

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 1.77	▼ \$ (0.01)	▼ \$ (0.02)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 39.33	▼ \$ (0.22)	▲ \$ 1.4

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 42.28	▼ \$ (0.02)	▲ \$ 1.6

Page Menu

- [Short-term Weather Model Outlooks](#)
- [Lower 48 Component Models](#)
- [Regional S/D Models Storage Projection](#)
- [Weather Model Storage Projection](#)
- [Supply – Demand Trends](#)
- [Nat Gas Options Volume and Open Interest](#)
- [Nat Gas Futures Open Interest](#)
- [Price Summary](#)

00z GWDD Change

Cooler Change

Warmer Change

ECMWF Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	1.8	0.1	5.5	7.4
24 Hr Chg	0.3	-5.1	1.4	-3.4

GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	3.3	2.2	2.9	8.4
24 Hr Chg	2.0	-2.7	-1.5	-2.2

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	83.9	▲ 0.09	▼ -0.30

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	35.8	▲ 6.40	▲ 3.26

	Current	Δ from YD	Δ from 7D Avg
US ResComm	8.6	▲ 0.37	▲ 0.38

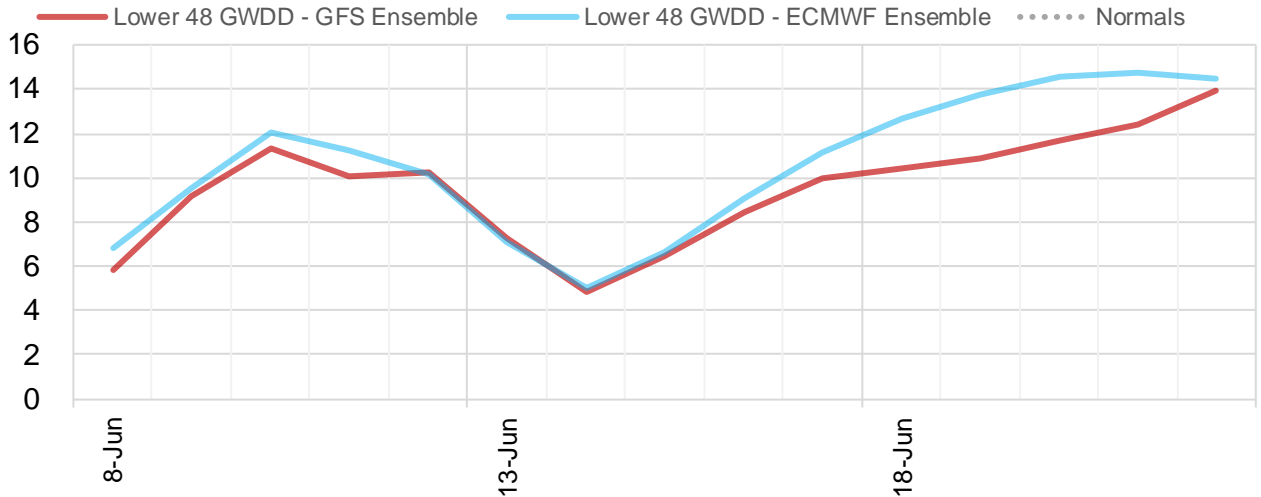
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	3.3	▼ -0.11	▼ -0.83

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	3.9	▲ 0.10	▼ -0.26

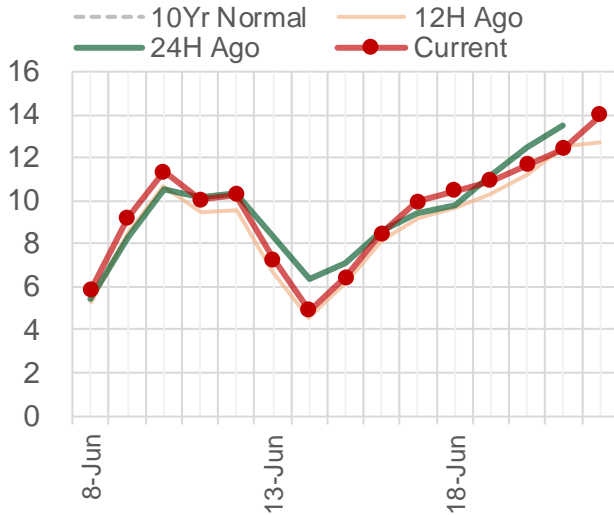
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.3	▲ 0.08	▼ -0.21

Short-term Weather Model Outlooks (00z)

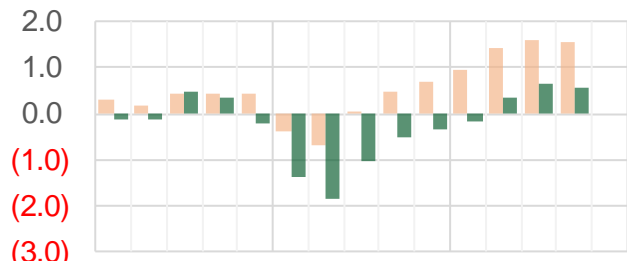
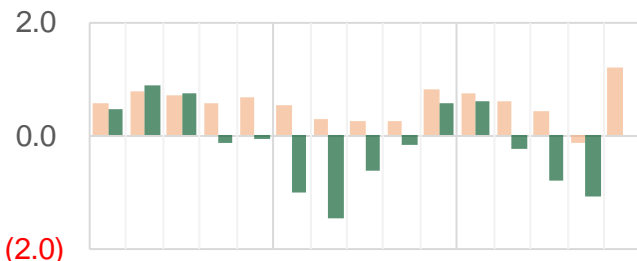
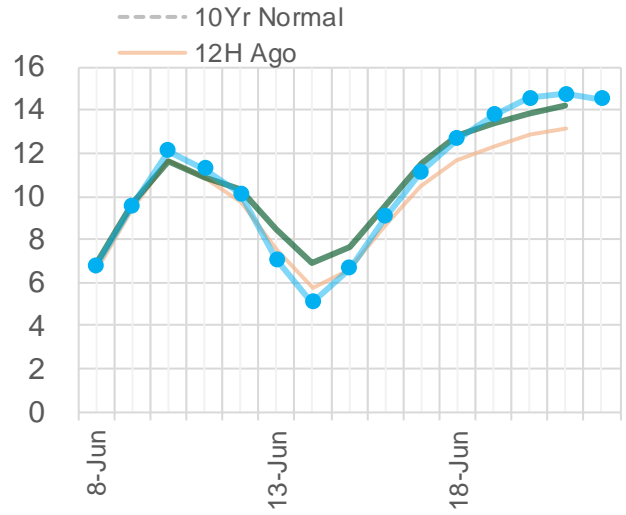
Lower 48 TDD Forecast



Lower 48 GWDD - GFS Ensemble



Lower 48 GWDD - ECMWF Ensemble



Source: WSI, Bloomberg

Lower 48 Component Models

Daily Balances

	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	8-Jun	DoD	vs. 7D
Lower 48 Dry Production	84.2	84.4	84.4	84.5	84.1	83.8	83.9	▲ 0.1	▼ -0.3
Canadian Imports	4.1	4.5	4.7	4.5	3.5	3.4	3.3	▼ -0.1	▼ -0.8
L48 Power	33.4	35.7	35.0	35.0	29.3	29.4	35.8	▲ 6.4	▲ 2.8
L48 Residential & Commercial	8.2	8.0	7.9	8.0	7.7	8.3	8.6	▲ 0.4	▲ 0.6
L48 Industrial	18.4	18.1	18.0	17.9	17.8	17.7	17.7	▼ 0.0	▼ -0.3
L48 Lease and Plant Fuel	4.7	4.8	4.8	4.8	4.7	4.7	4.7	▲ 0.0	▼ 0.0
L48 Pipeline Distribution	2.0	2.1	2.1	2.1	1.8	1.8	2.1	▲ 0.3	▲ 0.2
L48 Regional Gas Consumption	66.8	68.7	67.7	67.8	61.4	61.9	69.0	▲ 7.1	▲ 3.3
Net LNG Exports	3.7	4.6	5.2	4.4	3.9	3.8	3.9	▲ 0.1	▼ -0.4
Total Mexican Exports	5.6	5.5	5.6	5.7	5.4	5.2	5.3	▲ 0.1	▼ -0.2
Implied Daily Storage Activity	12.2	10.0	10.5	11.1	17.0	16.3	9.0		
EIA Reported Daily Storage Activity									
Daily Model Error									

EIA Storage Week Balances

	1-May	8-May	15-May	22-May	29-May	5-Jun	WoW	vs. 4W
Lower 48 Dry Production	89.9	87.0	86.5	83.9	83.9	84.5	▲ 0.6	▼ -0.8
Canadian Imports	3.4	3.6	4.0	4.1	4.1	4.2	▲ 0.1	▲ 0.3
L48 Power	24.8	24.6	25.0	26.7	30.0	31.8	▲ 1.8	▲ 5.2
L48 Residential & Commercial	16.8	14.5	19.3	10.8	8.2	8.5	▲ 0.3	▼ -4.7
L48 Industrial	18.3	18.7	17.3	18.9	19.3	18.6	▼ -0.7	▲ 0.0
L48 Lease and Plant Fuel	5.1	4.9	4.8	4.7	4.7	4.7	▲ 0.1	▼ 0.0
L48 Pipeline Distribution	2.0	1.9	2.2	1.8	1.9	2.0	▲ 0.1	▼ 0.0
L48 Regional Gas Consumption	67.0	64.6	68.7	62.9	64.0	65.6	▲ 1.6	▲ 0.6
Net LNG Exports	7.5	7.7	6.9	6.3	6.1	5.1	▼ -1.0	▼ -1.7
Total Mexican Exports	4.8	4.7	4.7	5.2	5.0	5.4	▲ 0.4	▲ 0.5
Implied Daily Storage Activity	14.0	13.5	10.2	13.7	12.9	12.7	-0.2	
EIA Reported Daily Storage Activity	15.6	14.7	11.6	15.6	14.6			
Daily Model Error	-1.6	-1.2	-1.4	-1.8	-1.6			

Monthly Balances

	2Yr Ago Jun-18	LY Jun-19	Feb-20	Mar-20	Apr-20	May-20	MTD Jun-20	MoM	vs. LY
Lower 48 Dry Production	81.6	89.6	91.8	92.2	91.2	85.3	84.2	▼ -1.1	▼ -5.4
Canadian Imports	5.6	4.7	5.2	4.1	3.9	3.9	4.0	▲ 0.0	▼ -0.8
L48 Power	31.8	33.0	30.0	28.3	25.7	26.8	33.0	▲ 6.1	▼ 0.0
L48 Residential & Commercial	8.6	9.0	39.9	27.7	21.6	12.8	8.3	▼ -4.4	▼ -0.7
L48 Industrial	21.3	21.3	24.3	21.6	18.9	18.6	18.0	▼ -0.6	▼ -3.3
L48 Lease and Plant Fuel	4.5	5.0	5.2	5.2	5.2	4.8	4.7	▼ 0.0	▼ -0.3
L48 Pipeline Distribution	1.9	2.0	3.0	2.5	2.3	2.0	2.0	▲ 0.0	▼ 0.0
L48 Regional Gas Consumption	68.2	70.4	102.3	85.4	73.6	64.9	66.0	▲ 1.1	▼ -4.3
Net LNG Exports	3.2	5.5	8.5	8.5	8.2	6.7	4.1	▼ -2.5	▼ -1.4
Total Mexican Exports	4.5	5.3	5.3	5.6	4.9	4.9	5.5	▲ 0.6	▲ 0.1
Implied Daily Storage Activity	11.3	13.1	-19.0	-3.1	8.4	12.7	12.5		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

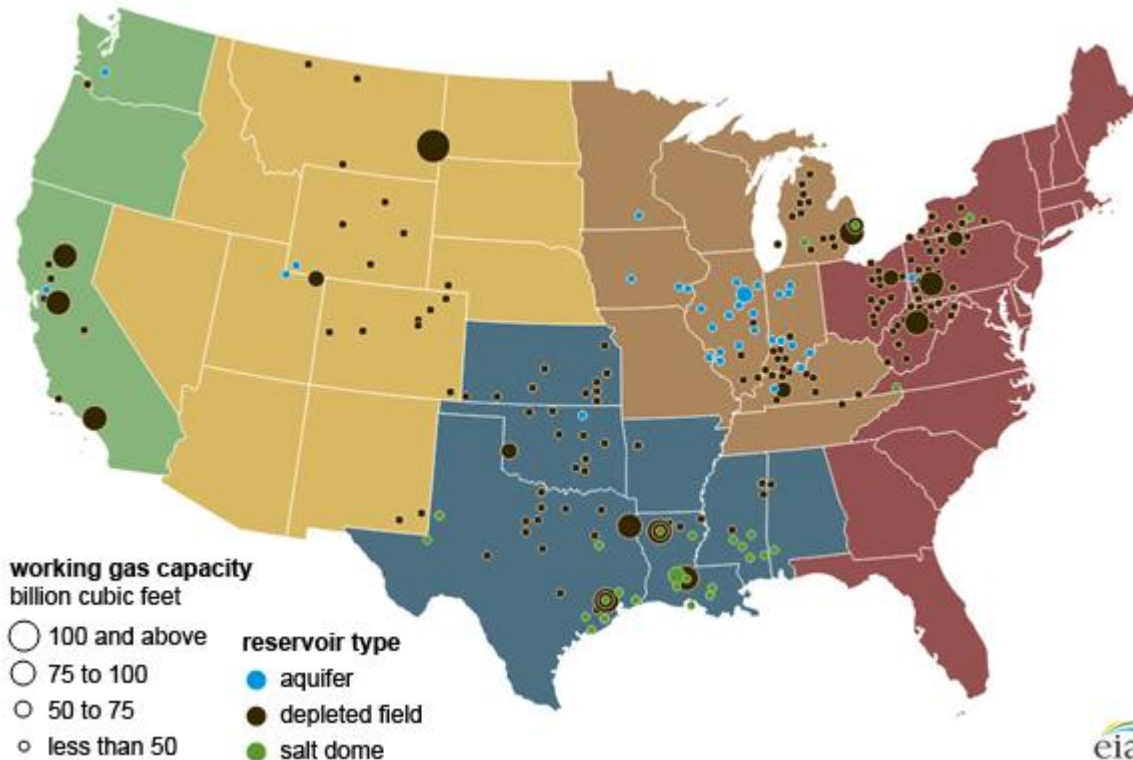
Regional S/D Models Storage Projection

Week Ending 5-Jun

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	12.5	1.9	14.3	100
East	2.0	2.2	4.2	29
Midwest	4.0	0.5	4.5	32
Mountain	3.6	-2.1	1.5	10
South Central	1.5	1.7	3.3	23
Pacific	1.4	-0.5	0.9	6

*Adjustment Factor is calculated based on historical regional deltas

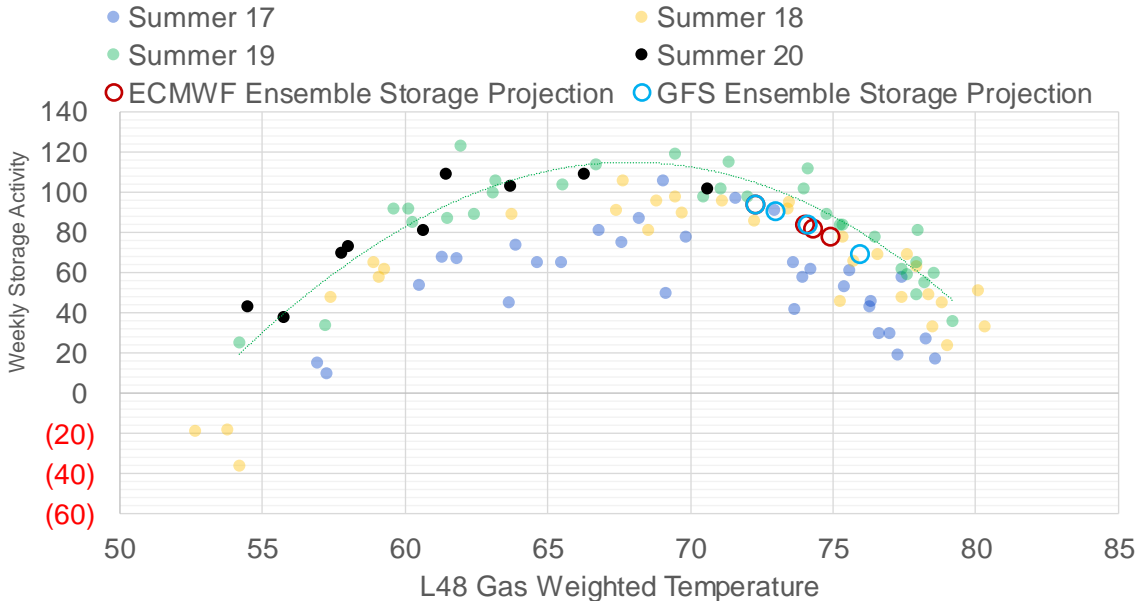
U.S. underground natural gas storage facilities by type (July 2015)



Weather Model Storage Projection

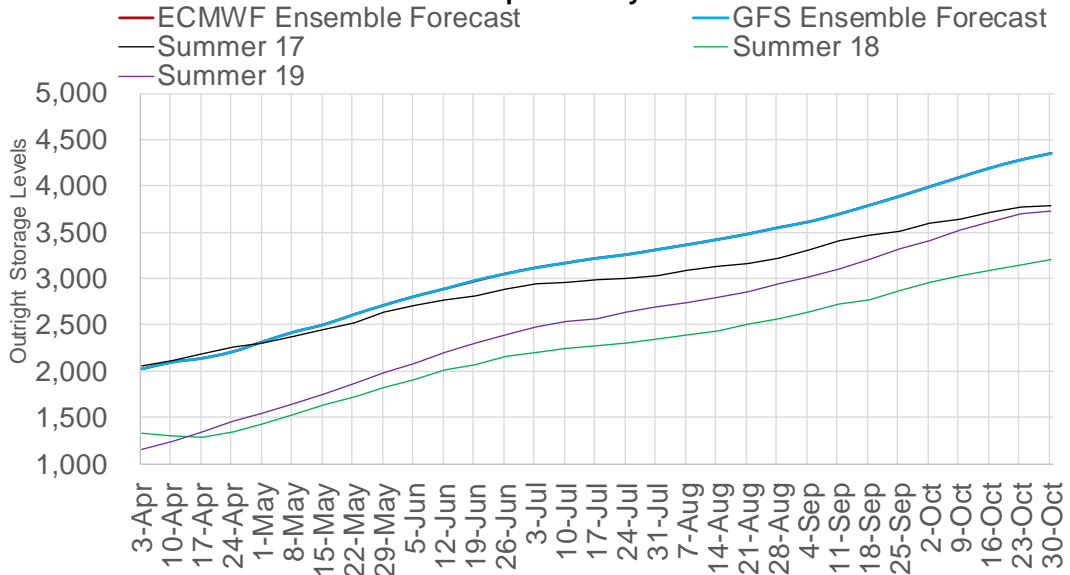
Week Ending	Week Storage Projection
5-Jun	94
12-Jun	83
19-Jun	87
26-Jun	74

Weather Storage Model - Next 4 Week Forecast



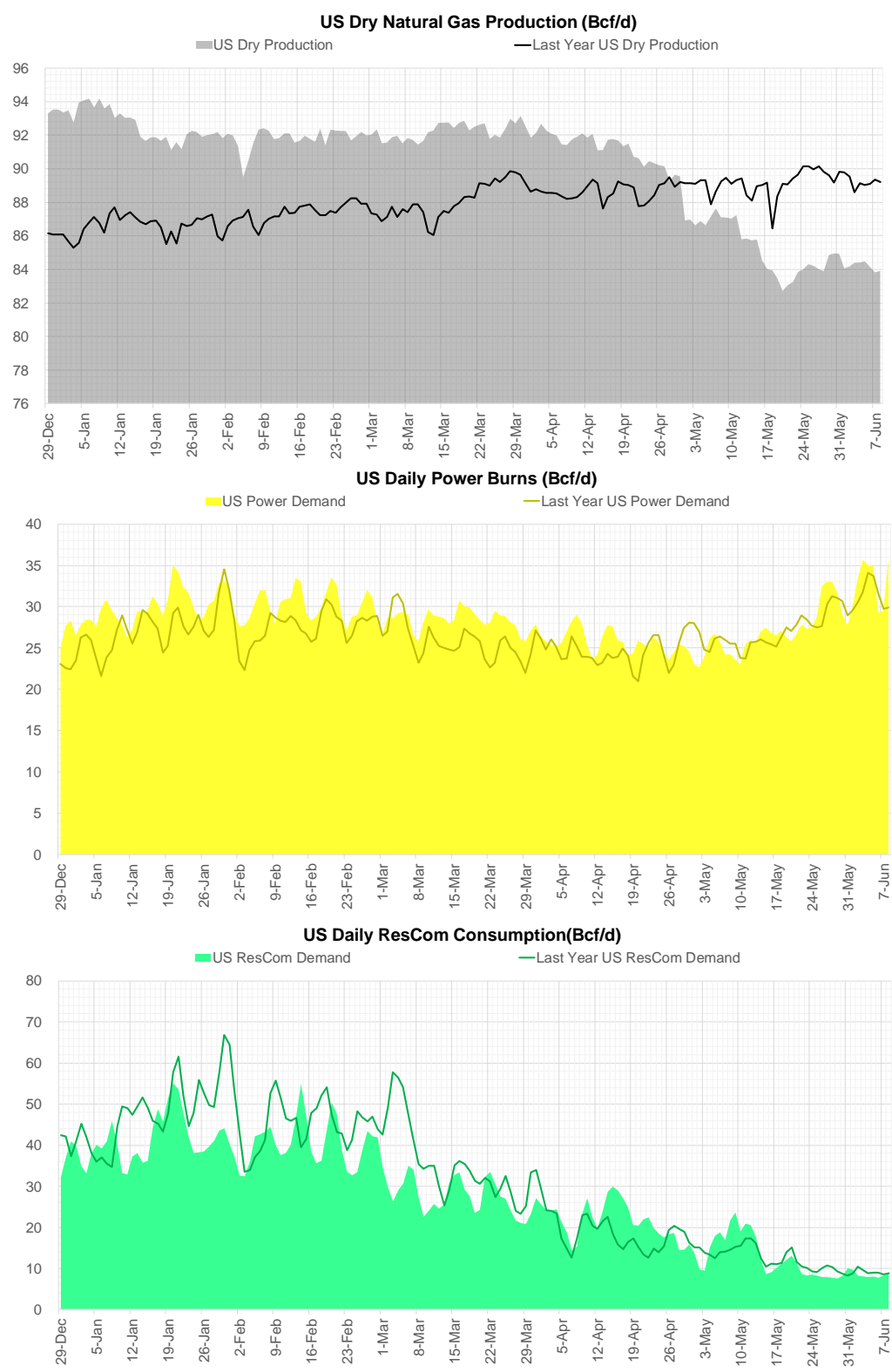
Weather Based End of Winter Projection (Bcf)

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.

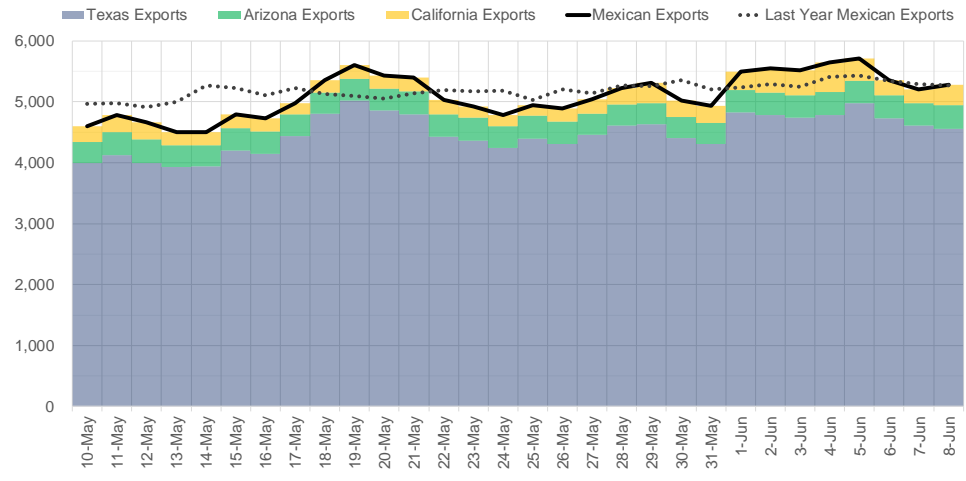
Supply – Demand Trends



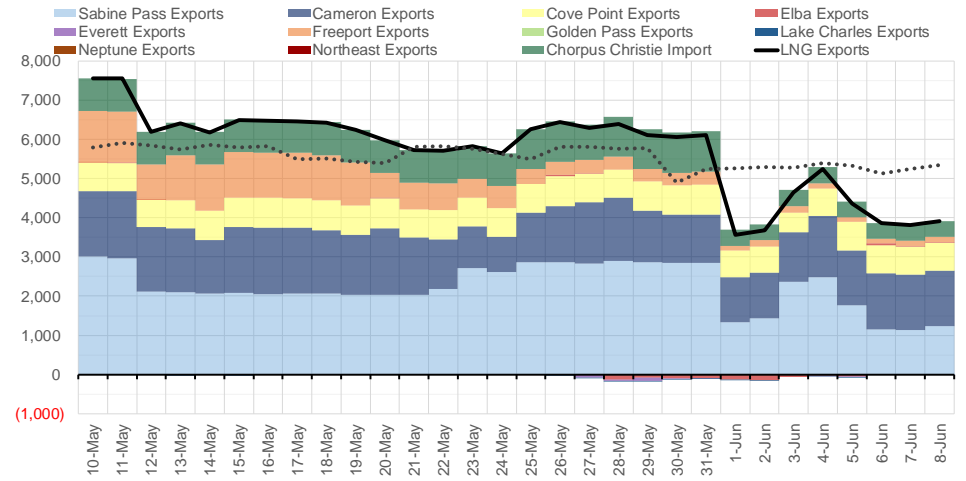
Source: Bloomberg

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

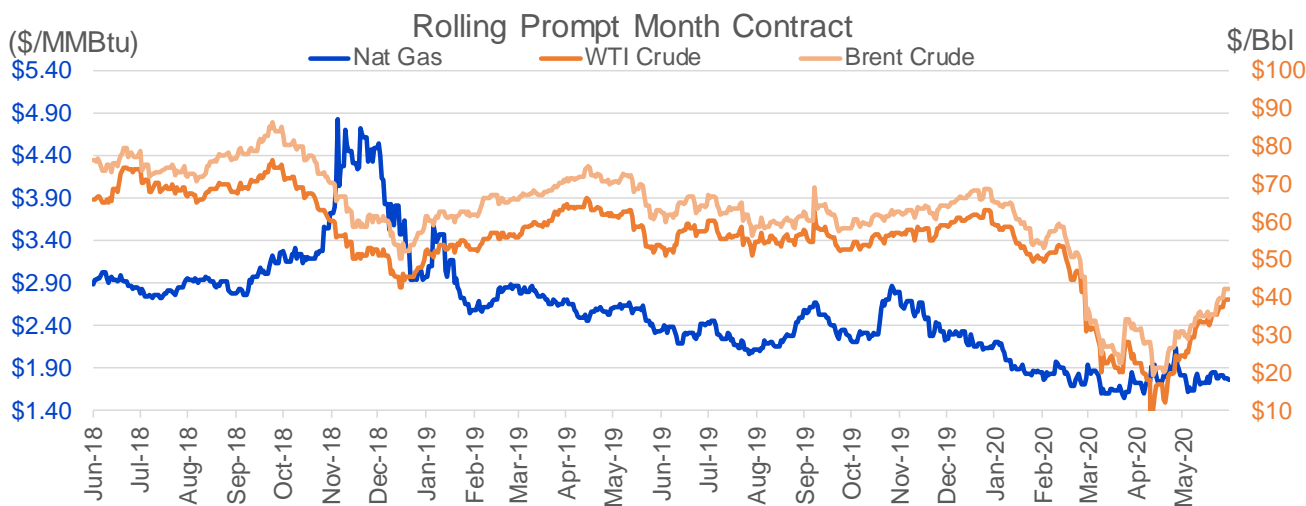
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
7	2020	P	1.75	5518	10	2020	P	1.50	39096
7	2020	P	1.50	4762	10	2020	C	3.00	35169
7	2020	C	2.00	3539	10	2020	P	1.60	34779
10	2020	P	1.50	3396	10	2020	C	2.75	32572
10	2020	P	1.60	3306	3	2021	P	2.00	32533
7	2020	P	1.60	3239	7	2020	P	1.75	31800
7	2020	C	2.25	3124	7	2020	P	1.50	31398
12	2020	P	1.50	3000	10	2020	P	2.00	27636
7	2020	C	2.50	2745	10	2020	C	2.50	27618
10	2020	C	3.00	2658	9	2020	C	2.50	25491
10	2020	C	2.50	2500	7	2020	C	2.50	25240
10	2020	C	2.75	2500	10	2020	P	1.25	24416
7	2020	P	1.25	2247	9	2020	P	1.50	22343
1	2021	C	3.10	2200	8	2020	P	1.50	21807
9	2020	P	1.50	2126	8	2020	C	2.50	21010
9	2020	P	1.00	2115	10	2020	P	1.75	20884
11	2020	C	2.60	2000	9	2020	C	2.75	20697
9	2020	P	1.75	1601	7	2020	P	2.00	20115
7	2020	P	1.00	1600	7	2020	C	2.00	19641
7	2020	C	2.05	1512	7	2020	C	3.00	19520
9	2020	P	1.60	1460	9	2020	P	1.00	19375
7	2020	P	1.80	1383	10	2020	C	2.25	18155
10	2020	P	1.00	1208	1	2021	C	3.50	17986
9	2020	P	2.00	1106	10	2020	P	2.10	17903
9	2020	P	1.25	1060	11	2020	C	4.00	17864
12	2020	P	2.25	1001	7	2020	C	2.30	17672
12	2020	P	2.00	1000	1	2021	C	3.00	17518
10	2020	C	2.10	925	7	2020	C	2.25	17455
7	2020	P	1.70	867	9	2020	P	1.75	16958
7	2020	C	1.90	861	8	2020	P	1.00	16884
7	2020	P	1.55	850	10	2020	C	3.25	16659
7	2020	C	2.20	820	7	2020	P	1.25	16476
10	2020	P	1.25	794	7	2020	C	2.75	16376
8	2020	C	2.50	691	7	2020	P	1.60	16189
8	2020	P	1.50	691	10	2020	P	1.00	15805
8	2020	P	1.85	657	9	2020	P	1.20	15353
8	2020	P	1.70	638	8	2020	P	1.20	15298
3	2021	C	4.00	600	3	2021	C	3.00	15057
8	2020	C	2.00	566	9	2020	C	2.25	14736
8	2020	P	1.40	551	10	2020	P	1.20	14644
8	2020	P	1.25	539	4	2021	C	3.00	14639
4	2021	C	4.00	525	8	2020	C	3.00	14234
5	2021	C	4.00	525	7	2020	P	1.00	14085
6	2021	C	4.00	525	7	2020	C	2.35	14035
7	2021	C	4.00	525	9	2020	P	2.00	13861
8	2021	C	4.00	525	8	2020	C	2.75	13855
8	2021	C	4.00	525	8	2020	C	2.25	13434
9	2021	C	4.00	525	9	2020	C	3.00	13272
10	2021	C	4.00	525	8	2020	P	1.75	13271
7	2020	C	1.80	510	3	2021	C	7	12881

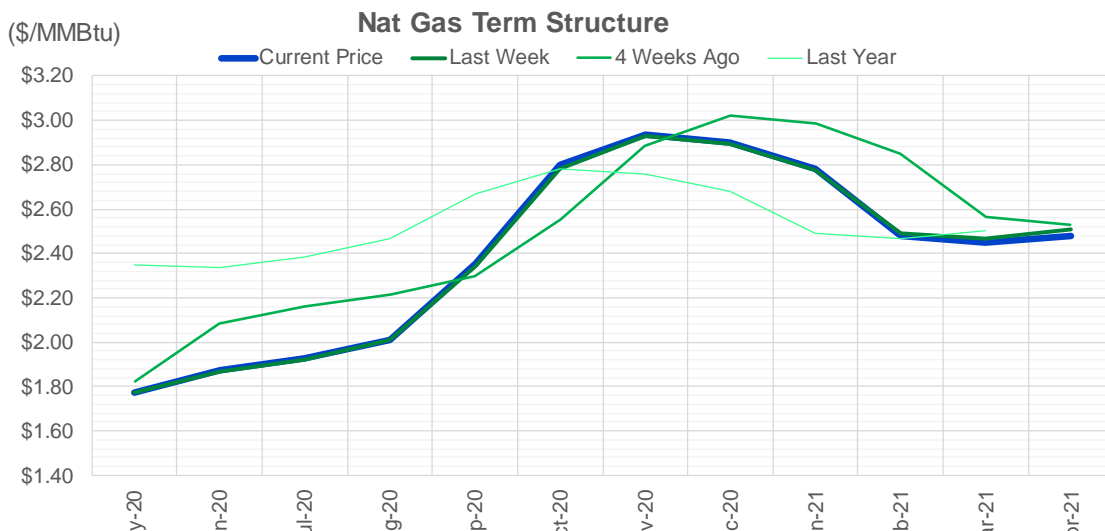
Source: CME, Nasdaq, ICE

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)				NASDAQ Henry Hub Futures (10,000 MMBtu)			
	Current	Prior	Daily Change		Current	Prior	Daily Change		Current	Prior	Daily Change
JUL 20	324421	364219	-39798	JUL 20	78374	82323	-3949.25	JUL 20			
AUG 20	108166	97434	10732	AUG 20	81618	82744	-1126	AUG 20			
SEP 20	152044	150979	1065	SEP 20	68930	69454	-523.75	SEP 20			
OCT 20	118795	119504	-709	OCT 20	82009	81277	732.5	OCT 20			
NOV 20	52453	53343	-890	NOV 20	61542	61414	127.75	NOV 20			
DEC 20	59367	59372	-5	DEC 20	58459	58540	-80.5	DEC 20			
JAN 21	104965	105462	-497	JAN 21	72840	72089	751.25	JAN 21			
FEB 21	37718	37091	627	FEB 21	45593	45146	447.75	FEB 21			
MAR 21	68404	66635	1769	MAR 21	61798	61298	499.5	MAR 21			
APR 21	69826	69963	-137	APR 21	49570	49735	-165.25	APR 21			
MAY 21	25806	25637	169	MAY 21	45404	44960	444.5	MAY 21			
JUN 21	16371	16518	-147	JUN 21	43101	42613	487.5	JUN 21			
JUL 21	13338	13239	99	JUL 21	43842	43521	320.5	JUL 21			
AUG 21	10698	10670	28	AUG 21	44533	44231	302	AUG 21			
SEP 21	12201	11987	214	SEP 21	42287	41822	465.25	SEP 21			
OCT 21	28456	27026	1430	OCT 21	54213	53792	421	OCT 21			
NOV 21	17459	17135	324	NOV 21	36402	36197	204.25	NOV 21			
DEC 21	14620	14467	153	DEC 21	36792	36707	85.25	DEC 21			
JAN 22	11715	11801	-86	JAN 22	28855	28723	132.5	JAN 22			
FEB 22	8540	8391	149	FEB 22	25556	25422	134.5	FEB 22			
MAR 22	14907	13824	1083	MAR 22	27410	27220	190.25	MAR 22			
APR 22	10665	10641	24	APR 22	24158	23608	550.5	APR 22			
MAY 22	4672	4648	24	MAY 22	21808	21207	600.75	MAY 22			
JUN 22	2060	2070	-10	JUN 22	20986	20905	80.5	JUN 22			
JUL 22	1785	1803	-18	JUL 22	21535	21472	63	JUL 22			
AUG 22	1243	1262	-19	AUG 22	21291	21212	79.25	AUG 22			
SEP 22	1311	1330	-19	SEP 22	21058	20985	73	SEP 22			
OCT 22	1880	1899	-19	OCT 22	23822	23703	119	OCT 22			
NOV 22	1345	1364	-19	NOV 22	18871	18836	34.75	NOV 22			
DEC 22	1261	1279	-18	DEC 22	19900	19865	35.25	DEC 22			

Source: CME, Nasdaq, ICE





	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21
Current Price	\$1.772	\$1.873	\$1.927	\$2.013	\$2.352	\$2.798	\$2.934	\$2.897	\$2.782	\$2.478	\$2.449	\$2.478
Last Week	\$1.774	\$1.871	\$1.924	\$2.009	\$2.345	\$2.784	\$2.930	\$2.895	\$2.777	\$2.492	\$2.469	\$2.508
vs. Last Week	-\$0.002	\$0.002	\$0.003	\$0.004	\$0.007	\$0.014	\$0.004	\$0.002	\$0.005	-\$0.014	-\$0.020	-\$0.030
4 Weeks Ago	\$1.826	\$2.085	\$2.160	\$2.213	\$2.299	\$2.551	\$2.883	\$3.023	\$2.984	\$2.848	\$2.564	\$2.530
vs. 4 Weeks Ago	-\$0.054	-\$0.212	-\$0.233	-\$0.200	\$0.053	\$0.247	\$0.051	-\$0.126	-\$0.202	-\$0.370	-\$0.115	-\$0.052
Last Year	\$2.357	\$2.350	\$2.335	\$2.382	\$2.467	\$2.667	\$2.783	\$2.758	\$2.683	\$2.488	\$2.467	\$2.502
vs. Last Year	-\$0.585	-\$0.477	-\$0.408	-\$0.369	-\$0.115	\$0.131	\$0.151	\$0.139	\$0.099	-\$0.010	-\$0.018	-\$0.024

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	1.40	1.61	0.21
TETCO M3	\$/MMBtu	1.37	1.54	0.17
FGT Zone 3	\$/MMBtu	1.49	1.87	0.37
Zone 6 NY	\$/MMBtu	1.49	1.56	0.07
Chicago Citygate	\$/MMBtu	1.59	1.72	0.13
Michcon	\$/MMBtu	1.60	1.69	0.09
Columbia TCO Pool	\$/MMBtu	1.42	1.57	0.15
Ventura	\$/MMBtu	1.56	1.68	0.12
Rockies/Opal	\$/MMBtu	1.53	1.57	0.03
El Paso Permian Basin	\$/MMBtu	1.44	1.50	0.06
Socal Citygate	\$/MMBtu	2.05	2.06	0.01
Malin	\$/MMBtu	1.55	1.67	0.12
Houston Ship Channel	\$/MMBtu	1.70	1.84	0.14
Henry Hub Cash	\$/MMBtu	1.80	1.69	-0.12
AECO Cash	C\$/GJ	1.51	1.43	-0.08
Station2 Cash	C\$/GJ	1.48	1.71	0.23
Dawn Cash	C\$/GJ	1.64	1.69	0.05

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks		vs. Last Year
				Ago		
NatGas Jan/Apr	\$/MMBtu	-0.52	▲ 0.000	▲ 0.000	▼ -0.238	
NatGas Mar/Apr	\$/MMBtu	0.187	▲ 0.000	▲ 0.000	▲ 0.006	
NatGas Oct/Nov	\$/MMBtu	0.34	▲ 0.018	▲ 0.091	▲ 0.280	
NatGas Oct/Jan	\$/MMBtu	0.92	▲ 0.035	▲ 0.196	▲ 0.599	
WTI Crude	\$/Bbl	39.55	▲ 4.060	▲ 14.810	▼ -14.440	
Brent Crude	\$/Bbl	42.30	▲ 6.970	▲ 11.330	▼ -20.990	
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000	
Heating Oil	cents/Gallon	115.06	▲ 18.590	▲ 25.130	▼ -67.420	
Propane, Mt. Bel	cents/Gallon	0.52	▲ 0.107	▲ 0.148	▲ 0.053	
Ethane, Mt. Bel	cents/Gallon	0.24	▲ 0.013	▲ 0.032	▲ 0.050	
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▼ -0.150	
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▼ -9.500	