.05%	5,166.95
October	128.94	4.97%	162.87	6.28%	3,997.26

Treated Water Flow- McGeorge Well Supply System					
Timeframe	Average Flow (m³/day)	Percent of Rated Capacity	Maximum Flow (m³/day)	Percent of Rated Capacity	Total Volume (m³)
November	283.86	10.95%	327.97	12.65%	8,515.88
December	217.72	8.40%	303.59	11.71%	6,749.22
2024	138.72	5.35%	409.57	15.80%	50,770.41

A review of flow information for the reporting period indicates that the McGeorge Well Supply System operated within the rated capacity specified in the MDWL (2,592 m³/day), for the maximum treated volume of treated water that flows from the treatment subsystem to the distribution system.

Table 6. Treated Water Annual and Monthly Maximum Flowrates for McGeorge Well Supply System in 2024

Treated Water Flowrate- McGeorge Well Supply System		
Timeframe	Average Flowrate^{6A} (L/sec)	Maximum Flowrate (L/sec)
January	--	20.00
February	--	20.00
March	--	17.72
April	--	9.12
May	--	18.23
June	--	16.87
July	--	20.00
August	--	8.26
September	--	10.43
October	--	15.08
November	--	15.24
December	--	14.47
2024	--	20.00

^{6A}Average TW flowrates are not calculated for the McGeorge Well Supply System/Pumphouse. The MDWL does not list a maximum or average allowable flowrate limit of water that flows into the treatment subsystem.

A summary of flowrates of water that flows out of the McGeorge treatment subsystem to the distribution system can be found in the above table. A summary of flowrates of water that flows into the McGeorge treatment subsystem can be found in Tables 12 and 14. The applicable MDWL for the reporting period did not list a maximum allowable limit for the flowrate of water that flows into the treatment subsystem.

Table 7. Treated Water Annual and Monthly Average and Maximum Flows with Comparison to Rated Capacity and Total Volume for Brownley Well Supply System in 2024

Treated Water Flow- Brownley Well Supply System					
Timeframe	Average Flow (m³/day)	Percent of Rated Capacity	Maximum Flow (m³/day)	Percent of Rated Capacity	Total Volume (m³)
January	803.50	18.90%	1,172.10	27.57%	24,908.60
February	659.87	15.52%	1,045.14	24.59%	19,136.12
March	1,002.70	23.59%	1,632.82	38.41%	31,083.72
April	1,037.10	24.40%	1,393.32	32.78%	31,113.07
May	838.27	19.72%	1,528.78	35.96%	25,986.50
June	1,207.42	28.40%	3,560.75	83.76%	36,222.50
July	1,312.40	30.87%	1,772.59	41.70%	40,684.26
August	899.26	21.15%	2,188.90	51.49%	27,876.91
September	992.10	23.34%	1,302.86	30.65%	29,763.01
October	1,319.51	31.04%	1,592.00	37.45%	40,904.70
November	383.56	9.02%	847.81	19.94%	11,506.91
December	562.66	13.24%	1,014.96	23.88%	17,442.50
2024	919.75	21.64%	3560.75	83.76%	336,628.80

A review of flow information for the reporting period indicates that the Brownley Well Supply System operated within the rated capacity specified in the MDWL (4,251 m³/day), for the maximum treated volume of treated water that flows from the treatment subsystem to the distribution system.

Table 8. Treated Water Annual and Monthly Maximum Flowrates for Brownley Well Supply System in 2024

Treated Water Flowrate- Brownley Well Supply System		
Timeframe	Average Flowrate^{8A} (L/sec)	Maximum Flowrate (L/sec)
January	-	65.12
February	-	133.03
March	-	60.17
April	-	50.95
May	-	66.42
June	-	73.56
July	-	133.43
August	-	47.22
September	-	50.95
October	-	63.92
November	-	52.22

Treated Water Flowrate- Brownley Well Supply System		
Timeframe	Average Flowrate^{8A} (L/sec)	Maximum Flowrate (L/sec)
December	-	49.32
2024	-	133.43

^{8A}Average TW flowrates are not calculated for the Brownley Well Supply System/Pumphouse. The MDWL does not list a maximum or average allowable flowrate limit of water that flows into the treatment subsystem.

A summary of maximum flowrates of water that flows out of the Brownley treatment subsystem to the distribution system can be found in the above table. A summary of flowrates of water that flows into the Brownley treatment subsystem can be found in Tables 16, 18 and 20. The applicable MDWL for the reporting period did not list a maximum allowable limit for the flowrate of water that flows into the treatment subsystem.

2.2 Raw Water

Permit to Take Water Number (PTTW):	0244-CU4QCG
Allowable Maximum Raw Water Volume - Well #1: Mill Street	3,927.77 m ³ /day
Allowable Maximum Raw Water Flowrate - Well #1: Mill Street	2,728 L/Min (45.47 L/sec)
Allowable Maximum Volume of Raw Water - Well #2: Centre Street (McGeorge)	1,296.00 m ³ /day
Allowable Maximum Raw Water Flowrate – Well #2: Centre Street (McGeorge)	900 L/Min (15.00 L/sec)
Allowable Maximum Volume of Raw Water - Well #3: Centre Street (McGeorge)	1,296.00 m ³ /day
Allowable Maximum Raw Water Flowrate – Well #3 Centre Street (McGeorge)	900 L/Min (15.00 L/sec)
Allowable Maximum Volume of Raw Water - Well #4: Brownley	1,800.00 m ³ /day
Allowable Maximum Raw Water Flowrate – Well #4: Brownley	1,250.00 L/Min (20.83 L/sec)
Allowable Maximum Volume of Raw Water - Well #5: Brownley	654.62 m ³ /day
Allowable Maximum Raw Water Flowrate – Well #5: Brownley	455 L/Min (7.58 L/sec)
Allowable Maximum Volume of Raw Water - Well #6: Brownley	1,800.00 m ³ /day
Allowable Maximum Raw Water Flowrate – Well #6: Brownley	1,250 L/Min (20.83 L/sec)
Allowable Maximum Combined Raw Water Volume from Well #1, Well #2, Well #3, Well #4, Well #5 and Well #6:	9,585.00 m ³ /day

As per the PTTW, water shall only be taken from the specified source(s) and at the rates and amounts taken as specified in the permit. Notwithstanding, the above maximum daily takings, the maximum daily taking of water from all wells identified is limited to 9,585.00 m³/day. See table 21 for a review of the combined maximum daily takings of water from all wells identified within the Angus Drinking Water System.

Table 9. Raw Water (Well #1- Mill Street) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Mill Street Well #1					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	1,490.45	37.95%	1,854.00	47.20%	46,204.00
February	1,642.93	41.83%	2,193.00	55.83%	47,645.00
March	1,255.84	31.97%	1,878.00	47.81%	38,931.00
April	1,231.93	31.36%	1,699.00	43.26%	34,494.00
May	1,961.39	49.94%	2,846.00	72.46%	60,803.00
June	2,063.70	52.54%	2,965.00	75.49%	61,911.00
July	1,976.45	50.32%	2,946.00	75.00%	61,270.00
August	2,194.74	55.88%	2,466.00	62.78%	68,037.00
September	1,946.37	49.55%	2,395.00	60.98%	58,391.00
October	1,074.61	27.36%	1,604.00	40.84%	33,313.00
November	1,692.90	43.10%	2,059.00	52.42%	50,787.00
December	1,511.97	38.49%	1,875.00	47.74%	46,871.00
2024	1,672.14	42.57%	2,965.00	75.49%	608,657.00

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume for Mill Street Well #1 (3,927.77 m³/day).

Table 10. Raw Water (Well #1- Mill Street) Annual and Monthly Average and Maximum Flowrates for 2024

Raw Water Flowrate – Mill Street Well #1		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	40.72	47.20 ^{10A}
February	40.48	48.25 ^{10A}
March	34.35	52.49 ^{10A}
April	40.93	50.13 ^{10A}
May	40.66	50.26 ^{10A}
June	40.20	46.57 ^{10A}
July	40.07	47.19 ^{10A}
August	40.39	49.22 ^{10A}
September	39.80	45.74 ^{10A}
October	38.79	49.34
November	39.79	45.78 ^{10A}
December	39.80	46.33
2024	39.66	52.49^{10A}

A review of Mill Street Well #1 flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate (45.47 L/sec) with the exception of:

- ^{10A} January, February, March, April, May, June, July, August, September and November 2024 - flowrate exceedances were of very short duration and were a result of well pump start-ups. All average daily flowrates were within the allowable flowrate.

Table 11. Raw Water (Well #2- Centre Street (McGeorge)) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Centre Street (McGeorge) Well #2					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	9.02	0.70%	115.17	8.89%	279.66
February	29.84	2.30%	56.87	4.39%	865.37
March	19.82	1.53%	42.46	3.28%	614.48
April	26.51	2.05%	67.80	5.23%	795.27
May	93.36	7.20%	130.99	10.11%	2,894.28
June	94.42	7.29%	199.96	15.43%	2,832.48
July	83.07	6.41%	139.20	10.74%	2,575.15
August	87.89	6.78%	130.31	10.05%	2,724.61
September	87.00	6.71%	110.19	8.50%	2,609.88
October	64.46	4.97%	82.05	6.33%	1,998.17
November	140.51	10.84%	168.20	12.98%	4,215.23
December	109.58	8.46%	156.27	12.06%	3,396.91
2024	70.50	5.44%	199.96	15.43%	25,801.49

A review of Well #2- Centre Street (McGeorge) flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume (1,296.00 m³/day).

Table 12. Raw Water (Well #2- Centre Street (McGeorge)) Annual and Monthly Maximum Flowrates for 2024

Raw Water Flowrate – Centre Street (McGeorge) Well #2	
January	9.24
February	9.24
March	9.24
April	9.21
May	9.22
June	9.18
July	9.20
August	9.20
September	9.17
October	9.14
November	9.14
December	9.17
2024	9.24

A review of for Well #2- Centre Street (McGeorge) flow information for the reporting period indicates that the system operated within the PTTW's the maximum allowable raw water flowrate (15.00 L/sec).

Table 13. Raw Water (Well #3- Centre Street (McGeorge)) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Centre Street (McGeorge) Well #3					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	6.77	0.52%	114.59	8.84%	209.76
February	29.57	2.28%	56.62	4.37%	857.64
March	19.67	1.52%	42.27	3.26%	609.74
April	26.89	2.07%	67.33	5.20%	806.69
May	92.59	7.14%	129.95	10.03%	2,870.17
June	93.59	7.22%	198.47	15.31%	2,807.67
July	82.35	6.35%	138.17	10.66%	2,552.77
August	85.65	6.61%	129.23	9.97%	2,655.01
September	86.25	6.66%	109.03	8.41%	2,587.41
October	63.94	4.93%	81.39	6.28%	1,982.16
November	140.54	10.84%	166.97	12.88%	4,216.25
December	107.44	8.29%	155.15	11.97%	3,330.77
2024	69.63	5.37%	198.47	15.31%	25,486.04

A review of Well #3- Centre Street (McGeorge) flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume (1,296.00 m³/day).

Table 14. Raw Water (Well #3- Centre Street (McGeorge)) Annual and Monthly Maximum Flowrates for 2024

Raw Water Flowrate – Centre Street (McGeorge) Well #3	
January	8.49
February	8.24
March	8.34
April	8.22
May	8.58
June	8.04
July	8.08
August	8.07
September	8.01
October	8.00
November	8.04
December	12.96
2024	12.96

A review of Well #3- Center Street (McGeorge) flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate (15.00 L/sec).

Table 15. Raw Water (Well #4- Brownley) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Brownley Well #4					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
January	335.35	18.63%	509.37	28.30%	10,395.88
February	271.77	15.10%	450.53	25.03%	7,881.44
March	17.98	1.00%	19.01	1.06%	557.32
April	413.57	22.98%	567.01	31.50%	12,406.99
May	348.16	19.34%	656.12	36.45%	10,793.07
June	500.88	27.83%	1391.64	77.31%	15,026.47
July	535	29.72%	753.14	41.84%	16,584.99
August ^{15A}	66.37	3.69%	909.82	50.55%	2,057.52
September ^{15A}	0	0.00%	0	0.00%	0.00
October ^{15A}	145.42	8.08%	1423.16	79.06%	4,508.06
November	157.78	8.77%	402.47	22.36%	4,733.38

Raw Water Flow – Brownley Well #4					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
December	238.14	13.23%	407.23	22.62%	7,382.47
2024	252.54	14.03%	1,423.16	79.06%	92,327.59

^{15A}Brownley Well #4 was offline from August 6 to October 21, 2044 for maintenance and repair activities. No raw water was sent to the treatment system during this timeframe.

A review of Brownley Well #4 flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume (1,800.00 m³/day).

Table 16. Raw Water (Well #4- Brownley) Annual and Monthly Average and Maximum Flowrates for 2024

Raw Water Flowrate – Brownley Well #4		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	16.58	18.18
February	16.60	18.03
March	16.43	19.38
April	16.25	18.03
May	16.03	17.96
June	16.41	17.91
July	16.32	17.90
August ^{16A}	1.58	17.76
September ^{16A}	0.00	0.00
October ^{16A}	4.43	17.57
November	15.63	17.84
December	16.93	19.05
2024	12.74	19.38

^{16A}Brownley Well #4 was offline from August 6 to October 21, 2044 for maintenance and repair activities. No raw water was sent to the treatment system during this timeframe.

A review of Brownley Well #4, flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate (20.83 L/sec).

Table 17. Raw Water (Well #5- Brownley) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Brownley Well #5					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	115.78	17.69%	175.87	26.87%	3,589.19
February	94.06	14.37%	155.58	23.77%	2,727.74
March	133.87	20.45%	239.78	36.63%	4,149.97
April	154.57	23.61%	251.22	38.38%	4,637.00
May	120.70	18.44%	225.10	34.39%	3,741.65
June	172.44	26.34%	458.84	70.09%	5,173.10
July	190.54	29.11%	297.31	45.42%	5,906.78
August	327.89	50.09%	830.96 ^{17A}	126.94% ^{17A}	10,164.62
September	242.85	37.10%	318.44	48.65%	7,285.42
October	309.17	47.23%	408.38	62.38%	9,584.15
November	54.89	8.39%	139.91	21.37%	1,646.75
December	77.75	11.88%	124.96	19.09%	2,410.32
2024	166.71	25.39%	830.96^{17A}	126.94%^{17A}	61,016.69

A review of Brownley Well #5 flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily raw water volume (654.62 m³/day), with the exception of:

- ^{17A}August 17 and 18, 2024. For the details, please see "Table 2. - Self-Reported Incidents and Corrective Actions for the Reporting Period" for more information.

Table 18. Raw Water (Well #5- Brownley) Annual and Monthly Average and Maximum Flowrates for 2024

Raw Water Flowrate – Brownley Well #5		
Timeframe	Average Flowrate (L/sec)	Flowrate (L/sec)
January	5.77	7.42
February	7.29	6.58
March	6.23	6.93
April	5.82	6.78
May	5.79	6.61
June	5.60	6.55
July	5.59	7.73 ^{18A}
August	6.04	12.29 ^{18B}
September	5.69	6.78
October	5.64	6.78
November	5.75	6.64

Raw Water Flowrate – Brownley Well #5		
Timeframe	Average Flowrate (L/sec)	Flowrate (L/sec)
December	5.67	13.12 ^{18C}
2024	5.60	13.12^{18B}

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate for Brownley Well #5 (7.58 L/sec), with the exception of:

- ^{18A} July 24, 2024- flow exceedance was for a short duration and due to well pump start up
- ^{18B} August 17 and 18, 2024- PTTW exceedance, for the details, please see "Table 2. Self-Reported Incidents and Corrective Actions for the Reporting Period" for more details.
- ^{18C} December 20 and 30, 2024- flow exceedance was for a short duration and due to well pump start up

Table 19. Raw Water (Well #6- Brownley) Monthly Average, Maximum Flow and Total Volume for 2024

Raw Water Flow – Brownley Well #6					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	359.40	19.97%	546.95	30.39%	11,141.26
February	289.81	16.10%	482.50	26.81%	8,404.42
March	18.32	1.02%	18.44	1.02%	568.06
April	467.79	25.99%	742.42	41.25%	14,033.68
May	367.18	20.40%	694.76	38.60%	11,382.62
June	511.80	28.43%	1,184.00	65.78%	15,354.00
July	589.62	32.76%	815.57	45.31%	18,278.19
August	507.07	28.17%	963.37	53.52%	15,719.11
September	749.99	41.67%	992.17	55.12%	22,499.82
October	883.30	49.07%	1,198.85	66.60%	27,382.32
November	167.44	9.30%	428.09	23.78%	5,023.10
December	249.49	13.86%	421.37	23.41%	7,734.30
2024	430.39	23.91%	1,198.85	66.60%	157,520.88

A review of Brownley Well #6 flow information for the reporting period indicates the system operated within the PTTW's maximum allowable daily raw water volume (1,800.00 m³/day).

Table 20. Raw Water (Well #6- Brownley) Annual and Monthly Average and Maximum Flowrates for 2024

Raw Water Flowrate – Brownley Well #6		
Timeframe	Average Flowrate (L/sec)	Maximum Flowrate (L/sec)
January	17.92	18.56
February	17.93	18.48
March	17.43	6.62
April	17.74	18.39
May	17.64	18.27
June	17.42	18.04
July	17.31	17.92
August	20.10	18.05
September	17.57	18.19
October	16.97	25.19 ^{20A}
November	17.71	18.17
December	17.98	24.72 ^{20B}
2024	17.81	25.19^{20A}

A review of flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable raw water flowrate for Brownley Well #6 (20.83 L/sec) with the exception of:

- ^{20A}October 4, 2024 – flowrate exceedance was for a brief duration and due to VFD installation testing.
- ^{20B}December 20, 2024 – flowrate exceedance was for a brief duration and due to well pump startup

Table 21. Combined Well (Well #1, Well #2, Well #3, Well #4, Well #5, Well #6) Annual and Monthly Flow and Annual Volume for 2024

Combined Well Flow (Well #1, Well #2, Well #3, Well #4, Well #5 & Well #6)					
Timeframe	Average Flow (m ³ /day)	Percent of Allowable Volume	Maximum Flow (m ³ /day)	Percent of Allowable Volume	Total Volume (m ³)
January	2,316.77	24.17%	2,824.10	29.46%	71,819.75
February	2,357.99	24.60%	2,852.15	29.76%	68,381.61
March	1,465.50	15.29%	2,129.25	22.21%	45,430.57
April	2,239.12	23.36%	2,849.47	29.73%	67,173.63
May	2,983.38	31.13%	4,427.31	46.19%	92,484.79
June	3,436.82	35.86%	4,685.11	48.88%	103,104.72
July	3,457.03	36.07%	4,112.95	42.91%	107,167.88
August	3,269.61	34.11%	4,294.33	44.80%	101,357.87

Combined Well Flow (Well #1, Well #2, Well #3, Well #4, Well #5 & Well #6)					
Timeframe	Average Flow (m³/day)	Percent of Allowable Volume	Maximum Flow (m³/day)	Percent of Allowable Volume	Total Volume (m³)
September	3,112.45	32.47%	3,771.68	39.35%	93,373.53
October	2,540.90	26.51%	3,150.25	32.87%	78,767.86
November	2,354.06	24.56%	2,984.18	31.13%	70,621.71
December	2,294.38	23.94%	2,756.34	28.76%	71,125.77
2024	2,652.48	27.67%	4,685.11	48.88%	970,809.70

A review of the combined well flow information for the reporting period indicates that the system operated within the PTTW's maximum allowable daily taking of water (9,585.00 m³/day).