

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 1.73	▼ \$ (0.04)	▼ \$ (0.07)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 38.00	▼ \$ (0.94)	▼ \$ (0.6)

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 40.40	▼ \$ (0.78)	▼ \$ (0.8)

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	1.4	1.3	2.1	4.9
24 Hr Chg	2.4	-0.1	2.5	4.8

GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	2.5	5.4	3.3	11.1
24 Hr Chg	-0.4	1.4	1.6	2.6

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	83.8	▼ -0.42	▼ -0.45

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	36.5	▲ 0.48	▲ 2.68

	Current	Δ from YD	Δ from 7D Avg
US ResComm	8.0	▼ -0.46	▼ -0.06

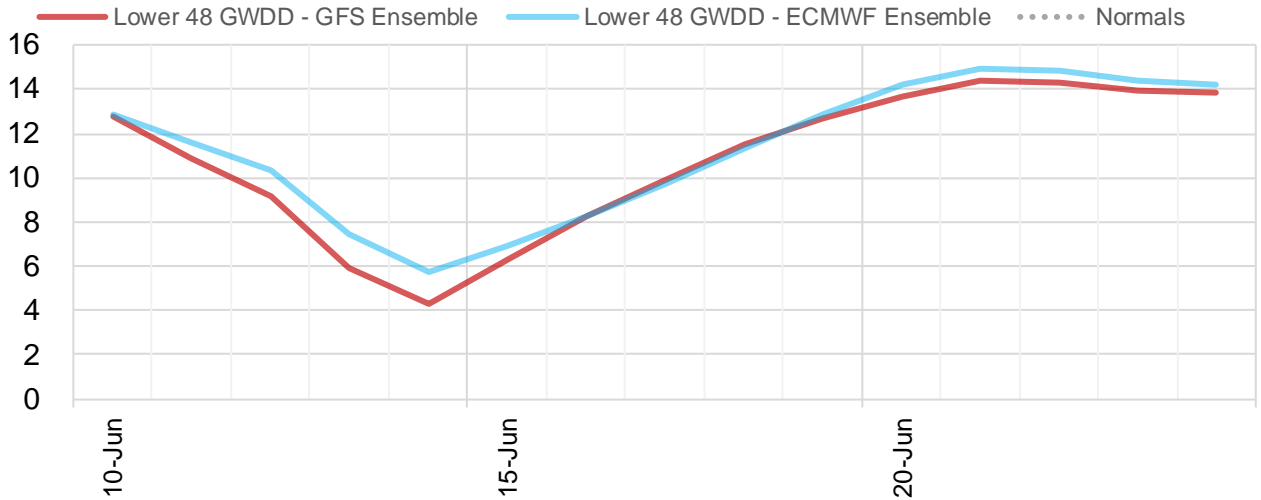
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	3.7	▼ -0.12	▼ -0.30

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	3.9	▲ 0.41	▼ -0.21

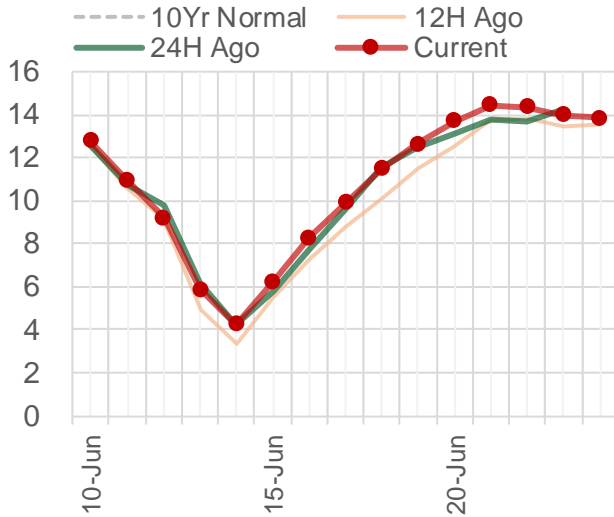
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.9	▲ 0.07	▲ 0.35

Short-term Weather Model Outlooks (00z)

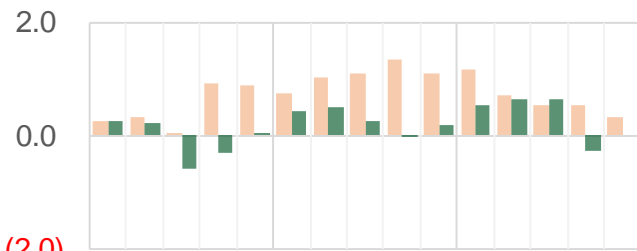
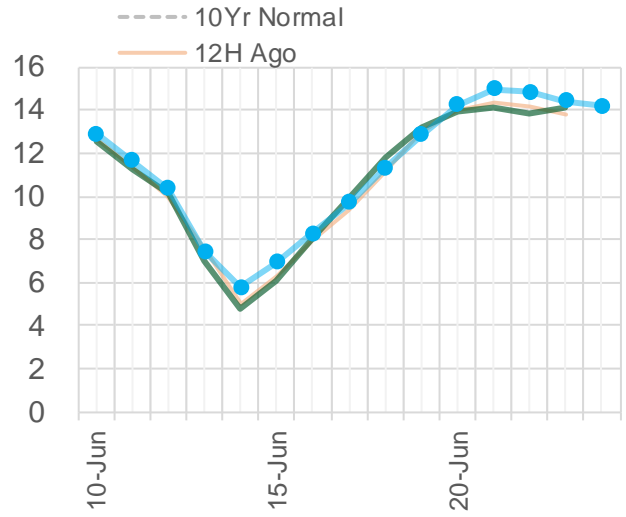
Lower 48 TDD Forecast



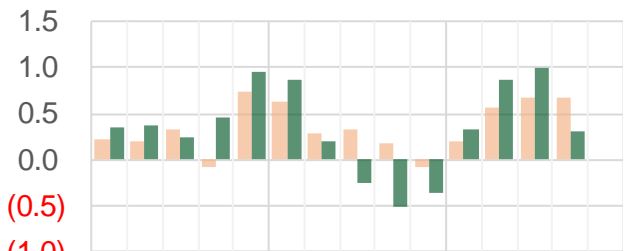
Lower 48 GWDD - GFS Ensemble



Lower 48 GWDD - ECMWF Ensemble



(2.0)



(0.5)

(1.0)

Source: WSI, Bloomberg

Lower 48 Component Models

Daily Balances

	4-Jun	5-Jun	6-Jun	7-Jun	8-Jun	9-Jun	10-Jun	DoD	vs. 7D
Lower 48 Dry Production	84.4	84.5	84.2	83.8	84.4	84.2	83.8	▼ -0.4	▼ -0.4
Canadian Imports	4.7	4.5	3.5	3.4	3.4	3.8	3.7	▼ -0.1	▼ -0.2
L48 Power	35.9	34.8	31.4	30.0	32.7	36.0	36.5	▲ 0.5	▲ 3.0
L48 Residential & Commercial	7.9	7.7	7.8	8.3	8.4	8.5	8.0	▼ -0.5	▼ -0.1
L48 Industrial	18.2	18.1	18.1	18.1	18.2	18.4	18.5	▲ 0.1	▲ 0.3
L48 Lease and Plant Fuel	4.8	4.8	4.7	4.7	4.8	4.7	4.7	▼ 0.0	▼ 0.0
L48 Pipeline Distribution	2.1	2.0	1.9	1.8	2.0	2.1	2.1	▲ 0.0	▲ 0.1
L48 Regional Gas Consumption	68.9	67.4	63.9	62.9	66.0	69.8	69.9	▲ 0.0	▲ 3.4
Net LNG Exports	5.2	4.4	3.9	3.8	3.6	3.5	3.9	▲ 0.4	▼ -0.1
Total Mexican Exports	5.7	5.8	5.4	5.2	5.5	5.8	5.9	▲ 0.1	▲ 0.3
Implied Daily Storage Activity	9.2	11.4	14.5	15.3	12.8	8.8	7.8		
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	30.1	32.1	▲ 2.0	▲ 5.5
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	18.8	19.3	18.5	▼ -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	1.9	1.9	2.0	▲ 0.1	▲ 0.0
L48 Regional Gas Consumption	67.0	64.6	68.7	62.9	64.1	65.8	▲ 1.8	▲ 0.8
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	5.3	▲ 0.4	▲ 0.4
Implied Daily Storage Activity	14.0	13.5	10.2	13.7	12.9	12.5	-0.4	
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	3.9	▲ 0.0	▼ -0.8
L48 Power	31.8	33.0	30.0	28.3	25.7	26.9	33.7	▲ 6.8	▲ 0.7
L48 Residential & Commercial	8.6	9.0	39.9	27.7	21.6	12.8	8.2	▼ -4.5	▼ -0.7
L48 Industrial	21.3	21.4	24.3	21.6	18.9	18.6	18.3	▼ -0.3	▼ -3.1
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	▲ 0.1	▼ 0.0
L48 Regional Gas Consumption	68.2	70.4	102.3	85.4	73.6	64.9	67.0	▲ 2.1	▼ -3.4
Net LNG Exports	3.2	5.5	8.5	8.5	8.2	6.7	4.0	▼ -2.7	▼ -1.5
Total Mexican Exports	4.5	5.3	5.3	5.6	4.9	4.9	5.6	▲ 0.7	▲ 0.3
Implied Daily Storage Activity	11.3	13.1	-19.0	-3.1	8.4	12.7	11.6		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

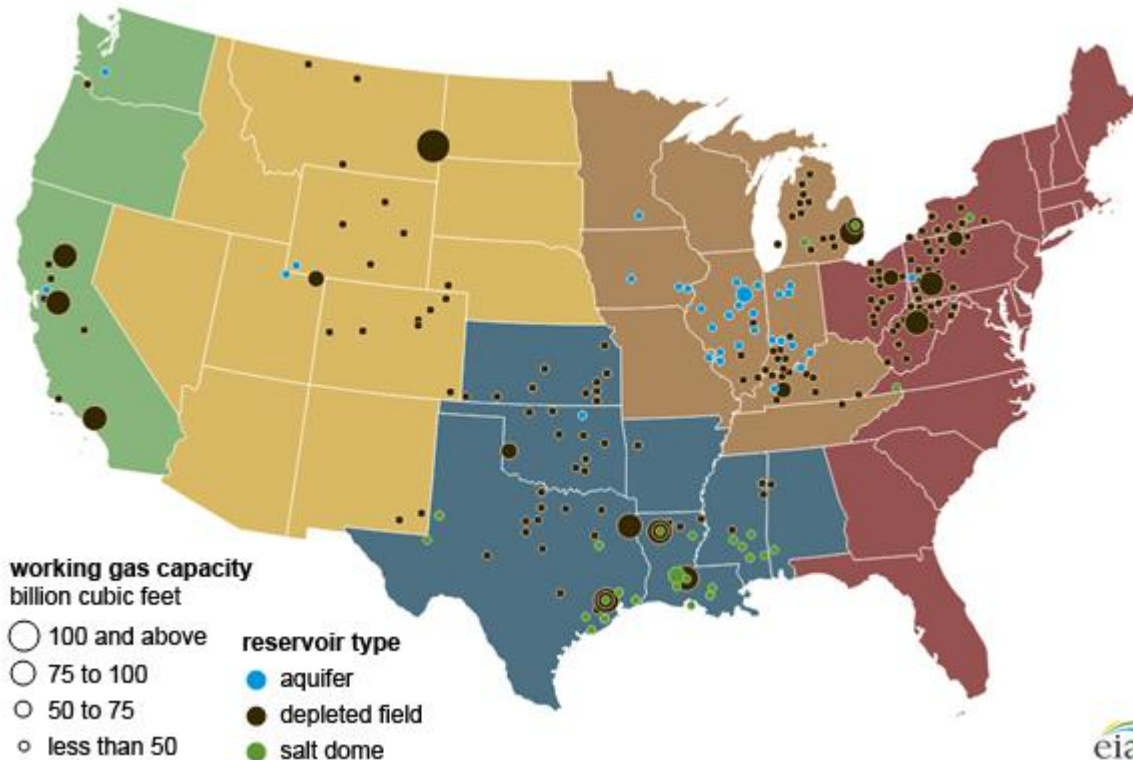
Regional S/D Models Storage Projection

Week Ending 5-Jun

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	12.2	1.9	14.1	97
East	1.8	2.2	4.0	28
Midwest	4.0	0.5	4.5	30
Mountain	3.6	-2.1	1.5	10
South Central	1.5	1.7	3.2	22
Pacific	1.4	-0.5	0.9	7

*Adjustment Factor is calculated based on historical regional deltas

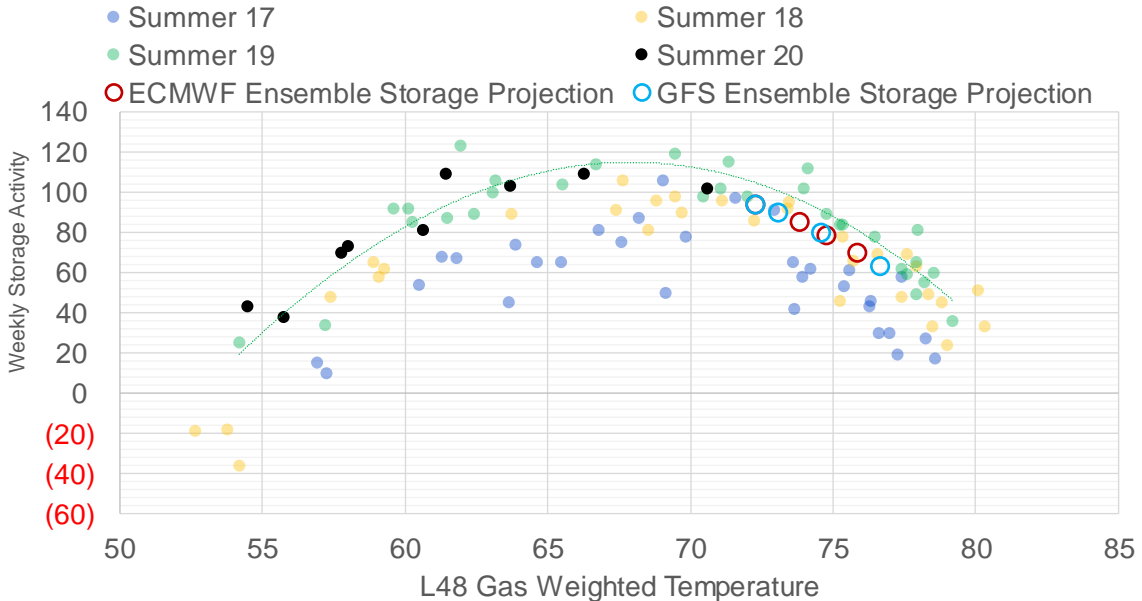
U.S. underground natural gas storage facilities by type (July 2015)



Weather Model Storage Projection

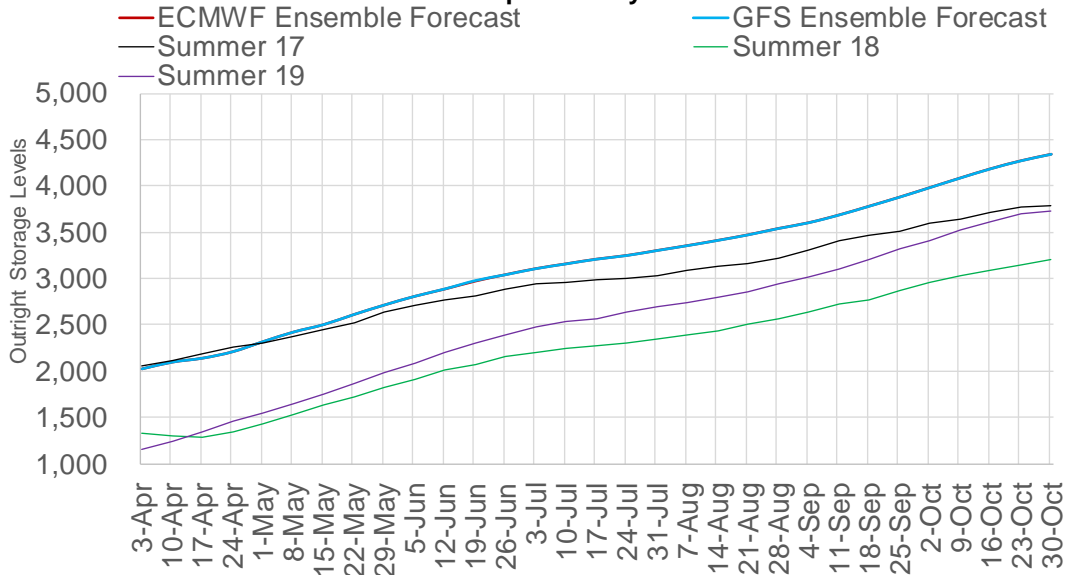
Week Ending	Week Storage Projection
5-Jun	94
12-Jun	80
19-Jun	88
26-Jun	67

Weather Storage Model - Next 4 Week Forecast



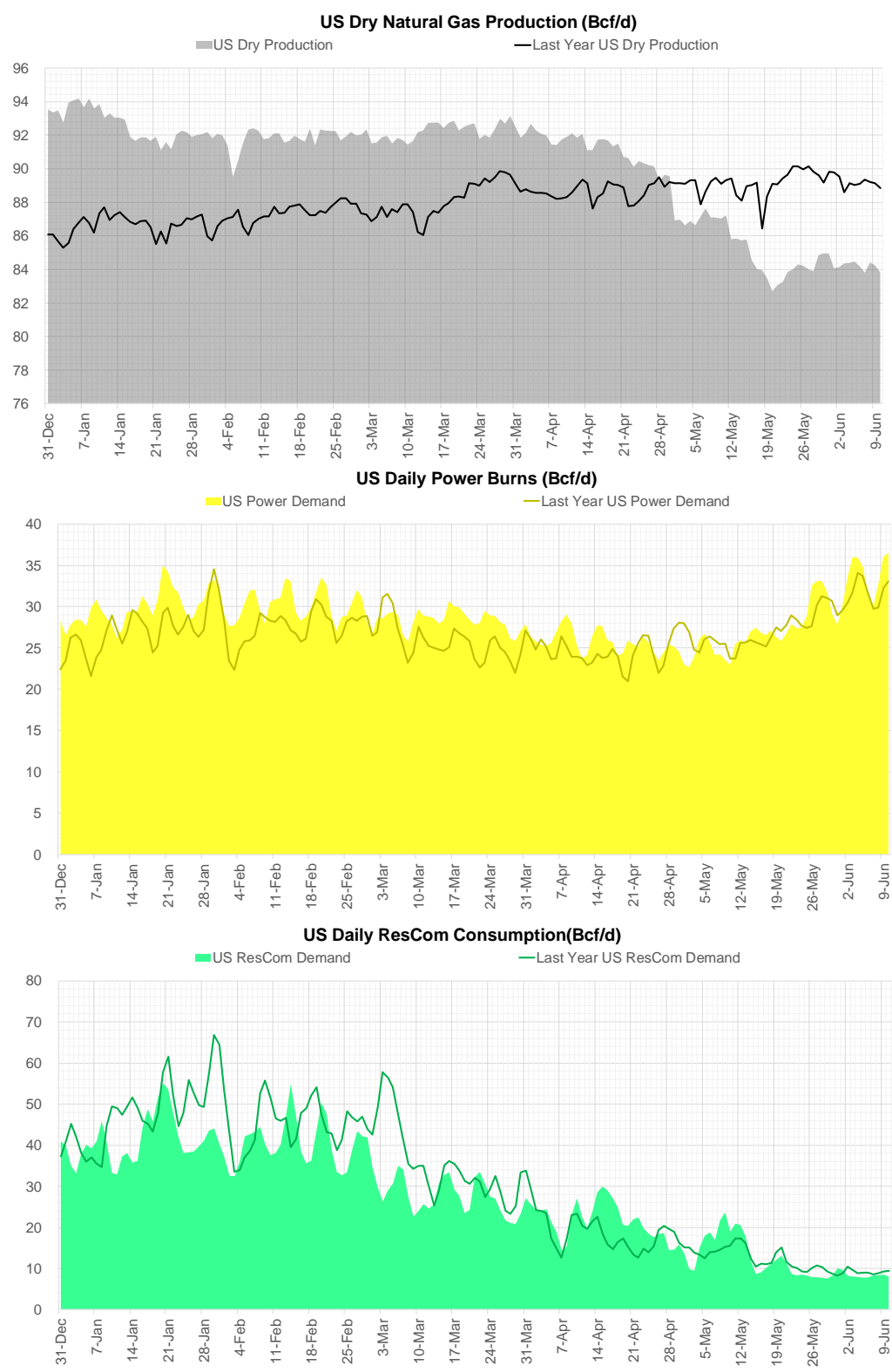
Weather Based End of Winter Projection (Bcf)

10Y normals past 15 day forecast window



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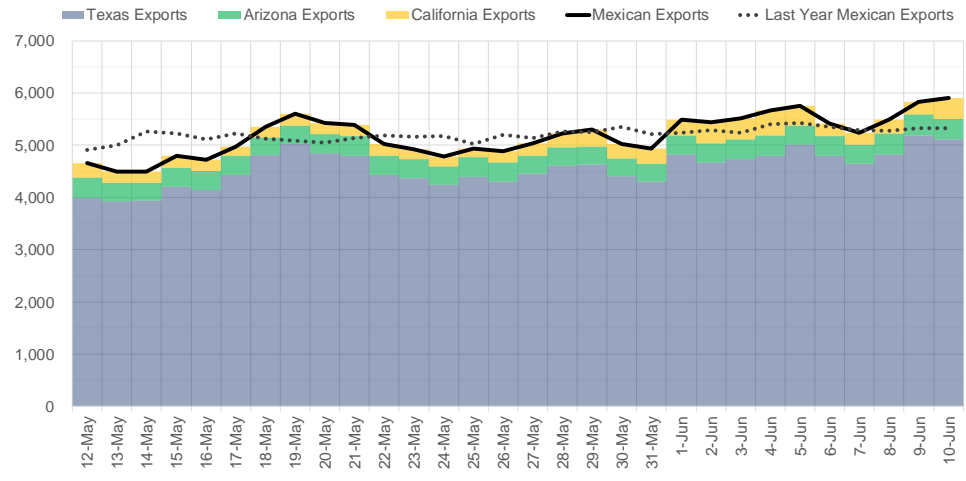
Supply – Demand Trends



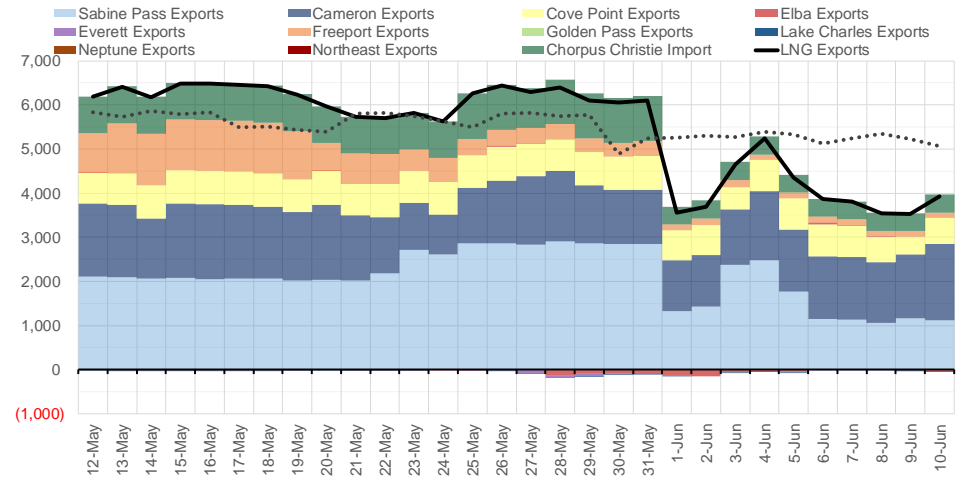
Source: Bloomberg

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Mexican Exports - Last 30 days (MMcf/d)



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



Source: Bloomberg

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

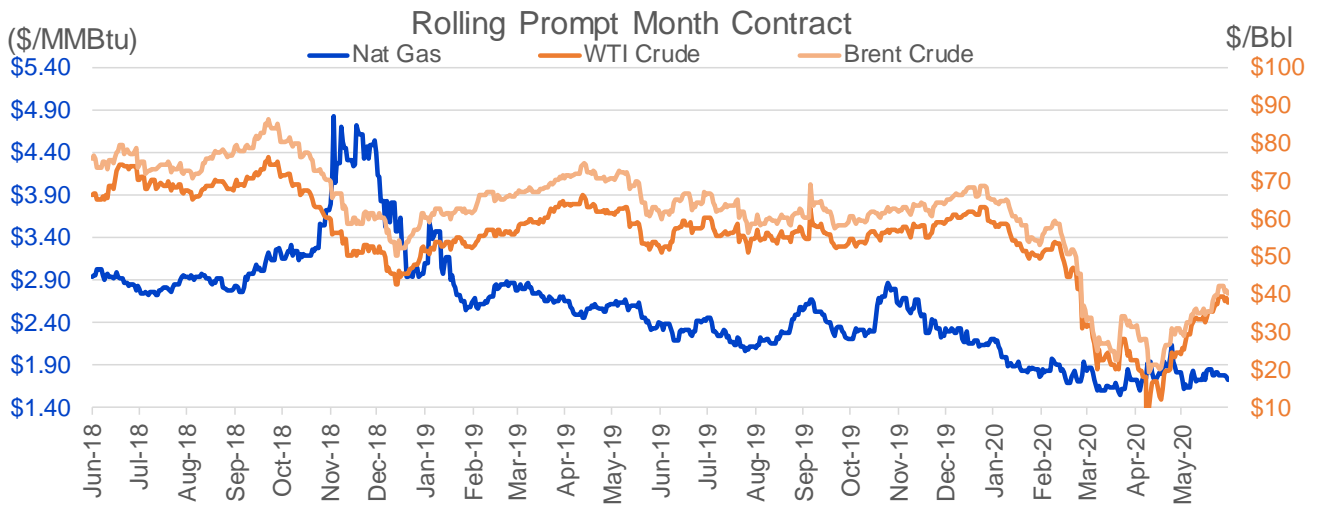
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
7	2020	C	1.95	8404	10	2020	P	1.50	37373
10	2020	P	1.75	7124	10	2020	C	3.00	35695
10	2020	P	1.50	7045	3	2021	P	2.00	32737
7	2020	P	1.75	6898	10	2020	C	2.75	32519
7	2020	C	2.00	5127	10	2020	P	1.60	32295
8	2020	C	2.50	3207	7	2020	P	1.50	30475
7	2020	P	1.60	3016	7	2020	P	1.75	30221
11	2020	C	4.00	2901	10	2020	C	2.50	27644
9	2020	P	1.50	2318	10	2020	P	2.00	27523
8	2020	P	1.65	1504	7	2020	C	2.50	25797
11	2020	P	1.50	1407	9	2020	C	2.50	25489
7	2020	C	1.90	1393	10	2020	P	1.25	24611
11	2020	P	1.80	1300	9	2020	P	1.50	22759
12	2020	C	4.00	1291	8	2020	P	1.50	21960
8	2020	C	2.25	1150	10	2020	P	1.75	21486
7	2020	P	1.65	1102	8	2020	C	2.50	21204
12	2020	C	3.50	1100	7	2020	C	2.25	20099
10	2020	P	1.80	1000	7	2020	P	2.00	19906
10	2020	P	1.90	1000	7	2020	C	2.00	19889
3	2021	C	7.00	1000	9	2020	P	1.00	19731
9	2020	P	1.85	951	7	2020	C	3.00	19520
1	2021	C	3.05	950	9	2020	C	2.75	19444
7	2020	C	1.80	914	9	2020	P	1.75	18223
8	2020	P	1.50	880	10	2020	C	2.25	18201
10	2020	C	2.25	852	10	2020	P	2.10	18144
7	2020	P	1.50	800	7	2020	C	2.30	17894
9	2020	P	1.60	778	11	2020	C	4.00	17864
1	2021	C	3.50	726	1	2021	C	3.50	17676
1	2021	C	3.00	700	8	2020	P	1.00	17383
9	2020	P	1.75	695	1	2021	C	3.00	17118
7	2020	P	1.80	679	10	2020	C	3.25	16509
7	2020	C	1.85	670	7	2020	C	2.75	16365
1	2021	C	3.25	650	7	2020	P	1.60	16134
8	2020	P	1.75	603	10	2020	P	1.00	16100
10	2020	P	1.60	542	9	2020	P	1.20	15342
7	2020	P	1.70	519	8	2020	P	1.20	15287
5	2021	C	3.00	500	3	2021	C	3.00	15146
9	2020	C	2.25	493	9	2020	C	2.25	15117
9	2020	P	1.25	459	9	2020	C	3.00	14949
7	2020	C	2.05	455	4	2021	C	3.00	14704
8	2020	P	1.55	455	10	2020	P	1.20	14644
11	2020	C	3.25	450	8	2020	C	3.00	14634
7	2020	C	2.10	443	7	2020	P	1.25	14618
8	2020	P	1.60	408	7	2020	C	2.35	14044
8	2020	P	1.70	400	8	2020	C	2.75	13856
11	2020	P	1.85	400	9	2020	P	2.00	13652
11	2020	P	2.15	400	8	2020	C	2.25	13644
8	2020	C	2.05	363	8	2020	P	1.75	13295
10	2020	C	2.40	351	7	2020	C	1.95	13260
					7	2020	P	1	13088

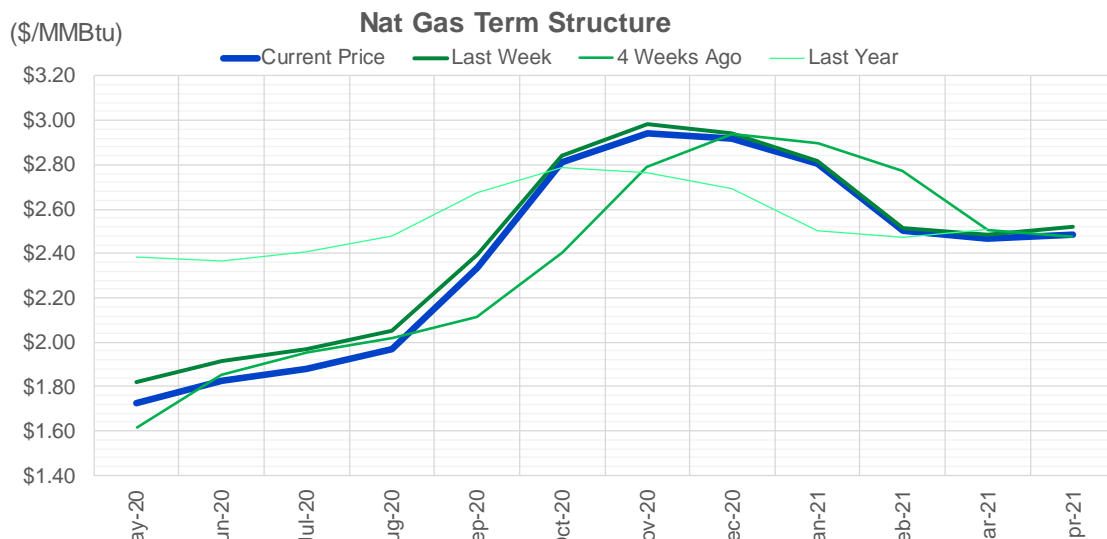
Source: CME, Nasdaq, ICE

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	241559	284913	-43354	JUL 20	75167	78374	-3206.75	JUL 20			
AUG 20	134236	119997	14239	AUG 20	81173	81618	-444.75	AUG 20			
SEP 20	168076	160777	7299	SEP 20	67919	68930	-1011.75	SEP 20			
OCT 20	118208	120603	-2395	OCT 20	82331	82009	321.75	OCT 20			
NOV 20	51817	51872	-55	NOV 20	61187	61542	-355	NOV 20			
DEC 20	60133	59855	278	DEC 20	58324	58459	-135.25	DEC 20			
JAN 21	105751	105883	-132	JAN 21	72593	72840	-247.5	JAN 21			
FEB 21	37829	36984	845	FEB 21	45625	45593	32	FEB 21			
MAR 21	73416	70107	3309	MAR 21	62196	61798	397.75	MAR 21			
APR 21	70603	70359	244	APR 21	49540	49570	-30	APR 21			
MAY 21	25457	25651	-194	MAY 21	46494	45404	1089.25	MAY 21			
JUN 21	17785	17124	661	JUN 21	43091	43101	-10.25	JUN 21			
JUL 21	13850	13582	268	JUL 21	44073	43842	231	JUL 21			
AUG 21	10888	10756	132	AUG 21	44759	44533	226.25	AUG 21			
SEP 21	12792	12436	356	SEP 21	42258	42287	-29.25	SEP 21			
OCT 21	29270	29088	182	OCT 21	54125	54213	-87.25	OCT 21			
NOV 21	17765	17658	107	NOV 21	36482	36402	80.75	NOV 21			
DEC 21	15009	14775	234	DEC 21	37136	36792	344.25	DEC 21			
JAN 22	11494	11365	129	JAN 22	29210	28855	354.5	JAN 22			
FEB 22	8516	8518	-2	FEB 22	25759	25556	202.25	FEB 22			
MAR 22	14823	14797	26	MAR 22	27705	27410	294.5	MAR 22			
APR 22	10684	10684	0	APR 22	24195	24158	36.5	APR 22			
MAY 22	4670	4672	-2	MAY 22	21864	21808	56	MAY 22			
JUN 22	2061	2060	1	JUN 22	21033	20986	47	JUN 22			
JUL 22	1788	1788	0	JUL 22	21577	21535	41.5	JUL 22			
AUG 22	1243	1243	0	AUG 22	21335	21291	44	AUG 22			
SEP 22	1311	1311	0	SEP 22	21105	21058	47	SEP 22			
OCT 22	1882	1882	0	OCT 22	23869	23822	46.25	OCT 22			
NOV 22	1344	1344	0	NOV 22	19158	18871	287	NOV 22			
DEC 22	1261	1261	0	DEC 22	19879	19900	-20.75	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	\$1.727	\$1.824	\$1.878	\$1.970	\$2.334	\$2.808	\$2.944	\$2.915	\$2.806	\$2.502	\$2.465	\$2.482
Last Week	\$1.821	\$1.915	\$1.969	\$2.053	\$2.396	\$2.840	\$2.981	\$2.941	\$2.817	\$2.515	\$2.484	\$2.521
vs. Last Week	-\$0.094	-\$0.091	-\$0.091	-\$0.083	-\$0.062	-\$0.032	-\$0.037	-\$0.026	-\$0.011	-\$0.013	-\$0.019	-\$0.039
4 Weeks Ago	\$1.616	\$1.856	\$1.957	\$2.018	\$2.113	\$2.404	\$2.789	\$2.936	\$2.897	\$2.775	\$2.504	\$2.477
vs. 4 Weeks Ago	\$0.111	-\$0.032	-\$0.079	-\$0.048	\$0.221	\$0.404	\$0.155	-\$0.021	-\$0.091	-\$0.273	-\$0.039	\$0.005
Last Year	\$2.386	\$2.381	\$2.365	\$2.406	\$2.481	\$2.673	\$2.789	\$2.764	\$2.691	\$2.503	\$2.475	\$2.510
vs. Last Year	-\$0.659	-\$0.557	-\$0.487	-\$0.436	-\$0.147	\$0.135	\$0.155	\$0.151	\$0.115	-\$0.001	-\$0.010	-\$0.028

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	1.80	1.56	-0.24
TETCO M3	\$/MMBtu	1.60	1.48	-0.12
FGT Zone 3	\$/MMBtu	1.56	1.81	0.25
Zone 6 NY	\$/MMBtu	1.56	1.49	-0.08
Chicago Citygate	\$/MMBtu	1.62	1.67	0.05
Michcon	\$/MMBtu	1.68	1.65	-0.03
Columbia TCO Pool	\$/MMBtu	1.48	1.52	0.04
Ventura	\$/MMBtu	1.56	1.64	0.08
Rockies/Opal	\$/MMBtu	1.67	1.53	-0.14
El Paso Permian Basin	\$/MMBtu	1.17	1.52	0.35
Socal Citygate	\$/MMBtu	2.15	1.98	-0.17
Malin	\$/MMBtu	1.50	1.63	0.13
Houston Ship Channel	\$/MMBtu	1.70	1.79	0.09
Henry Hub Cash	\$/MMBtu	1.68	1.63	-0.05
AECO Cash	C\$/GJ	1.44	1.41	-0.03
Station2 Cash	C\$/GJ	1.43	1.67	0.24
Dawn Cash	C\$/GJ	1.64	1.63	-0.01

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	▼ -0.229	
NatGas Mar/Apr	\$/MMBtu	0.187	▲ 0.000	▲ 0.000	▼ -0.008	
NatGas Oct/Nov	\$/MMBtu	0.34	▲ 0.004	▲ 0.088	▲ 0.282	
NatGas Oct/Jan	\$/MMBtu	0.93	▲ 0.004	▲ 0.201	▲ 0.599	
WTI Crude	\$/Bbl	38.19	▲ 2.750	▲ 14.050	▼ -15.070	
Brent Crude	\$/Bbl	40.80	▲ 2.480	▲ 11.170	▼ -21.490	
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000	
Heating Oil	cents/Gallon	112.13	▲ 9.230	▲ 25.260	▼ -68.500	
Propane, Mt. Bel	cents/Gallon	0.50	▲ 0.021	▲ 0.131	▲ 0.060	
Ethane, Mt. Bel	cents/Gallon	0.23	▼ -0.010	▲ 0.028	▲ 0.053	
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▼ -0.150	
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▼ -9.500	