



Town of Chatham
Department of Public Works
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TO: Honorable Select Board
Jill R. Goldsmith, Town Manager

FROM: Rob Faley, Director, Department of Public Works

DATE: May 7, 2024 (for the May 14, 2024 SB Meeting)

SUBJECT: Chatham Wells, Per- and Polyfluorinated Substances (PFAS), and Drinking Water Testing and Pumping Update

The following is a water supply update for the month of April 2024:

Training Field Wells 5 and 8 - Permanent Treatment Facility

Temporary Treatment at Well 5:

1. Project Update:
 - Well 5 was put back on-line for the summer season on April 17th.

Permanent Treatment Facility at Wells 5 & 8:

1. Project Update:
 - General Contract Bids were opened on March 28th. Winston Builders Corporation is the apparent low bidder with the projected cost of \$15,862,889. Bid proposals are currently under review.

Mill Pond Wells 10 and 11 - Pumping & Treatment Construction

Project Progress

1. After approval of the Well #10 Conservation Easement by DEP, it was sent to the Secretary of Energy and Environmental Affairs for their approval. It is in their queue, and we are waiting for comments.

2. MassDEP inspected Wells 10 and 11 and gave approval to put them into service.
3. Well #11 went on-line on April 29th.

Chatham Water Pumping Status:

For the month of March, wells have been running 4-10 hours a day.

The Water Storage Tanks did not hit the low-level alarm this month.

Water Sampling

- 30 bacteria samples were taken for the month of April and the results reported to DEP. All samples were free of bacteria.
- Quarterly samples were taken for Secondary Contaminants.

Station & System Maintenance

- Maher Services completed redeveloping Well 4 and replaced the defective pump parts. The water quality is being tested before putting the well back in service.
- Annual flushing of the distribution system continued.

Compliance

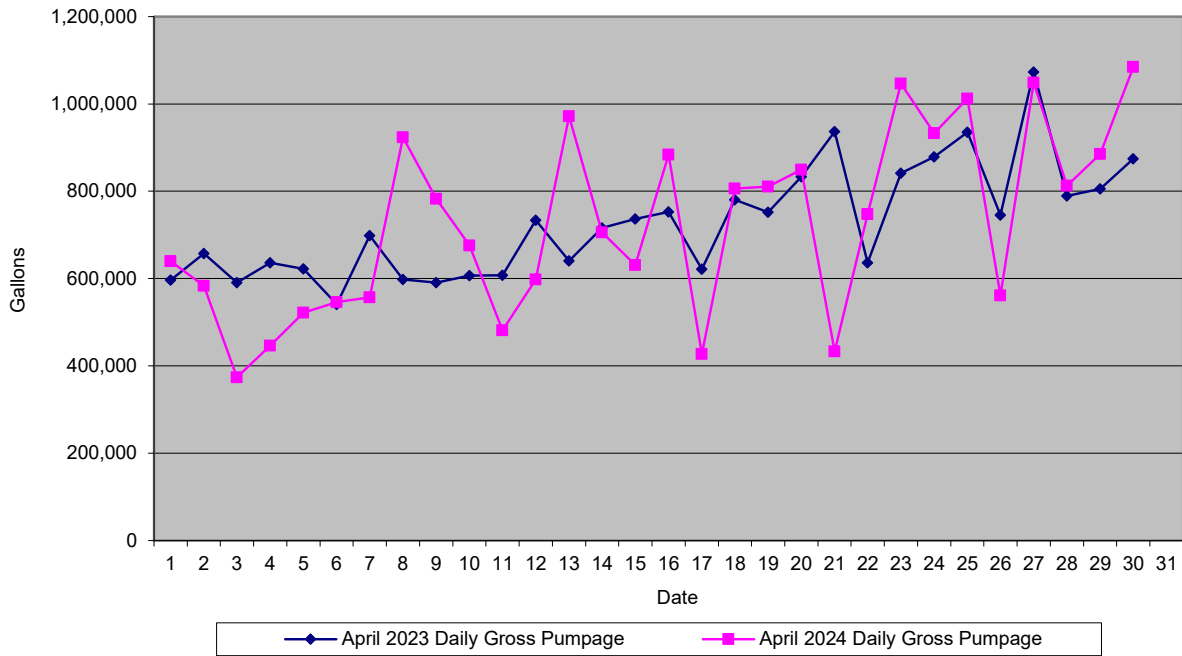
- The Tier 2 report was updated to include Wells 10 & 11.

April 2023 vs April 2024

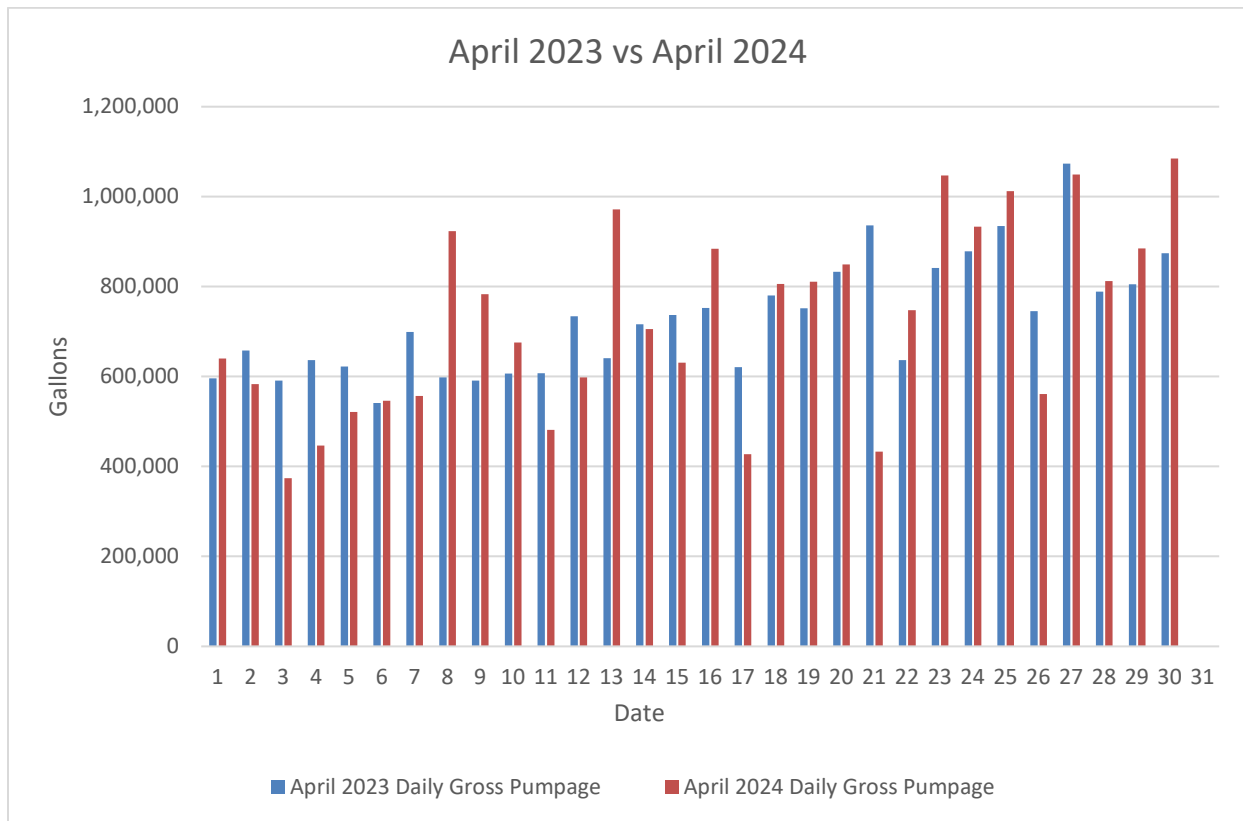
DATE	April 2023 Daily Gross Pumpage	April 2024 Daily Gross Pumpage	April 2023 vs. April 2024 Increase / Decrease (Gallons)	April 2023 vs April 2024 Increase / Decrease (Percent)
1	596,300	640,100	43,800	7%
2	657,600	583,300	(74,300)	-11%
3	590,700	373,900	(216,800)	-37%
4	636,400	446,400	(190,000)	-30%
5	622,600	521,600	(101,000)	-16%
6	541,200	546,300	5,100	1%
7	698,800	556,700	(142,100)	-20%
8	598,200	923,500	325,300	54%
9	590,800	782,900	192,100	33%
10	606,700	675,400	68,700	11%
11	607,600	481,500	(126,100)	-21%
12	733,900	598,400	(135,500)	-18%
13	640,500	971,700	331,200	52%
14	716,300	705,500	(10,800)	-2%
15	736,500	631,000	(105,500)	-14%
16	752,400	883,800	131,400	17%
17	621,200	427,100	(194,100)	-31%
18	780,400	806,100	25,700	3%
19	752,000	810,500	58,500	8%
20	833,100	849,500	16,400	2%
21	936,300	433,000	(503,300)	-54%
22	636,500	747,500	111,000	17%
23	841,200	1,046,800	205,600	24%
24	878,400	933,000	54,600	6%
25	934,900	1,012,000	77,100	8%
26	745,500	561,200	(184,300)	-25%
27	1,073,300	1,049,100	(24,200)	-2%
28	789,000	812,500	23,500	3%
29	805,500	885,000	79,500	10%
30	874,100	1,084,500	210,400	24%
31				
Total	21,827,900	21,779,800	(48,100)	-0.2%

Pumping Comparison

April 2023 vs April 2024

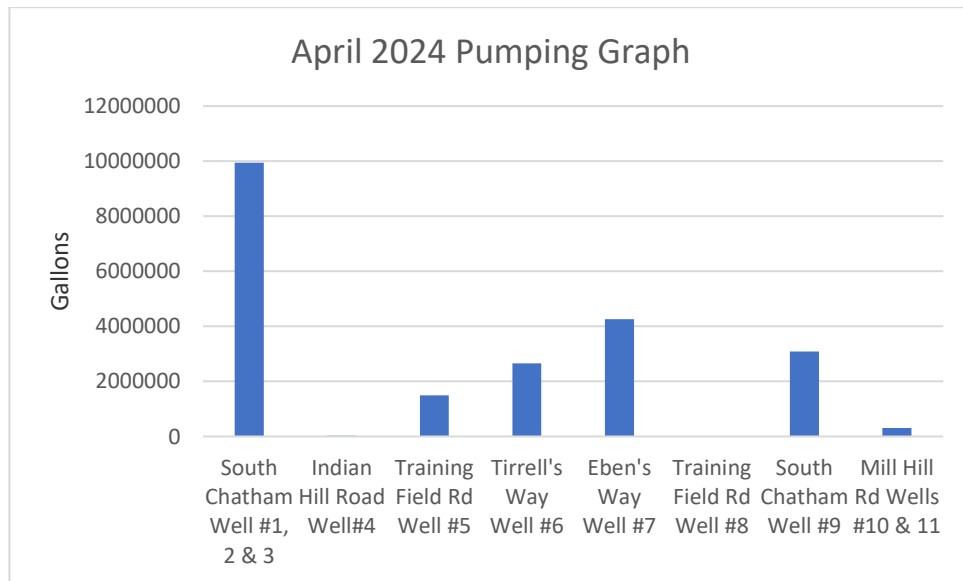


Pumping Comparison



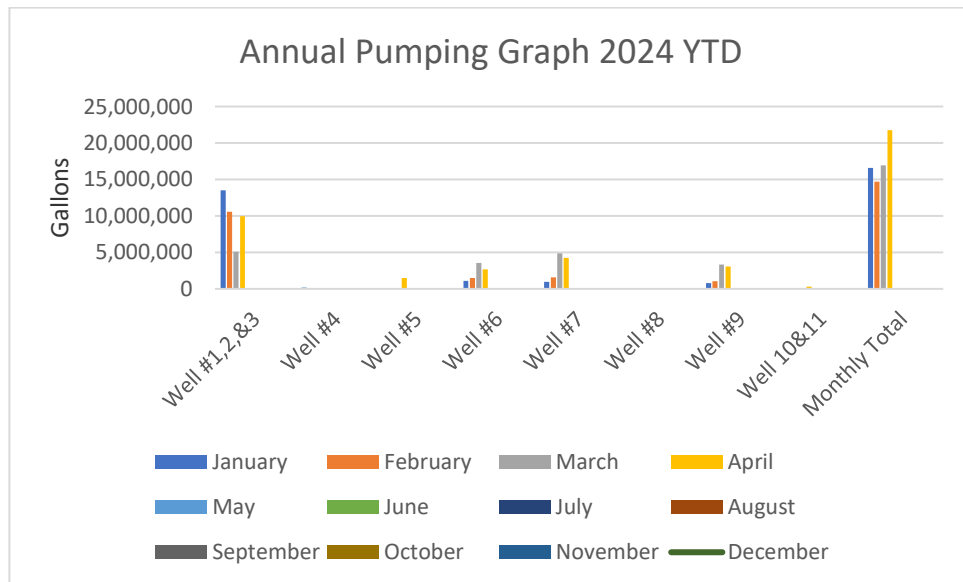
April 2024 Pumping Report

DATE	DAY	South Chatham Well #1, 2 & 3	Indian Hill Road Well#4	Training Field Rd Well #5	Tirrell's Way Well #6	Eben's Way Well #7	Training Field Rd Well #8	South Chatham Well #9	Mill Hill Rd Wells #10 & 11	Daily Gross Pumpage	7 Day Pumpage Totals
1		640,100								640,100	640,100
2		583,300								583,300	1,223,400
3		373,900								373,900	
4		446,400								446,400	2,043,700
5		26,200			154,800	224,700		115,900		521,600	2,565,300
6					160,900	267,000		118,400		546,300	3,111,600
7					173,300	278,100		105,300		556,700	3,668,300
8					254,100	398,700		270,700		923,500	3,951,700
9					215,400	338,000		229,500		782,900	4,151,300
10		23,600			112,100	182,800		356,900		675,400	4,452,800
11		481,500								481,500	4,487,900
12					162,200	263,800		172,400		598,400	4,564,700
13					261,100	422,800		287,800		971,700	4,990,100
14					190,300	207,700		307,500		705,500	5,138,900
15		631,000								631,000	4,846,400
16		883,800								883,800	4,947,300
17		406,800		20,300						427,100	4,699,000
18		784,900		21,200						806,100	5,023,600
19		546,100		264,400						810,500	5,235,700
20		849,500								849,500	5,113,500
21		429,600		3,400						433,000	4,841,000
22		747,500								747,500	4,957,500
23		942,400		82,600	6,500	15,300				1,046,800	5,120,500
24		523,000		238,500	1,100	95,300		75,100		933,000	5,626,400
25		629,200		289,300	24,900	52,300		16,300		1,012,000	5,832,300
26				65,600	134,700	198,600		162,300		561,200	5,583,000
27				16,400	279,800	447,900		305,000		1,049,100	5,782,600
28				168,100	172,700	286,500		185,200		812,500	6,162,100
29				108,300	177,600	291,800		186,500	120,800	885,000	6,299,600
30			34,400	216,700	176,500	286,700		185,300	184,900	1,084,500	6,337,300
31											5,404,300
Total		9,948,800	34,400	1,494,800	2,658,000	4,258,000		3,080,100	305,700	21,779,800	21,779,800



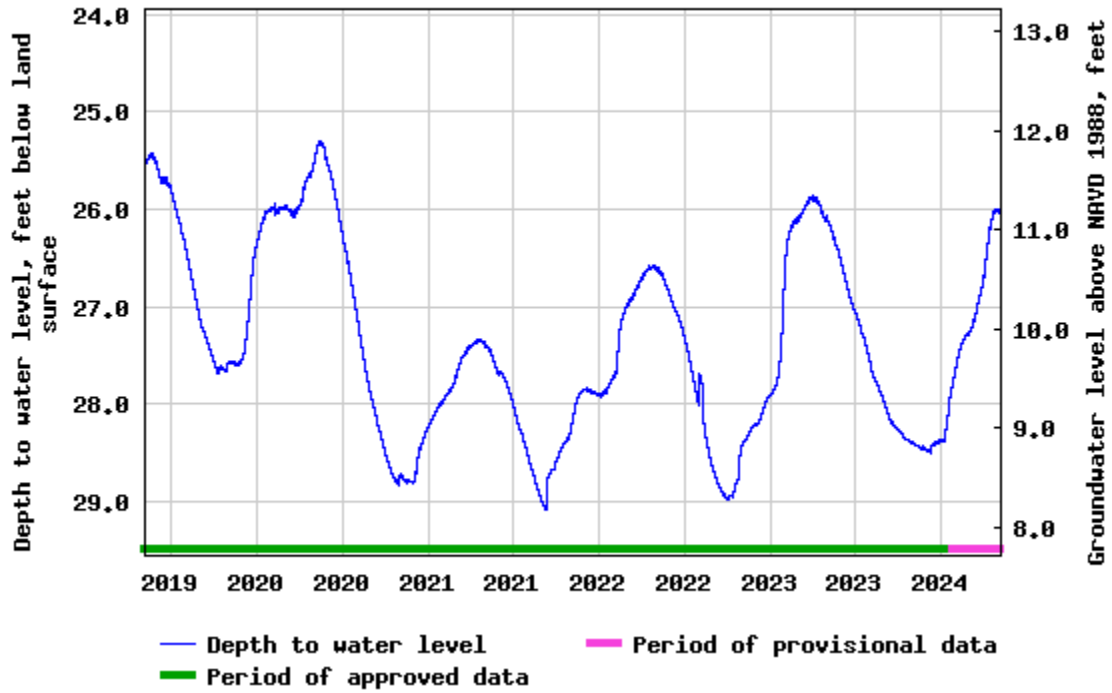
Annual Pumping 2024 YTD

	Well #1,2,&3	Well #4	Well #5	Well #6	Well #7	Well #8	Well #9	Well 10&11	Monthly Total	Last Years Pumping	Variance
January	13,524,300	198,400	0	1,076,200	988,300	0	788,400	0	16,575,600	17,179,500	-603,900
February	10,556,600	12,400	0	1,482,600	1,583,000	0	1,061,000	0	14,695,600	17,798,000	-3,102,400
March	5,107,800	55,000	0	3,571,000	4,877,400	0	3,321,700	0	16,932,900	17,807,500	-874,600
April	9,948,800	34,400	1,494,800	2,658,000	4,258,000	0	3,080,100	305,700	21,779,800	21,827,900	-48,100
May									0		0
June									0		0
July									0		0
August									0		0
September									0		0
October									0		0
November									0		0
December									0		0
Totals	39,137,500	300,200	1,494,800	8,787,800	11,706,700	0	8,251,200	305,700	69,983,900	74,612,900	-4,629,000

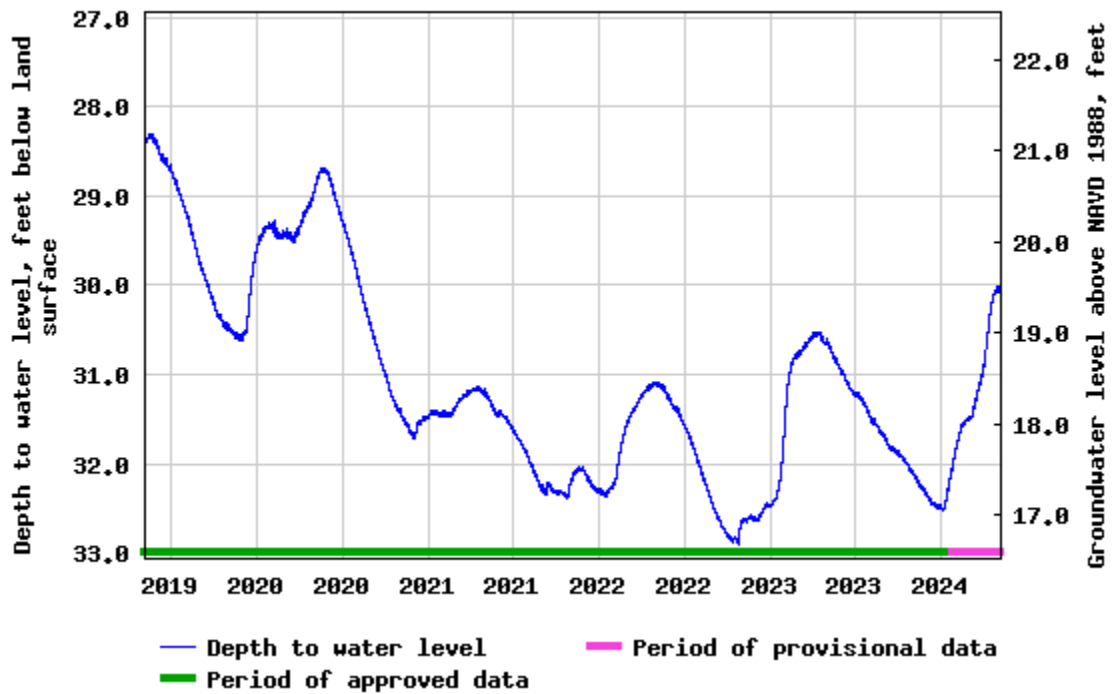


USGS Observation Well Data

USGS 414101070011001 MA-CGM 138R CHATHAM, MA



USGS 414632070014901 MA-BMW 22R BREWSTER, MA



Chatham 5-year Pumping Comparison (Month of April)

April Date	April 2020 Daily Gross Pumpage	Hours	April 2021 Daily Gross Pumpage	Hours	April 2022 Daily Gross Pumpage	Hours	April 2023 Daily Gross Pumpage	Hours	April 2024 Daily Gross Pumpage	Hours	Average Daily Pumpage (gallons)	Average Daily Pumpage (hours)
1	623,700	6	567,200	3	725,300	5	596,300	4	640,100	8	630,520	5.1
2	546,600	4	690,700	4.5	472,300	4	657,600	3	583,300	9.5	590,100	5
3	488,000	3	659,400	3.5	670,300	4	590,700	4	373,900	6	556,460	4.1
4	552,600	3	622,100	3	733,400	5	636,400	3	446,400	7	598,180	4.2
5	684,400	4	698,500	4.25	601,800	4	622,600	3	521,600	6	625,780	4.25
6	447,500	5	688,400	5	598,100	4	541,200	3	546,300	6	564,300	4.6
7	612,700	4	760,900	5	590,100	3	698,800	3	556,700	6	643,840	4.2
8	500,300	5	700,500	4.5	490,400	4	598,200	3.5	923,500	11	642,580	5.6
9	577,900	5	668,100	3.5	746,800	4	590,800	4	782,900	9	673,300	5.1
10	582,000	5	715,500	4	589,000	4	606,700	3	675,400	5	633,720	4.2
11	641,900	5	724,500	4	692,000	4	607,600	3	481,500	5	629,500	4.2
12	700,400	5	816,600	5	583,800	4.25	733,900	4	598,400	5	686,620	4.65
13	663,600	5	676,700	3.75	663,100	4	640,500	4	971,700	5	723,120	4.35
14	586,700	6	779,900	5.25	699,100	4	716,300	4	705,500	7	697,500	5.25
15	610,700	5	721,700	4.25	713,600	5	736,500	4	631,000	9.5	682,700	5.55
16	658,300	5	757,000	4.5	592,800	4	752,400	3	883,800	13.75	728,860	6.05
17	660,700	7	934,300	5	748,000	4	621,200	5	427,100	6.5	678,260	5.5
18	604,200	5	686,000	4.25	701,400	5	780,400	3	806,100	12	715,620	5.85
19	623,200	5	869,400	4.25	683,200	5	752,000	7	810,500	8.75	747,660	6
20	602,200	5	1,022,300	6	753,600	4	833,100	5	849,500	13.25	812,140	6.65
21	1,313,600	6	1,003,800	5.5	669,700	5	936,300	3.5	433,000	6.5	871,280	5.3
22	600,000	8	878,800	5	773,200	4.5	636,500	4	747,500	11	727,200	6.5
23	759,500	6	815,700	6	780,100	3.75	841,200	6	1,046,800	14.25	848,660	7.2
24	715,700	5	954,200	6	620,600	5	878,400	5	933,000	8.75	820,380	5.95
25	802,600	5	1,080,300	7.5	758,000	4	934,900	5	1,012,000	9	917,560	6.1
26	601,600	5	849,600	5.25	668,400	5	745,500	5	561,200	6	685,260	5.25
27	663,500	6	1,251,100	8	703,300	4	1,073,300	4	1,049,100	10	948,060	6.4
28	504,600	6	976,800	5.5	773,700	5	789,000	5	812,500	7	771,320	5.7
29	868,000	6	904,400	6.5	728,500	5	805,500	5	885,000	8	838,280	6.1
30	639,900	5	837,300	6.25	740,200	5	874,100	4	1,084,500	8.5	835,200	5.75
Total	19,436,600	155	24,311,700	148	20,263,800	131	21,827,900	122	21,779,800	248	21,523,960	160.65