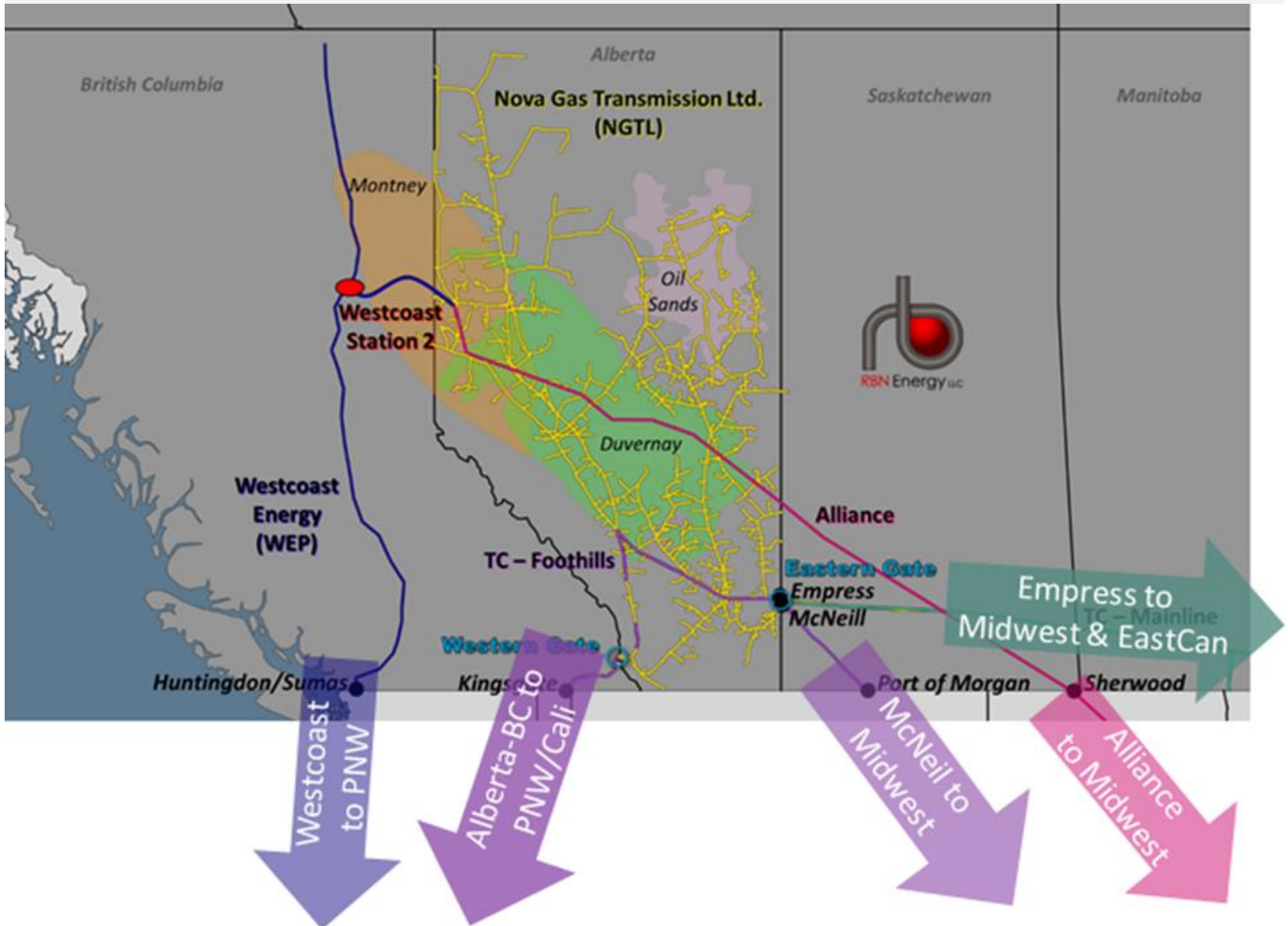


Western Canada has long been a critical natural gas producing region and supplier to the US. The rise of US shale and associated-gas from oil plays has put substantial pressure on Canadian production and pricing over the past decade. Despite increased competition and the resulting weak pricing environment, Western Canada's gas production has continued to rise. This is because Alberta producers focussed on two specific unconventional plays - the Montney and the Duverney. Wells from these two adjacent plays have produced large quantities of light crude and NGLs — so much so that natural gas from these wells is considered a by-product.



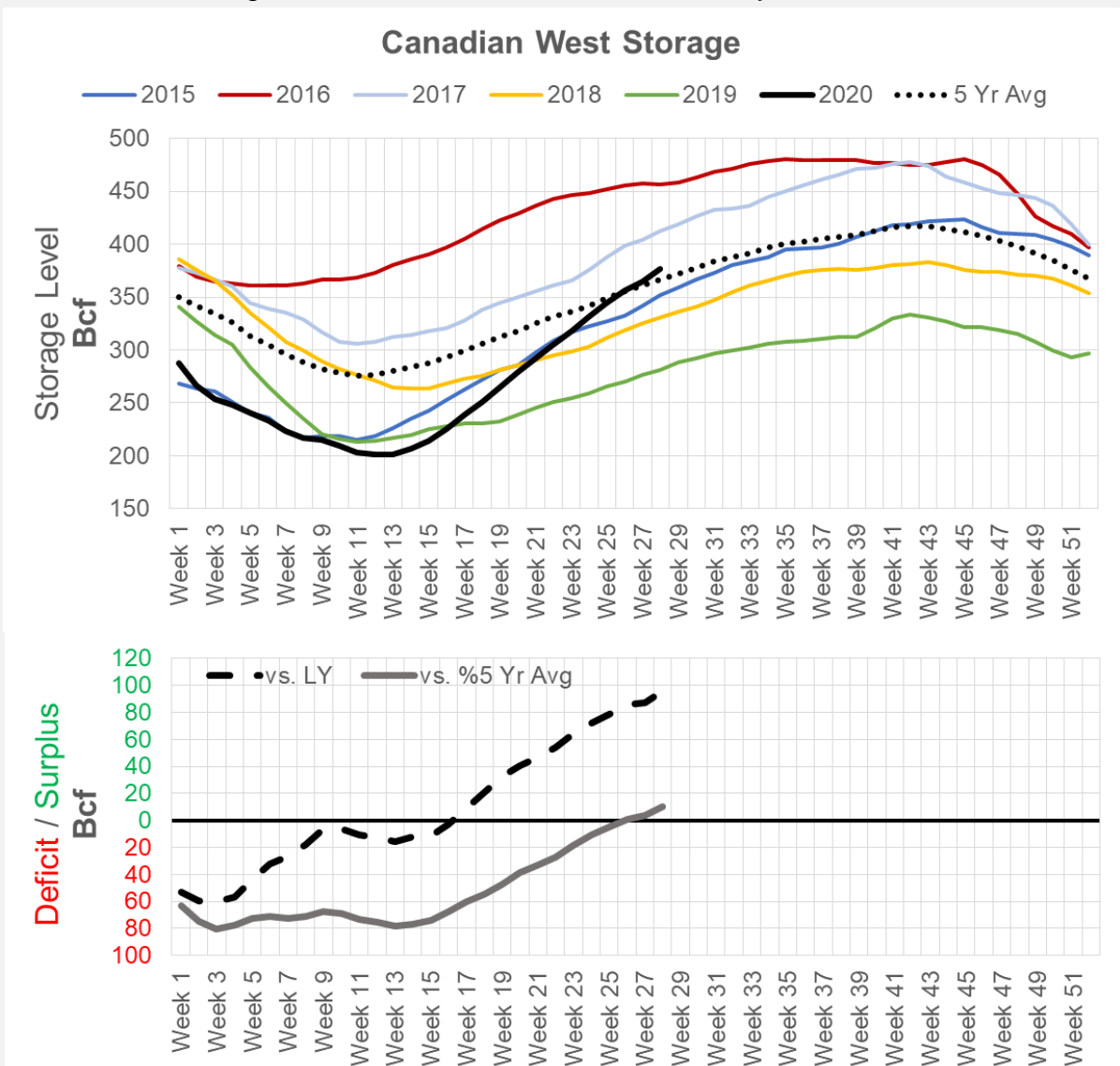
2020 has been full of surprises for energy Alberta energy producers. The combination of the global oil price war and COVID demand destruction has hit the industry hard.

Let's start with what's happened this year so far.

Two back-to-back cold winter's left AECO Storage heavily depleted. This has been some sort of a blessing for anyone exposed to AECO prices (and Henry Hub). According to Enerdata, Western Canadian storage dropped to levels not seen since the polar vortex winter of 2013-14. During that winter, storage bottomed out with 99 Bcf in the tanks. This past winter exited with 202 Bcf in storage - not as bad but well below what is thought to be normal.

As seen in the chart, the injection rates this summer so far have been well beyond past years. The latest Enerdata shows 175 Bcf being injected into storage this summer so far. The typical injection over that same timeframe is 87 Bcf. This is the result of a weak demand & exports, and continued strong production.

The current West storage level is 376 Bcf or 77% full as of July 17<sup>th</sup>.



To better understand the steep rate of injections, we take a closer look at the balance this summer so far, and compare that to last year.

## AECO Balances - Summer so far

	Apr-19	May-19	Jun-19	Jul-19	Apr to Jul	Apr-20	May-20	Jun-20	Jul-20	Apr to Jul	Apr to Jul YoY
<b>Production</b>											
NGTL Field Receipts	11,283	11,411	11,255	11,252	11,300	11,900	11,688	11,509	11,514	11,653	353.0
<b>Gas Consumption</b>											
NGTL Intra-provincial	4,706	4,742	4,671	4,840	4,740	4,284	4,257	4,287	4,282	4,277	-462.3
<b>Interconnects Out</b>											
Empress Border	2,899	2,740	2,851	2,849	2,835	2,756	2,723	2,681	2,680	2,710	-125
McNeil Border	1,108	1,279	1,211	1,219	1,204	981	941	999	1,009	982	-222
Alberta BC Border	2,363	2,443	2,335	2,403	2,386	2,142	2,191	2,299	2,306	2,234	-152
*Other Borders	-271	-350	-260	-285	-291	-384	-317	-336	-334	-343	-51
Gordondale Border	-53	-50	-46	-60	-52	-58	-16	-90	-94	-65	-12
Groundbirch East	413	481	566	572	508	398	446	424	420	422	-86
<b>Total Interconnect Out</b>	<b>6,459</b>	<b>6,543</b>	<b>6,657</b>	<b>6,699</b>	<b>6,433</b>	<b>5,835</b>	<b>5,967</b>	<b>5,978</b>	<b>5,986</b>	<b>5,941</b>	<b>-491.3</b>
<b>Storage Injections</b>	<b>303</b>	<b>304</b>	<b>428</b>	<b>228</b>	<b>-316</b>	<b>1,468</b>	<b>1,432</b>	<b>1,138</b>	<b>1,137</b>	<b>-1,294</b>	<b>977.9</b>

**Production:** NGTL production has averaged 11.6 Bcf/d (+0.35 Bcf/d YoY) this summer so far. This high production level coming in spite of oil and gas rig counts falling throughout Q2 2020. For week ending June 26th, the total Alberta rig count was only 5. The same time last year, the rig count stood at 69.

**Gas Consumption:** Gas consumption has dropped by 10% with the combination of local demand destruction due to COVID-19 and oil sands production being shut-in due to low global oil prices. Oil sands mining projects use natural gas to generate steam to inject into underground formations to thin the heavy, sticky bitumen crude and allow it to be pumped to surface. At the peak of shut-ins, producers shut-in nearly 1 mmbbls/d or 25% in response to low Western Canadian Select (WCS) crude prices in Q2. With the recovery of prices, many producers have reversed their shut-ins. As of June, more than 200 kbbls/d has returned.

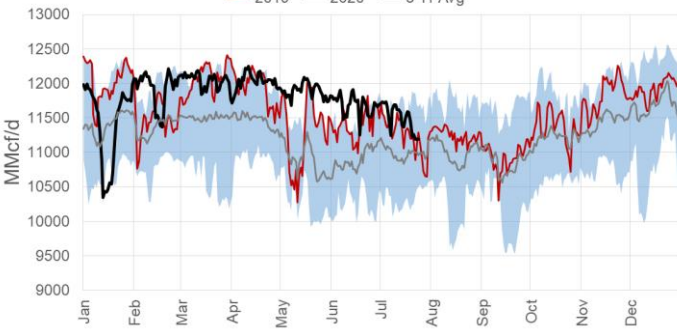
**Interconnects Out:** The elevated storage levels in the L48 along with decreased demand due to COVID has resulted less natgas exported from Canada. Exports out of the NGTL system averaged 5.94 Bcf/d or 0.49 Bcf/d lower than last year.

Along with exports from the NGTL, the Alliance pipeline and Westcoast system delivered less gas as well. The Alliance pipeline is being filled downstream in the Bakken by cheap associated gas - hence not as much gas is required from Canada.

**Storage:** The result of all these moving pieces is more gas being injected into Western Canadian storage. So far this summer, injection have exceeded last year's levels by nearly 1 Bcf/d.

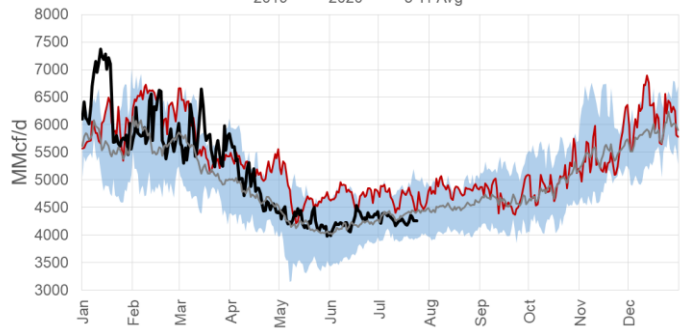
**NGTL Field Receipts**

— 2019 — 2020 — 5 Yr Avg



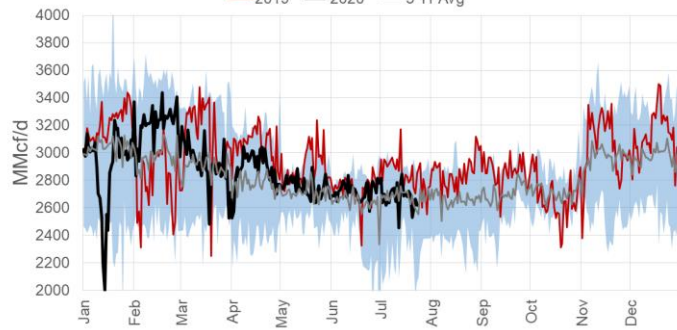
**NGTL Intra-provincial**

— 2019 — 2020 — 5 Yr Avg



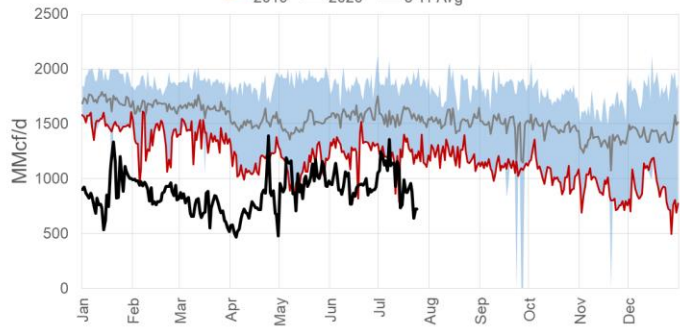
**Empress Border**

— 2019 — 2020 — 5 Yr Avg



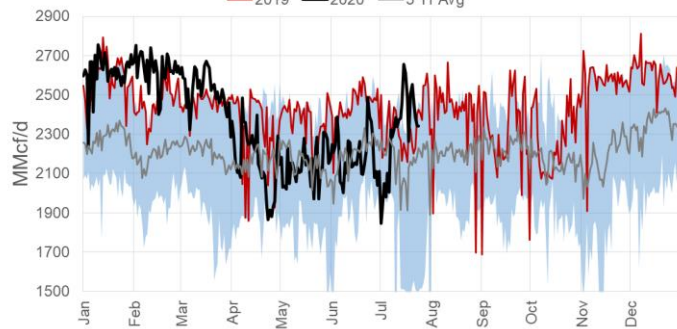
**McNeil Border**

— 2019 — 2020 — 5 Yr Avg



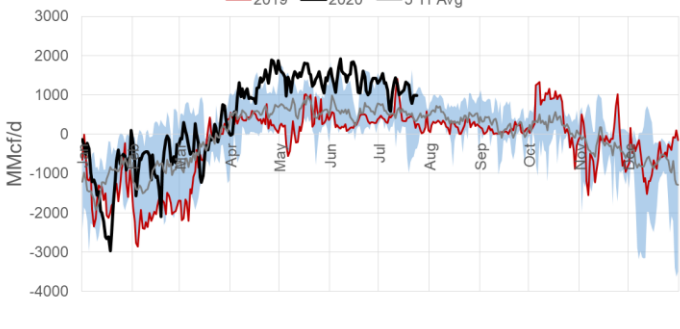
**Alberta BC Border**

— 2019 — 2020 — 5 Yr Avg



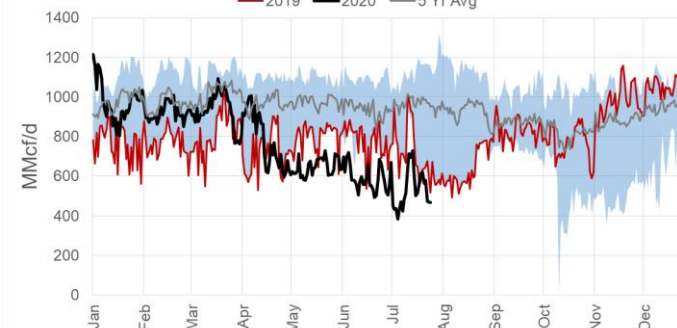
**Net Storage Receipts**

— 2019 — 2020 — 5 Yr Avg



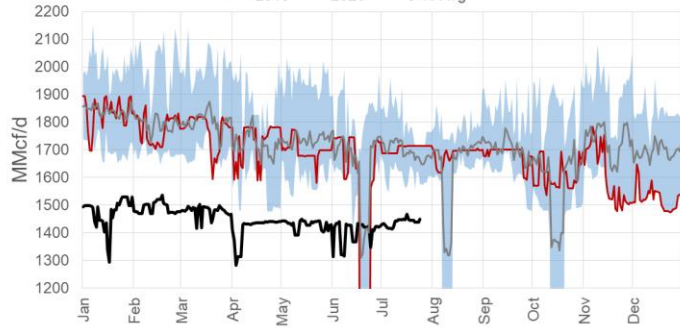
**Net Sumas Export**

— 2019 — 2020 — 5 Yr Avg



**Alliance US Border**

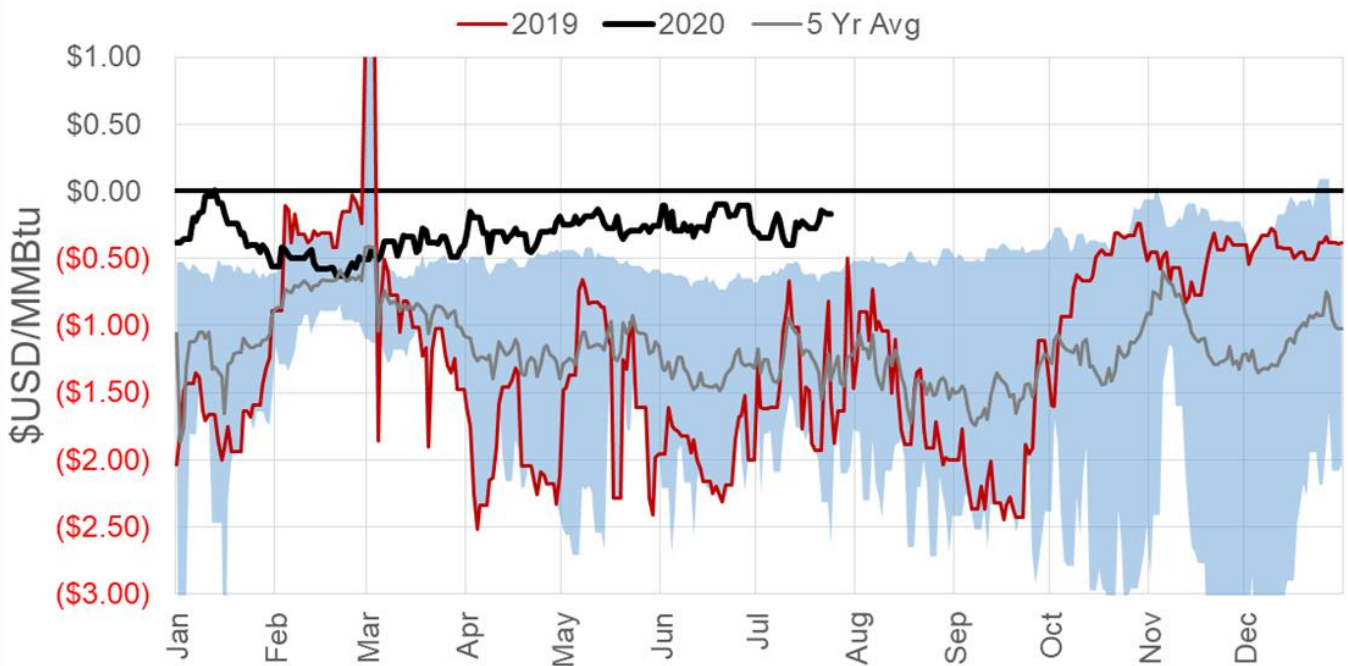
— 2019 — 2020 — 5 Yr Avg



Last we touch on AECO prices which have fared quite well starting Q4 last year. The strength can be attributed to both a cold winter, but also TransCanada's Temporary Service Protocol (TSP) that was enacted in late September 2019. The TSP makes storage deliveries available to all shippers on the NGTL system, no longer giving priority to producers with firm transport. In the past, this contributed to daily imbalances on the NGTL system and led to price volatility, particularly during periods of maintenance or system outages.

The TSP was in place from September 13th to October 31st last year, and now again from April 2020 to October 2020, i.e. injection season. In Q2 2021, there are expansions planned on the NGTL system which should increase efficiencies on the pipe network making the TSP unnecessary.

## AECO Cash - Henry Hub Cash

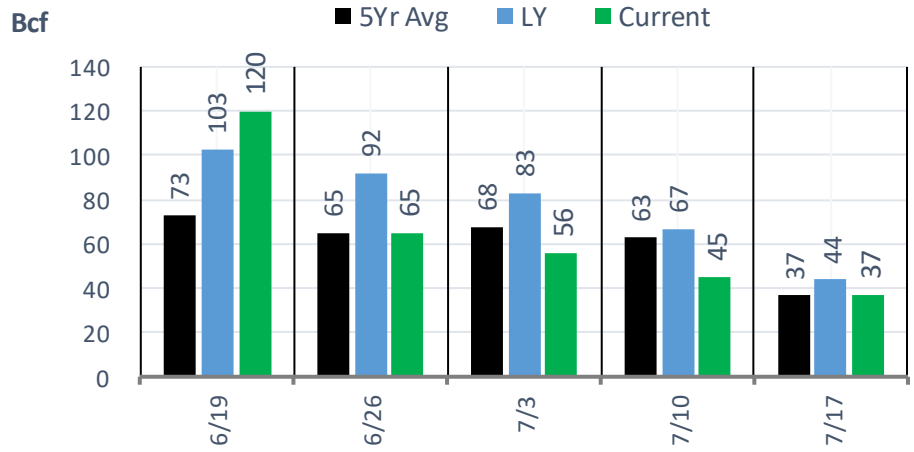


In our view, Western Canadian storage is headed on a crash course to capacity - similar to the situation in Europe. Unlike Europe though, there are couple of simple levers to pull to correct the problem.

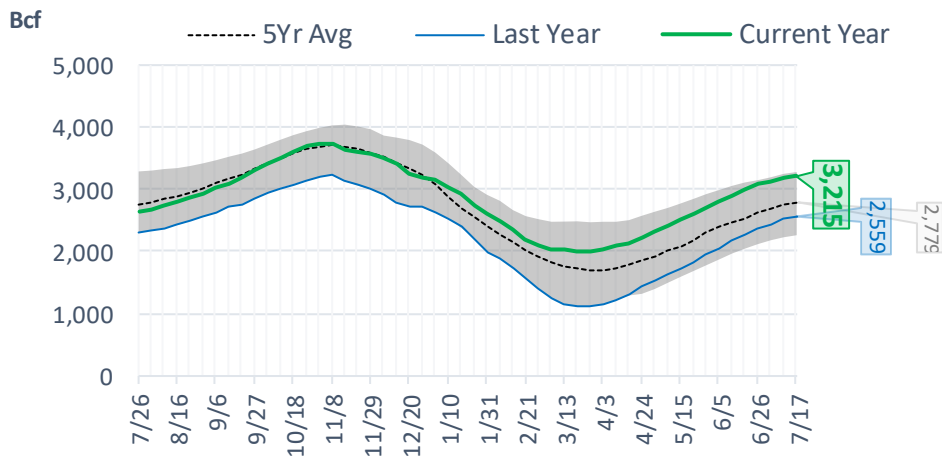
- 1) Lower outright production levels which could be already happening with record low rig counts.
- 2) Oil sands projects resume and natural gas demand picks up.
- 3) AECO prices weaken further incenting exports to US markets. In the end that would push the problem down south, similar to LNG cargo cancellations.

## EIA Storage Report

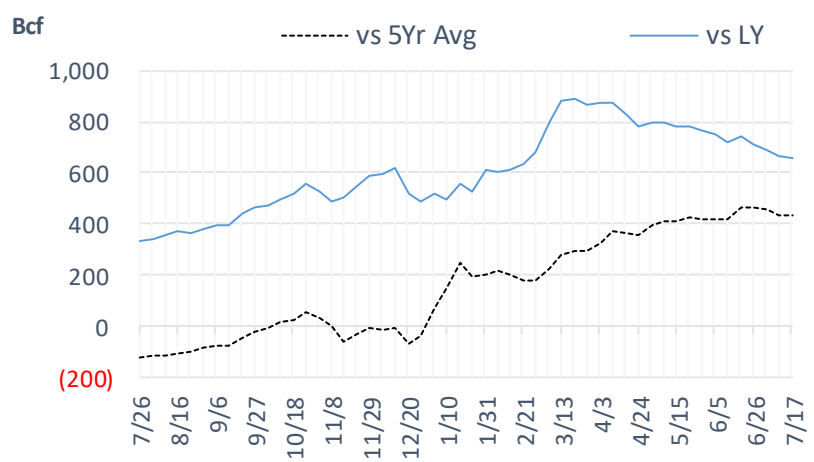
### Total Lower 48 YoY Weekly Change



### Total Lower 48 Storage Levels



### Total Lower 48 LY Surplus/Deficit

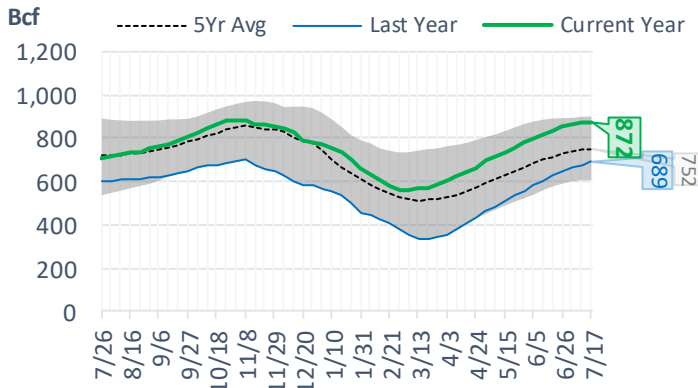


The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are not necessarily indicative of future results. This communication may contain links to third party websites which are not under the control of and are not maintained by ION Energy Group, and ION Energy Group is not responsible for their content.

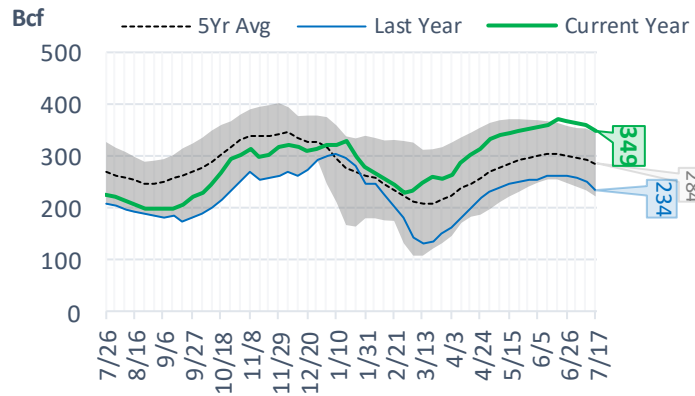
## Natural Gas Storage Stats - Last 5 Weeks

Week Ending	Current 17-Jul	Week - 1 10-Jul	Week - 2 3-Jul	Week - 3 26-Jun	Week - 4 19-Jun	Week - 5 12-Jun
<b>Total Lower 48 Storage Level</b>	<b>3215</b>	3178	3133	3077	3012	2892
<b>Weekly Change</b>	<b>+37</b>	+45	+56	+65	+120	+85
<b>vs LY</b>	<b>+656</b>	+663	+685	+712	+739	+722
<b>vs 5Yr Avg</b>	<b>+436</b>	+436	+454	+466	+466	+419
<b>S. Central Salt Storage Level</b>	<b>349</b>	359	364	368	372	358
<b>Weekly Change</b>	<b>-10</b>	-5	-4	-4	+14	+1
<b>vs LY</b>	<b>+115</b>	+110	+106	+108	+109	+96
<b>vs 5Yr Avg</b>	<b>+65</b>	+66	+68	+69	+68	+53
<b>S. Central NonSalt Storage Level</b>	<b>872</b>	869	862	854	840	815
<b>Weekly Change</b>	<b>+3</b>	+7	+8	+14	+25	+18
<b>vs LY</b>	<b>+183</b>	+190	+199	+211	+215	+210
<b>vs 5Yr Avg</b>	<b>+120</b>	+121	+124	+128	+125	+113
<b>Midwest Storage Level</b>	<b>799</b>	780	761	740	716	688
<b>Weekly Change</b>	<b>+19</b>	+19	+21	+24	+28	+26
<b>vs LY</b>	<b>+156</b>	+162	+172	+181	+188	+195
<b>vs 5Yr Avg</b>	<b>+132</b>	+133	+138	+144	+145	+143
<b>East Storage Level</b>	<b>693</b>	672	657	639	619	586
<b>Weekly Change</b>	<b>+21</b>	+15	+18	+20	+33	+23
<b>vs LY</b>	<b>+122</b>	+116	+118	+121	+128	+123
<b>vs 5Yr Avg</b>	<b>+86</b>	+84	+91	+98	+104	+96
<b>Mountain Storage Level</b>	<b>190</b>	186	180	173	165	156
<b>Weekly Change</b>	<b>+4</b>	+6	+7	+8	+9	+8
<b>vs LY</b>	<b>+40</b>	+41	+42	+41	+41	+40
<b>vs 5Yr Avg</b>	<b>+16</b>	+15	+14	+11	+8	+4
<b>Pacific Storage Level</b>	<b>311</b>	312	310	304	299	290
<b>Weekly Change</b>	<b>-1</b>	+2	+6	+5	+9	+9
<b>vs LY</b>	<b>+41</b>	+45	+49	+52	+57	+58

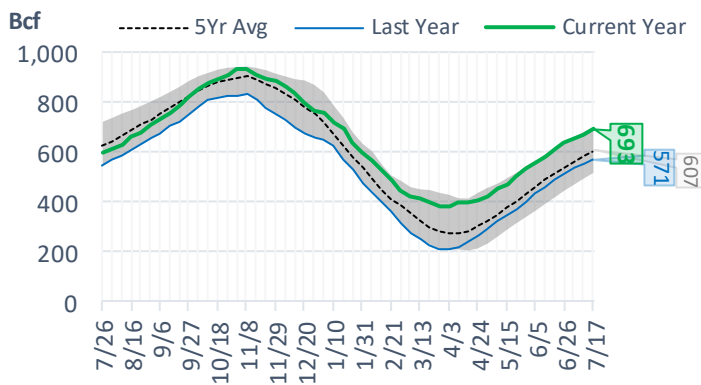
## NonSalt Storage Levels



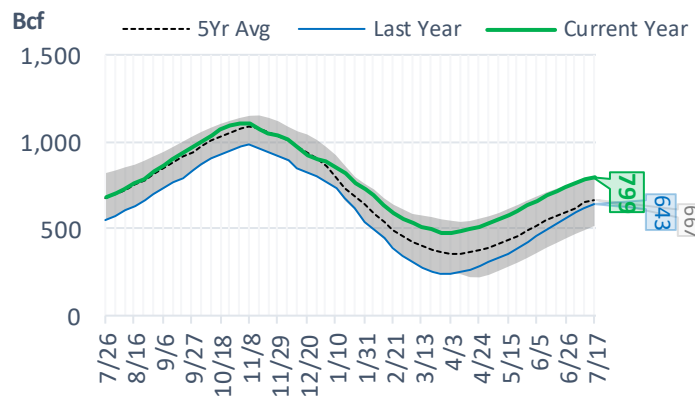
## Salt Storage Levels



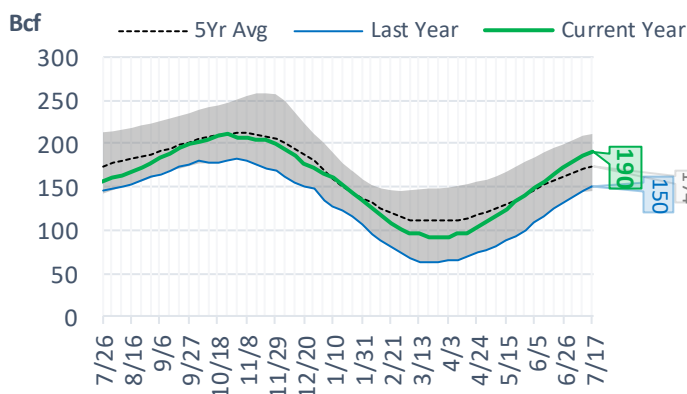
## East Storage Levels



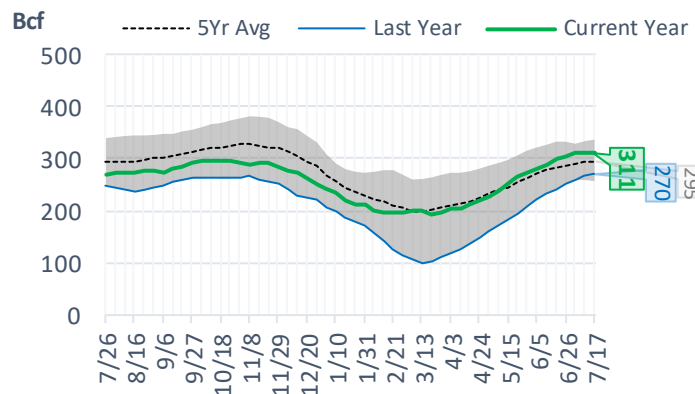
## Midwest Storage Levels



## Mountain Storage Levels

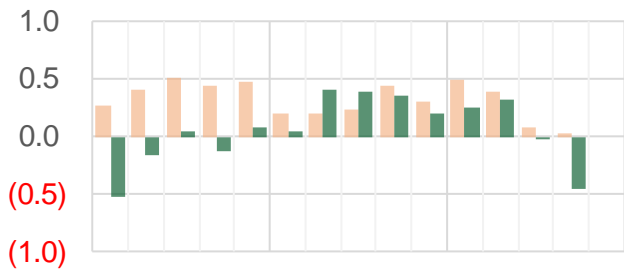
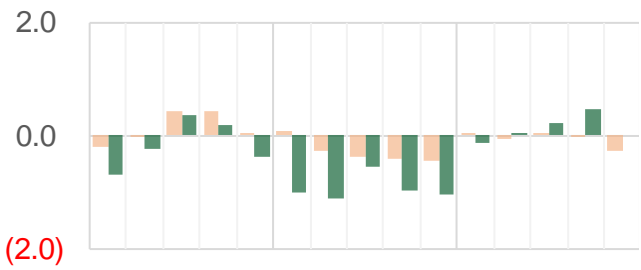
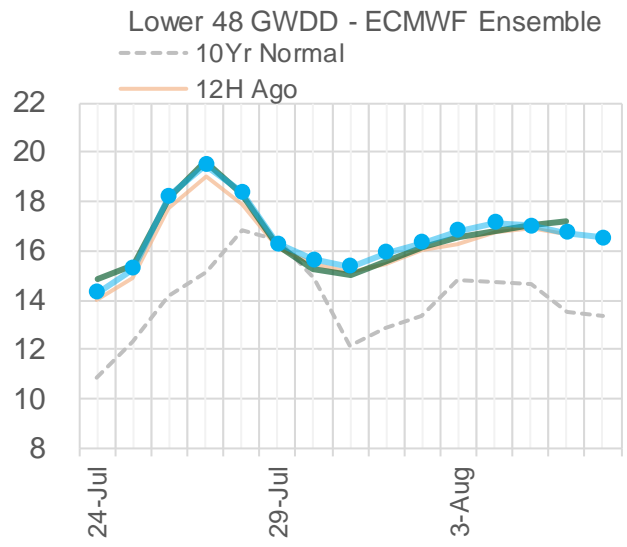
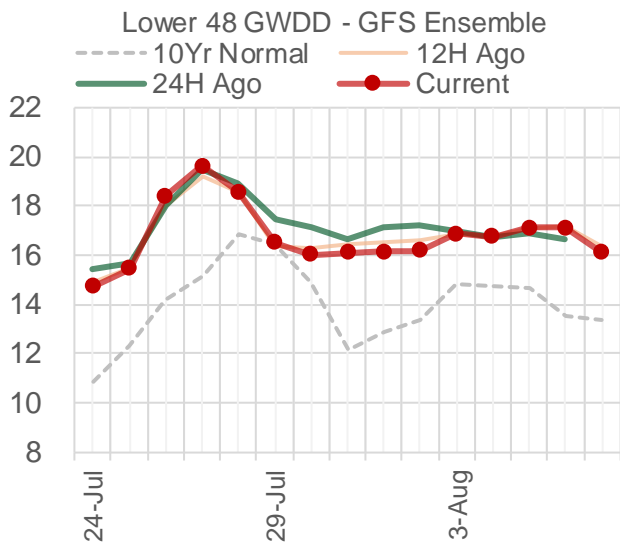
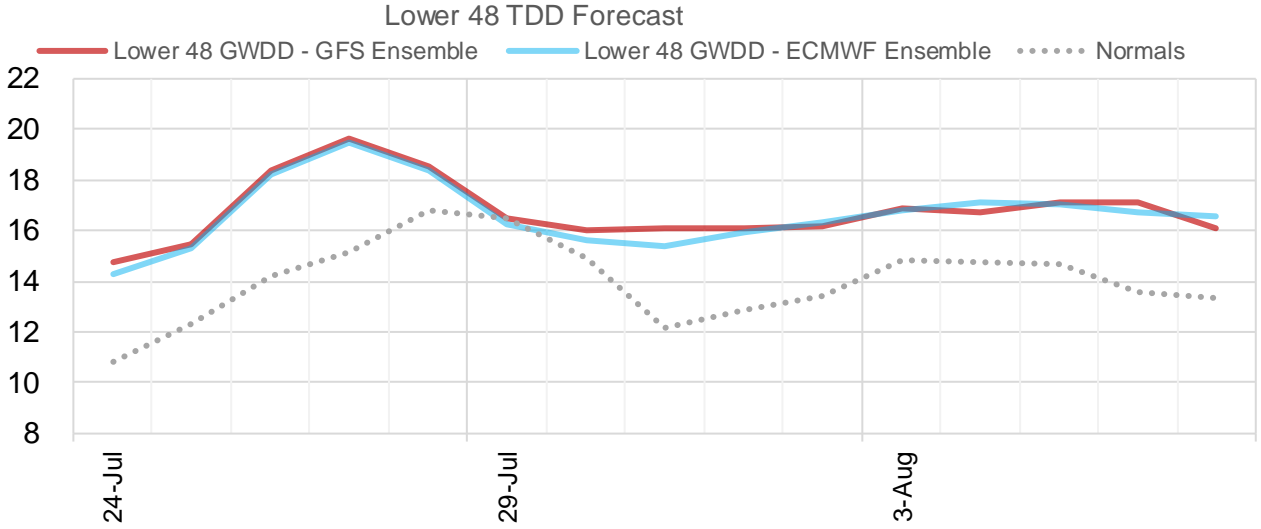


## Pacific Storage Levels





## Current Short-term Weather Model Outlooks (00z)



Source: WSI, Bloomberg

The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are not necessarily indicative of future results. This communication may contain links to third party websites which are not under the control of and are not maintained by ION Energy Group, and ION Energy Group is not responsible for their content.

## EIA Storage Week Balances

	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	24-Jul	WoW	vs. 4W
<b>Lower 48 Dry Production</b>	<b>85.1</b>	<b>84.9</b>	<b>85.2</b>	<b>85.6</b>	<b>85.5</b>	<b>86.2</b>	▲ 0.7	▲ 0.9
<b>Canadian Imports</b>	<b>3.8</b>	<b>4.2</b>	<b>4.1</b>	<b>4.2</b>	<b>4.6</b>	<b>4.4</b>	▼ -0.2	▲ 0.1
L48 Power	30.3	37.1	38.4	41.8	42.9	45.6	▲ 2.7	▲ 5.6
L48 Residential & Commercial	8.0	7.4	7.4	7.3	7.4	7.6	▲ 0.2	▲ 0.2
L48 Industrial	18.9	19.3	19.8	18.8	18.3	17.1	▼ -1.3	▼ -2.0
L48 Lease and Plant Fuel	4.8	4.8	4.8	4.8	4.8	4.8	▲ 0.0	▲ 0.0
L48 Pipeline Distribution	1.8	2.1	2.2	2.2	2.3	2.4	▲ 0.1	▲ 0.2
<b>L48 Regional Gas Consumption</b>	<b>63.8</b>	<b>70.7</b>	<b>72.6</b>	<b>74.9</b>	<b>75.7</b>	<b>77.5</b>	▲ 1.8	▲ 4.0
<b>Net LNG Exports</b>	<b>3.8</b>	<b>4.0</b>	<b>4.0</b>	<b>3.0</b>	<b>3.3</b>	<b>3.6</b>	▲ 0.3	▲ 0.0
<b>Total Mexican Exports</b>	<b>5.6</b>	<b>5.9</b>	<b>5.8</b>	<b>5.9</b>	<b>6.2</b>	<b>6.3</b>	▲ 0.2	▲ 0.4
<b>Implied Daily Storage Activity</b>	<b>15.7</b>	<b>8.5</b>	<b>6.9</b>	<b>5.9</b>	<b>4.9</b>	<b>3.2</b>	<b>-1.7</b>	
<b>EIA Reported Daily Storage Activity</b>	<b>17.1</b>	<b>9.3</b>	<b>8.0</b>	<b>6.4</b>	<b>5.3</b>			
<b>Daily Model Error</b>	<b>-1.5</b>	<b>-0.8</b>	<b>-1.1</b>	<b>-0.5</b>	<b>-0.4</b>			

## Monthly Balances

	2Yr Ago Jul-18	LY Jul-19	Mar-20	Apr-20	May-20	Jun-20	MTD Jul-20	MoM	vs. LY
<b>Lower 48 Dry Production</b>	<b>81.8</b>	<b>90.1</b>	<b>93.3</b>	<b>91.8</b>	<b>86.0</b>	<b>84.9</b>	<b>85.8</b>	▲ 0.8	▼ -4.3
<b>Canadian Imports</b>	<b>5.6</b>	<b>5.0</b>	<b>4.1</b>	<b>4.0</b>	<b>3.9</b>	<b>4.0</b>	<b>4.4</b>	▲ 0.4	▼ -0.6
L48 Power	39.1	40.9	28.3	25.3	26.3	34.3	41.4	▲ 7.1	▲ 0.5
L48 Residential & Commercial	7.8	8.1	27.5	20.9	12.3	7.7	7.1	▼ -0.6	▼ -1.0
L48 Industrial	20.7	20.3	22.8	20.7	20.3	19.6	17.5	▼ -2.1	▼ -2.8
L48 Lease and Plant Fuel	4.6	5.0	5.2	5.1	4.8	4.8	4.6	▼ -0.2	▼ -0.4
L48 Pipeline Distribution	2.2	2.2	2.5	2.1	1.9	2.0	2.2	▲ 0.2	▼ 0.0
<b>L48 Regional Gas Consumption</b>	<b>74.3</b>	<b>76.6</b>	<b>86.4</b>	<b>74.2</b>	<b>65.6</b>	<b>68.3</b>	<b>72.8</b>	▲ 4.4	▼ -3.8
<b>Net LNG Exports</b>	<b>3.3</b>	<b>6.0</b>	<b>8.5</b>	<b>8.2</b>	<b>6.7</b>	<b>4.0</b>	<b>3.3</b>	▼ -0.8	▼ -2.7
<b>Total Mexican Exports</b>	<b>5.0</b>	<b>5.4</b>	<b>5.6</b>	<b>4.9</b>	<b>4.9</b>	<b>5.7</b>	<b>6.1</b>	▲ 0.4	▲ 0.7
<b>Implied Daily Storage Activity</b>	<b>4.8</b>	<b>7.1</b>	<b>-3.1</b>	<b>8.4</b>	<b>12.7</b>	<b>10.9</b>	<b>7.9</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									

Source: Bloomberg, analytix.ai

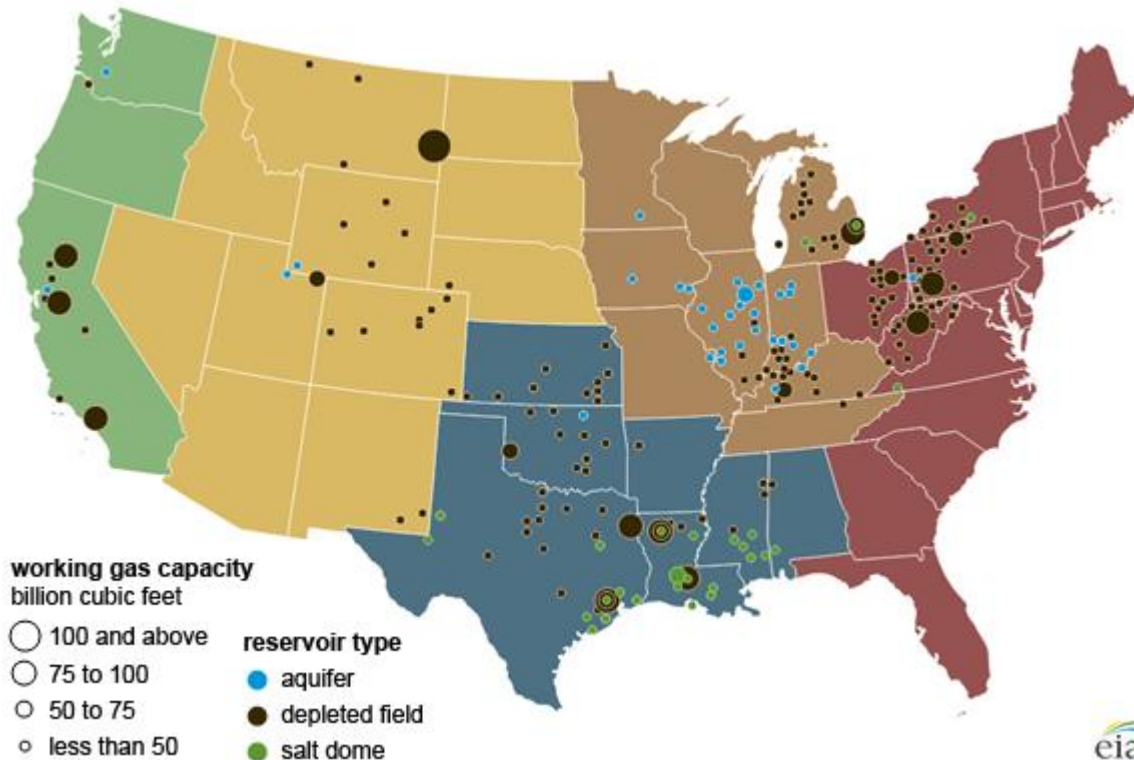
## Regional S/D Models Storage Projection

Week Ending 24-Jul

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	2.9	0.7	3.6	23
East	-0.6	1.9	1.4	9
Midwest	2.8	-0.7	2.1	14
Mountain	2.9	-2.4	0.5	3
South Central	-3.0	2.3	-0.7	-5
Pacific	0.7	-0.3	0.4	3

\*Adjustment Factor is calculated based on historical regional deltas

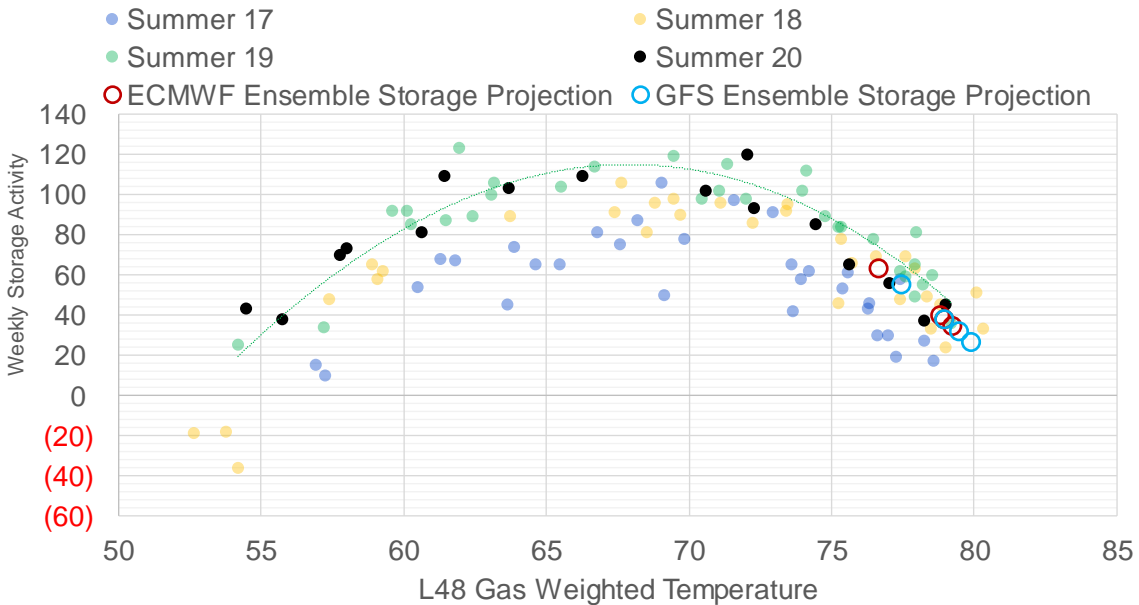
U.S. underground natural gas storage facilities by type (July 2015)



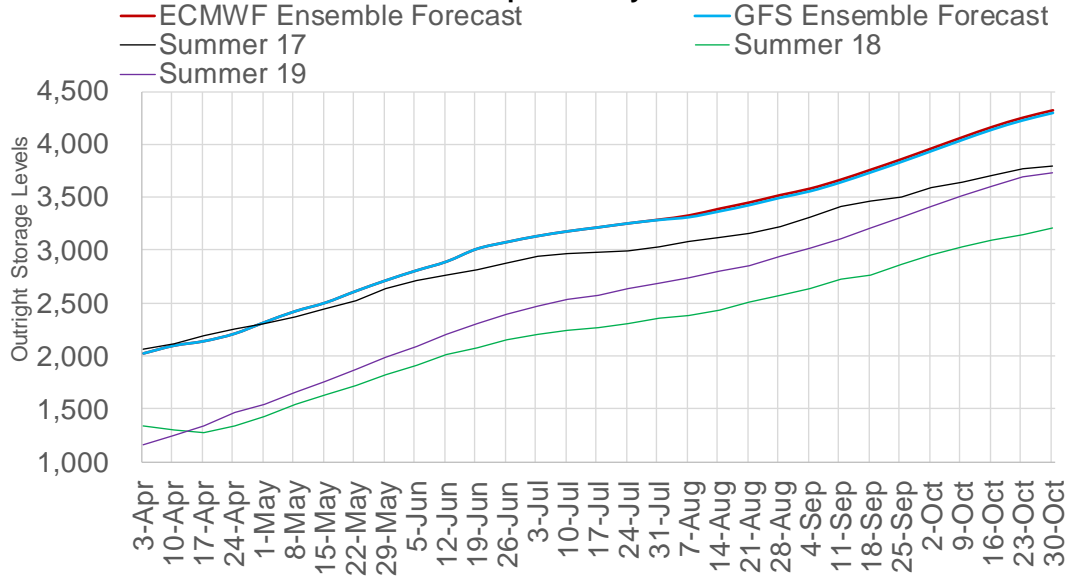
## Weather Model Storage Projection

Next report and beyond	
Week Ending	Week Storage Projection
31-Jul	33
7-Aug	33
14-Aug	59

### Weather Storage Model - Next 4 Week Forecast



### Weather Based End of Winter Projection (Bcf) 10Y normals past 15 day forecast window



The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are not necessarily indicative of future results. This communication may contain links to third party websites which are not under the control of and are not maintained by ION Energy Group, and ION Energy Group is not responsible for their content.

### Weather Model Storage Projection to End of Season

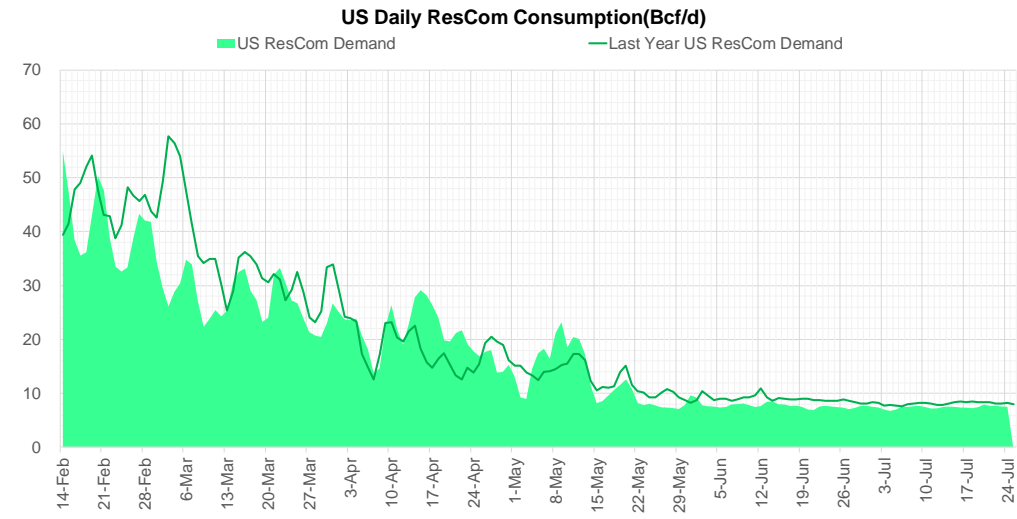
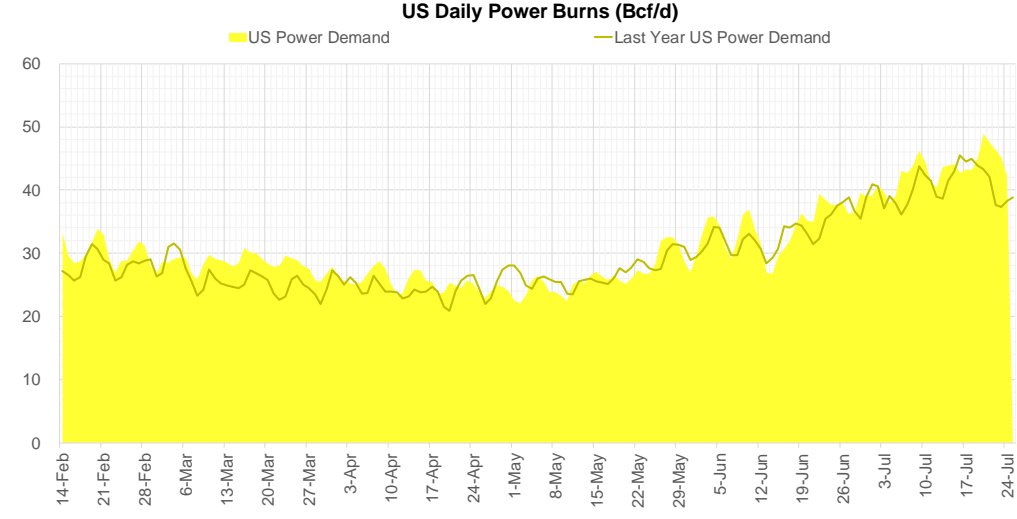
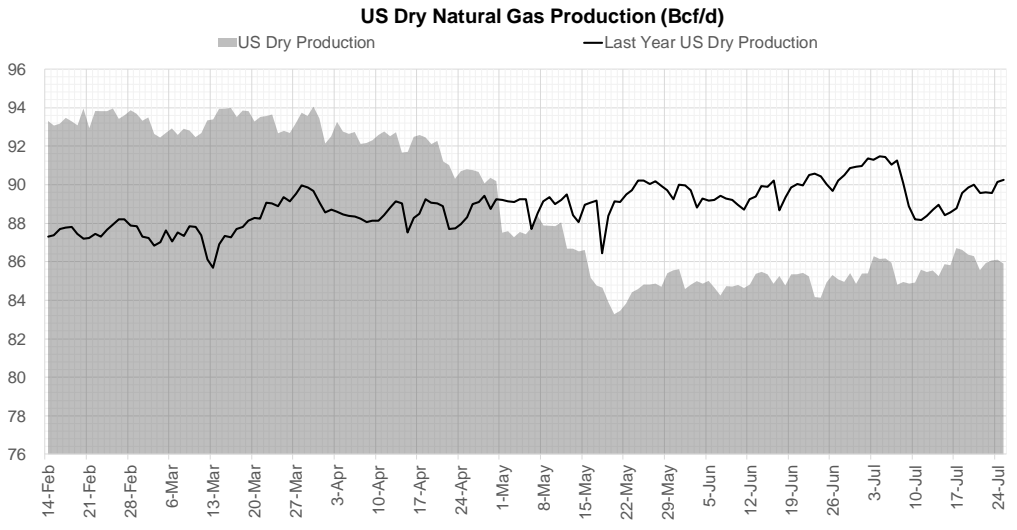
#### L48 Storage Trajectory from Weather Model

#### Forecast Storage Levels

	Report		vs 5Yr	Reported	Estimate	Forecast Storage Levels			
	Storage Level	vs. LY	Avg	Chg	Chg *	LY Chg	vs. LY	5Yr Avg Chg	vs. 5Yr
3-Apr-20	2024	876	324	38		25	13	6	32
10-Apr-20	2097	876	370	73		73	0	27	46
17-Apr-20	2140	827	364	43		92	(49)	49	(6)
24-Apr-20	2210	783	360	70		114	(44)	74	(4)
1-May-20	2319	796	395	109		96	13	74	35
8-May-20	2422	799	413	103		100	3	85	18
15-May-20	2503	779	407	81		101	(20)	87	(6)
22-May-20	2612	778	423	109		110	(1)	93	16
29-May-20	2714	762	422	102		118	(16)	103	(1)
5-Jun-20	2807	748	421	93		107	(14)	94	(1)
12-Jun-20	2892	722	419	85		111	(26)	87	(2)
19-Jun-20	3012	739	466	120		103	17	73	47
26-Jun-20	3077	712	466	65		92	(27)	65	0
3-Jul-20	3133	685	454	56		83	(27)	68	(12)
10-Jul-20	3178	663	436	45		67	(22)	63	(18)
17-Jul-20	3215	656	436	37		44	(7)	37	0
24-Jul-20					38	56	(18)	33	5
31-Jul-20					33	58	(25)	33	0
7-Aug-20					33	51	(18)	44	(11)
14-Aug-20					59	56	3	44	15
21-Aug-20					60	60	(0)	49	11
28-Aug-20					69	77	(8)	66	3
4-Sep-20					62	80	(18)	68	(6)
11-Sep-20					83	82	1	77	6
18-Sep-20					95	97	(2)	80	15
25-Sep-20					98	109	(11)	78	20
2-Oct-20					103	102	1	86	17
9-Oct-20					103	102	1	87	16
16-Oct-20					99	92	7	75	24
23-Oct-20					86	89	(3)	67	19
30-Oct-20					71	49	22	52	19
			<b>2323</b>	<b>2596</b>	<b>(273)</b>	<b>2024</b>	<b>299</b>		

\* first 15D change is an average of the GFS Ensemble and ECMWF Ensemble

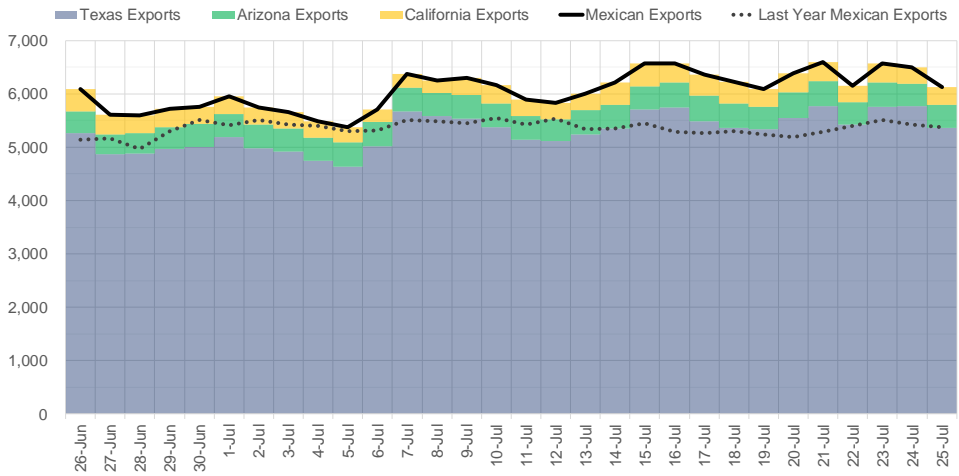
## Supply – Demand Trends



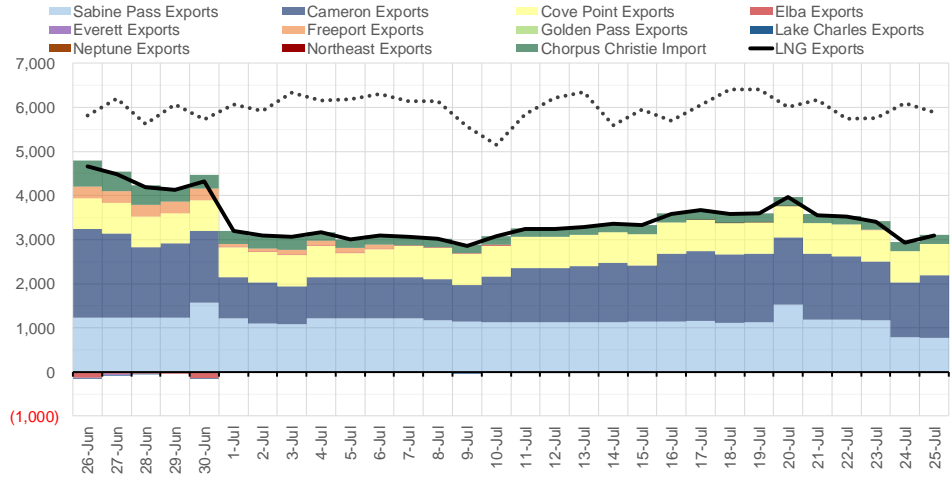
Source: Bloomberg

The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are not necessarily indicative of future results. This communication may contain links to third party websites which are not under the control of and are not maintained by ION Energy Group, and ION Energy Group is not responsible for their content.

**Mexican Exports - Last 30 days (MMcf/d)**



**Net LNG Exports - Last 30 days (MMcf/d)**



Source: Bloomberg

The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are not necessarily indicative of future results. This communication may contain links to third party websites which are not under the control of and are not maintained by ION Energy Group, and ION Energy Group is not responsible for their content.

## Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
9	2020	P	1.50	8665	10	2020	P	1.50	50222
8	2020	P	1.50	7016	10	2020	C	2.75	49373
9	2020	P	1.30	6401	10	2020	C	2.50	37609
10	2020	P	1.50	6379	8	2020	C	2.00	36933
12	2020	P	2.00	5725	3	2021	P	2.00	35681
8	2020	P	1.60	5323	9	2020	P	1.50	35127
10	2020	P	1.30	5260	8	2020	P	1.50	32034
9	2020	P	1.10	5097	10	2020	P	1.60	31929
9	2020	C	3.25	5072	10	2020	C	3.00	31928
10	2020	P	1.10	5016	10	2020	P	2.00	30701
8	2020	P	1.65	4334	9	2020	C	2.50	30134
8	2020	P	1.70	4095	10	2020	P	1.25	28165
8	2020	C	2.00	3678	10	2020	P	1.75	28120
9	2020	C	2.25	3586	9	2020	C	3.00	24611
11	2020	P	1.75	3561	9	2020	P	1.00	24547
9	2020	C	2.00	3203	8	2020	C	2.50	23901
11	2020	P	1.85	3201	9	2020	P	1.20	23210
11	2020	P	1.90	3002	9	2020	C	2.00	22190
10	2020	C	2.50	2992	3	2021	C	3.00	21754
10	2020	P	1.75	2961	9	2020	P	1.30	19897
9	2020	P	1.65	2812	9	2020	P	1.75	19605
9	2020	P	1.35	2676	9	2020	P	1.25	19506
8	2020	C	1.90	2512	10	2020	P	1.30	19388
9	2020	C	2.10	2389	8	2020	C	2.25	18980
9	2020	C	3.00	2316	8	2020	P	1.30	18837
10	2020	C	2.25	2280	3	2021	C	6.00	18626
1	2021	C	3.75	2200	9	2020	C	2.75	18588
8	2020	P	1.55	2186	10	2020	C	2.10	18523
9	2020	P	1.40	2121	1	2021	C	3.50	18259
9	2020	P	1.75	1912	10	2020	C	3.25	18190
11	2020	P	2.20	1900	10	2020	P	2.10	18133
8	2020	C	1.70	1839	8	2020	P	1.60	18122
1	2021	C	4.75	1800	10	2020	P	1.00	17969
12	2020	C	3.25	1784	3	2021	C	3.50	17908
9	2020	P	1.25	1688	10	2020	C	2.25	17611
11	2020	C	2.75	1601	9	2020	C	2.25	17374
4	2021	P	2.00	1600	1	2021	C	3.00	17338
11	2020	C	2.60	1511	8	2020	P	1.75	17192
11	2020	P	1.60	1501	8	2020	P	1.00	16762
8	2020	C	1.85	1488	10	2020	C	2.40	16155
8	2020	P	1.40	1425	10	2020	C	2.00	15960
8	2020	C	1.80	1423	8	2020	P	1.20	15639
10	2020	P	1.60	1366	8	2020	P	1.25	15578
9	2020	P	1.00	1276	4	2021	C	3.00	15501
10	2020	C	2.35	1259	8	2020	P	1.65	15409
8	2020	P	1.80	1243	12	2020	P	1.50	15255
12	2020	C	3.50	1200	8	2020	C	3.00	14670
9	2020	C	1.90	1172	9	2020	C	2.10	14033
8	2020	C	1.95	1111	9	2020	P	2.00	13946
					11	2020	C	3.5	13869

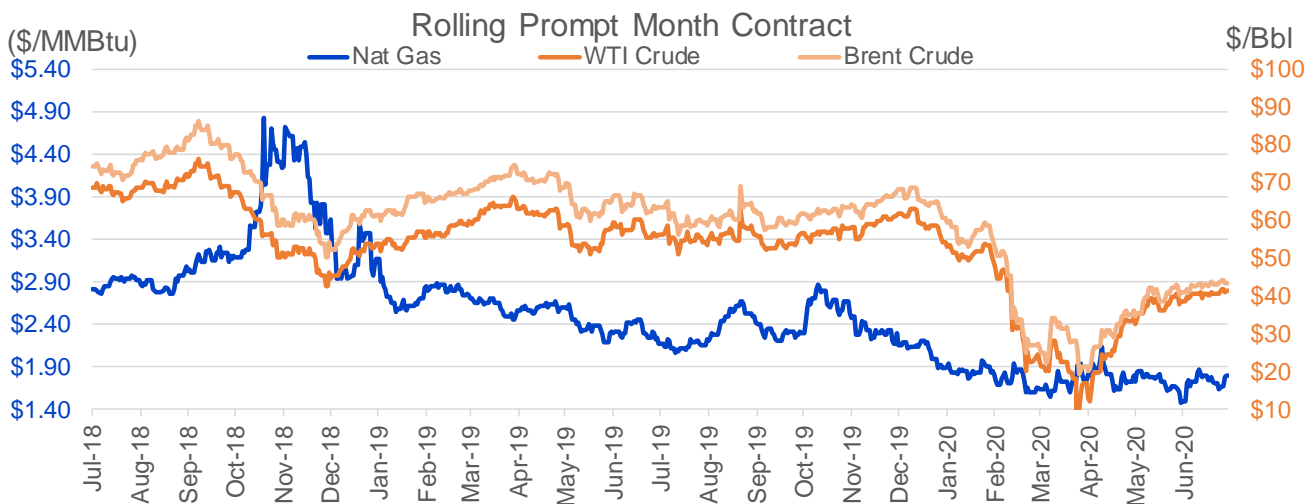
Source: CME, Nasdaq, ICE

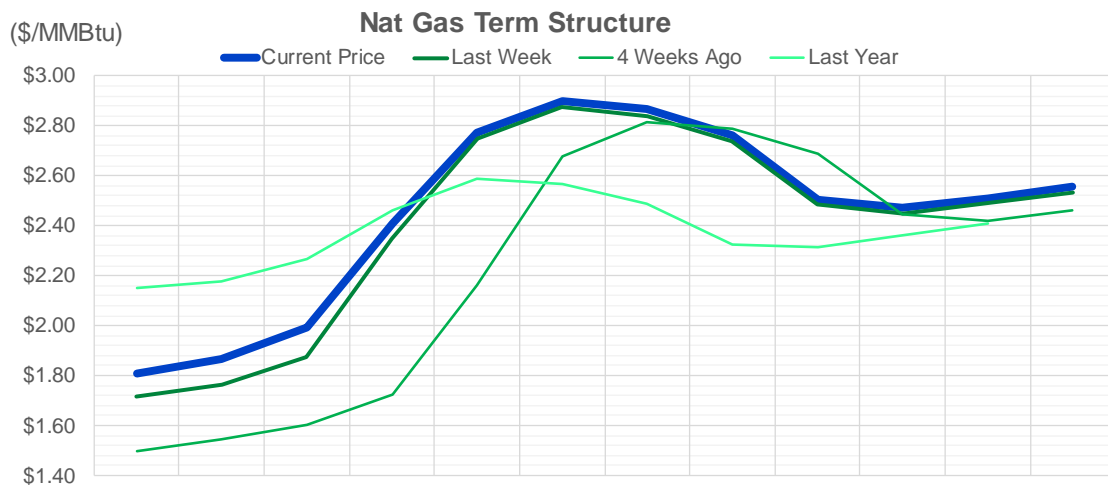


## Nat Gas Futures Open Interest CME, ICE and Nasdaq Combined

CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MM			
	Current	Prior	Daily Change	FOR JUNE 26	Current	Prior	Daily Change
AUG 20	34031	52186	-18155	AUG 20	70203	71352	-1148.75
SEP 20	351198	340981	10217	SEP 20	74871	77676	-2805.5
OCT 20	145365	142267	3098	OCT 20	83530	84267	-737.5
NOV 20	95603	97495	-1892	NOV 20	67451	67463	-12.25
DEC 20	86163	85606	557	DEC 20	63608	62956	651.5
JAN 21	127169	126364	805	JAN 21	81293	80348	945
FEB 21	41720	41831	-111	FEB 21	49108	48716	392.25
MAR 21	80173	79667	506	MAR 21	66939	66444	494.25
APR 21	78065	76856	1209	APR 21	54263	53316	947
MAY 21	34629	34323	306	MAY 21	47071	46630	441.75
JUN 21	20440	20199	241	JUN 21	46076	45698	378
JUL 21	17136	17122	14	JUL 21	46685	46172	512.5
AUG 21	14119	14074	45	AUG 21	47064	46567	497
SEP 21	16463	16310	153	SEP 21	44688	44542	145.75
OCT 21	42122	41963	159	OCT 21	66478	66164	313.5
NOV 21	22340	22225	115	NOV 21	38101	37986	114.75
DEC 21	15454	15449	5	DEC 21	39668	39549	118.75
JAN 22	14559	14313	246	JAN 22	31444	31222	222.25
FEB 22	8786	8833	-47	FEB 22	28127	27917	209.75
MAR 22	13594	13602	-8	MAR 22	30050	29813	237.75
APR 22	13381	13385	-4	APR 22	29018	29062	-43.75
MAY 22	5291	5286	5	MAY 22	22997	22849	148
JUN 22	2553	2550	3	JUN 22	22495	22518	-22.5
JUL 22	1930	1923	7	JUL 22	22524	22487	36.75
AUG 22	1352	1350	2	AUG 22	22295	22321	-25.25
SEP 22	1865	1860	5	SEP 22	21933	21965	-32
OCT 22	2309	2304	5	OCT 22	23607	23523	84.25
NOV 22	1654	1648	6	NOV 22	20701	20726	-24.5
DEC 22	1329	1324	5	DEC 22	21178	21203	-25.25
JAN 23	2592	2608	-16	JAN 23	11227	11210	16.25

Source: CME, ICE






	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21
<b>Current Price</b>	<b>\$1.808</b>	<b>\$1.867</b>	<b>\$1.994</b>	<b>\$2.410</b>	<b>\$2.773</b>	<b>\$2.898</b>	<b>\$2.865</b>	<b>\$2.764</b>	<b>\$2.505</b>	<b>\$2.472</b>	<b>\$2.511</b>	<b>\$2.557</b>
Last Week	\$1.718	\$1.765	\$1.876	\$2.350	\$2.749	\$2.874	\$2.841	\$2.740	\$2.483	\$2.450	\$2.490	\$2.535
vs. Last Week	\$0.090	\$0.102	\$0.118	\$0.060	\$0.024	\$0.024	\$0.024	\$0.024	\$0.022	\$0.022	\$0.021	\$0.022
4 Weeks Ago	\$1.495	\$1.544	\$1.605	\$1.725	\$2.162	\$2.676	\$2.816	\$2.787	\$2.688	\$2.446	\$2.419	\$2.461
vs. 4 Weeks Ago	\$0.313	\$0.323	\$0.389	\$0.685	\$0.611	\$0.222	\$0.049	-\$0.023	-\$0.183	\$0.026	\$0.092	\$0.096
Last Year	\$2.169	\$2.150	\$2.177	\$2.267	\$2.461	\$2.590	\$2.565	\$2.489	\$2.326	\$2.315	\$2.361	\$2.410
vs. Last Year	-\$0.361	-\$0.283	-\$0.183	\$0.143	\$0.312	\$0.308	\$0.300	\$0.275	\$0.179	\$0.157	\$0.150	\$0.147

	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jan/Apr	\$/MMBtu	-0.39	▼ -0.002	▼ -0.023	▼ -0.021
NatGas Mar/Apr	\$/MMBtu	-0.259	▼ -0.002	▼ -0.501	▼ -0.499
NatGas Oct/Nov	\$/MMBtu	0.42	▼ -0.058	▼ -0.021	▲ 0.349
NatGas Oct/Jan	\$/MMBtu	0.90	▼ -0.094	▼ -0.187	▲ 0.564
WTI Crude	\$/Bbl	41.34	▲ 0.750	▲ 2.850	▼ -14.860
Brent Crude	\$/Bbl	43.34	▲ 0.200	▲ 2.320	▼ -20.120
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	125.55	▲ 3.640	▲ 11.920	▼ -64.890
Propane, Mt. Bel	cents/Gallon	0.50	▲ 0.015	▼ -0.002	▲ 0.007
Ethane, Mt. Bel	cents/Gallon	0.22	▼ -0.001	▼ -0.002	▲ 0.070
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.000
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▼ -7.500

Source: CME, Bloomberg

## Baker Hughes Rig Counts

Oil rigs increased by +1, while nat gas rigs dropped by -3. The weekly changes for the major basins are listed below.

Rotary Rig Count						
7/24/2020						
Baker Hughes 						
U.S. Breakout Information	This Week	+/-	Last Week	+/-	Year Ago	
Oil	181	1	180	-595	776	
Gas	68	-3	71	-101	169	
Miscellaneous	2	0	2	1	1	
Directional	22	-1	23	-45	67	
Horizontal	215	0	215	-608	823	
Vertical	14	-1	15	-42	56	
Major Basin Variances	This Week	+/-	Last Week	+/-	Year Ago	
Ardmore Woodford	1	0	1	-4	5	
Arkoma Woodford	0	0	0	-3	3	
Barnett	0	0	0	-1	1	
Cana Woodford	5	-1	6	-44	49	
DJ-Niobrara	4	0	4	-25	29	
Eagle Ford	12	1	11	-54	66	
Granite Wash	1	1	0	-3	4	
Haynesville	32	0	32	-19	51	
Marcellus	25	-2	27	-31	56	
Mississippian	0	0	0	-2	2	
Permian	126	2	124	-317	443	
Utica	6	0	6	-9	15	
Williston	10	0	10	-37	47	