

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 1.67	▲ \$ 0.00	▼ \$ (0.07)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 37.85	▲ \$ 0.73	▲ \$ 0.6

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 40.58	▲ \$ 0.86	▲ \$ 1.0

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00z GWDD Change

Cooler Change

Warmer Change

ECMWF Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	1.1	1.8	1.5	4.3
24 Hr Chg	-1.9	-0.6	-3.6	-6.0

GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	0.0	4.7	2.0	6.7
24 Hr Chg	0.8	3.1	2.4	6.2

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	83.8	▼ -0.84	▼ -0.72

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	33.3	▲ 2.20	▲ 0.51

	Current	Δ from YD	Δ from 7D Avg
US ResComm	8.2	▼ -0.41	▼ -0.25

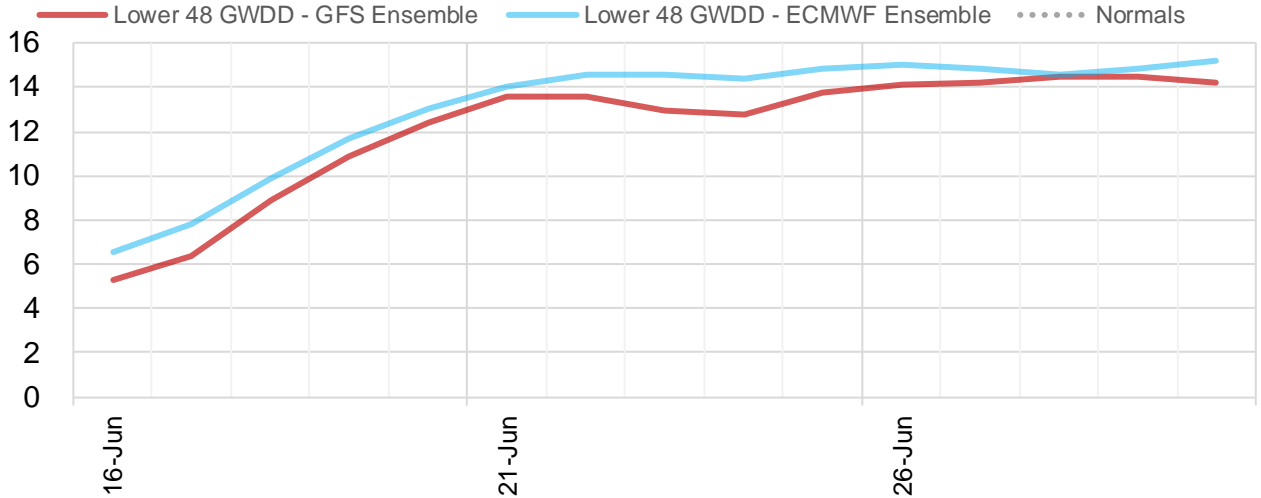
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	3.8	▲ 0.22	▲ 0.08

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	3.7	▼ -0.10	▼ -0.14

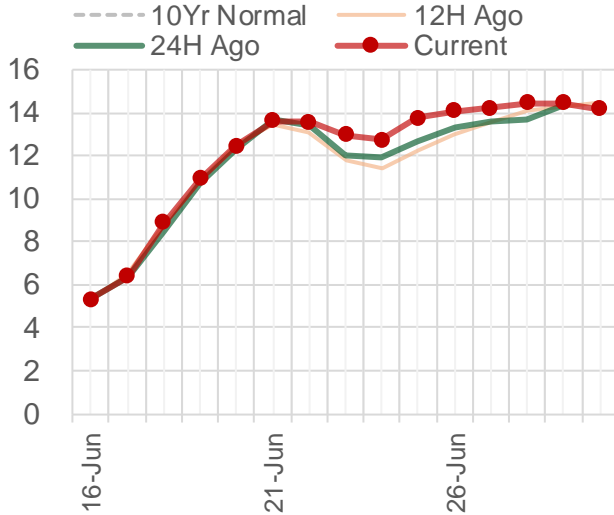
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.4	▼ -0.14	▼ -0.27

Short-term Weather Model Outlooks (00z)

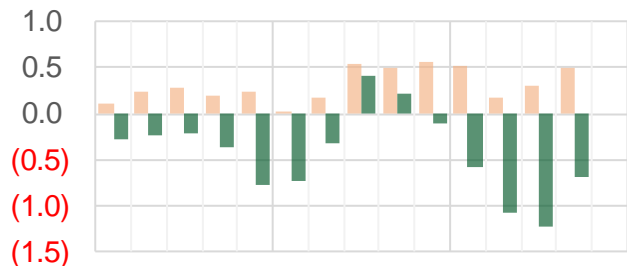
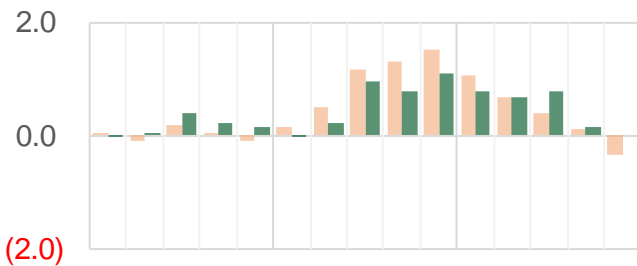
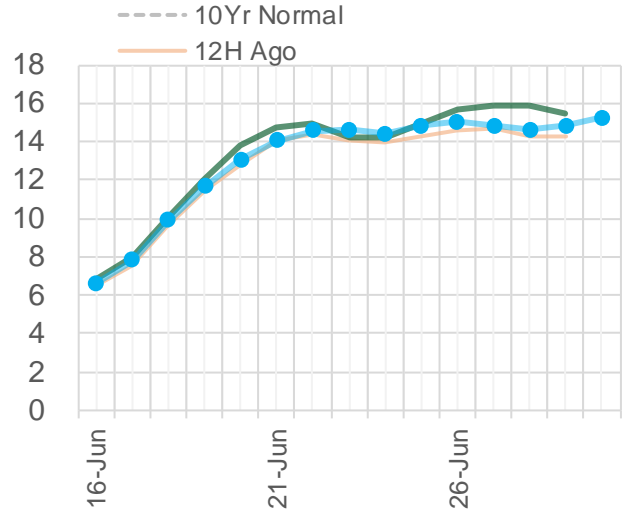
Lower 48 TDD Forecast



Lower 48 GWDD - GFS Ensemble



Lower 48 GWDD - ECMWF Ensemble



Source: WSI, Bloomberg

Lower 48 Component Models

Daily Balances

	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun	DoD	vs. 7D
Lower 48 Dry Production	84.6	84.2	84.3	84.7	84.7	84.6	83.8	▼ -0.8	▼ -0.7
Canadian Imports	4.0	4.1	3.9	3.3	3.3	3.6	3.8	▲ 0.2	▲ 0.1
L48 Power	37.1	34.1	32.9	28.9	28.7	31.1	33.3	▲ 2.2	▲ 1.1
L48 Residential & Commercial	8.2	7.8	8.2	8.8	8.9	8.6	8.2	▼ -0.4	▼ -0.2
L48 Industrial	18.6	18.1	17.9	17.6	17.5	17.5	17.6	▲ 0.1	▼ -0.3
L48 Lease and Plant Fuel	4.8	4.7	4.8	4.8	4.8	4.8	4.7	▼ 0.0	▼ 0.0
L48 Pipeline Distribution	2.2	2.0	2.0	1.8	1.8	1.9	2.0	▲ 0.1	▲ 0.0
L48 Regional Gas Consumption	70.9	66.8	65.8	62.0	61.6	63.8	65.7	▲ 1.9	▲ 0.6
Net LNG Exports	4.0	4.2	3.9	3.9	3.8	3.8	3.7	▼ -0.1	▼ -0.2
Total Mexican Exports	6.2	6.0	5.8	5.2	4.9	5.5	5.4	▼ -0.1	▼ -0.2
Implied Daily Storage Activity	7.5	11.4	12.7	16.8	17.6	15.1	12.8		
EIA Reported Daily Storage Activity									
Daily Model Error									

EIA Storage Week Balances

	8-May	15-May	22-May	29-May	5-Jun	12-Jun	WoW	vs. 4W
Lower 48 Dry Production	87.0	86.6	84.0	84.0	84.5	84.3	▼ -0.2	▼ -0.5
Canadian Imports	3.6	4.0	4.1	4.1	4.2	3.8	▼ -0.4	▼ -0.3
L48 Power	24.6	25.0	26.7	30.0	32.0	33.8	▲ 1.7	▲ 5.3
L48 Residential & Commercial	14.5	19.3	10.8	8.2	8.5	8.1	▼ -0.4	▼ -3.6
L48 Industrial	18.7	17.4	18.9	19.3	19.2	18.7	▼ -0.5	▲ 0.0
L48 Lease and Plant Fuel	4.9	4.8	4.7	4.7	4.7	4.7	▲ 0.0	▲ 0.0
L48 Pipeline Distribution	1.9	2.2	1.9	1.9	2.0	2.0	▲ 0.0	▲ 0.0
L48 Regional Gas Consumption	64.6	68.7	62.9	64.1	66.5	67.4	▲ 0.9	▲ 1.8
Net LNG Exports	7.7	6.9	6.3	6.1	5.1	3.9	▼ -1.2	▼ -2.2
Total Mexican Exports	4.7	4.7	5.2	5.0	5.3	5.7	▲ 0.4	▲ 0.7
Implied Daily Storage Activity	13.5	10.2	13.7	12.9	11.8	11.2	-0.7	
EIA Reported Daily Storage Activity	14.7	11.6	15.6	14.6	13.3			
Daily Model Error	-1.2	-1.3	-1.9	-1.7	-1.5			

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	84.3	▼ -1.0	▼ -5.2
Canadian Imports	5.6	4.7	5.2	4.1	3.9	3.9	3.9	▼ -0.1	▼ -0.9
L48 Power	31.8	33.0	30.0	28.3	25.7	26.9	32.9	▲ 6.1	▼ 0.0
L48 Residential & Commercial	8.6	9.0	39.9	27.7	21.6	12.8	8.3	▼ -4.4	▼ -0.6
L48 Industrial	21.3	21.4	24.3	21.6	18.9	18.7	18.5	▼ -0.2	▼ -2.9
L48 Lease and Plant Fuel	4.5	5.0	5.2	5.2	5.2	4.8	4.8	▼ 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	65.0	66.5	▲ 1.4	▼ -3.9
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	▲ 0.6	▲ 0.2
Implied Daily Storage Activity	11.3	13.1	-19.0	-3.1	8.4	12.7	12.2		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

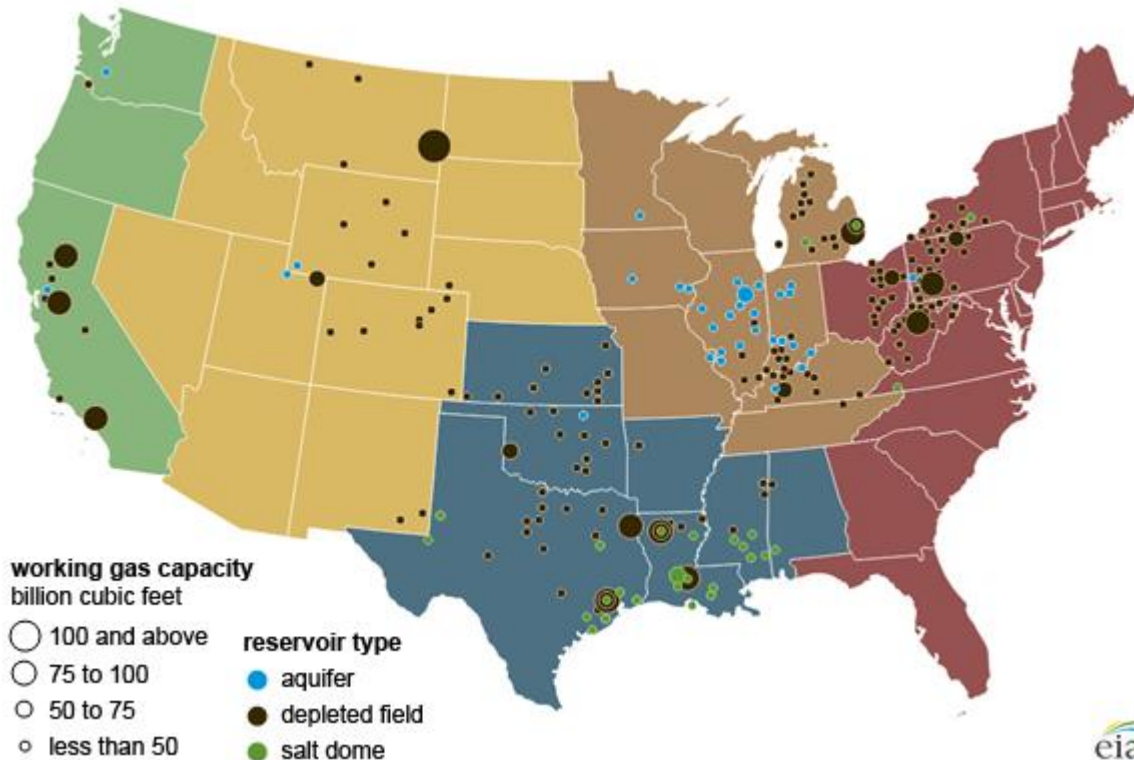
Regional S/D Models Storage Projection

Week Ending 12-Jun

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	10.9	1.8	12.7	89
East	1.6	2.2	3.8	27
Midwest	4.2	0.4	4.5	32
Mountain	2.9	-2.2	0.7	5
South Central	0.7	1.8	2.5	18
Pacific	1.5	-0.3	1.2	8

*Adjustment Factor is calculated based on historical regional deltas

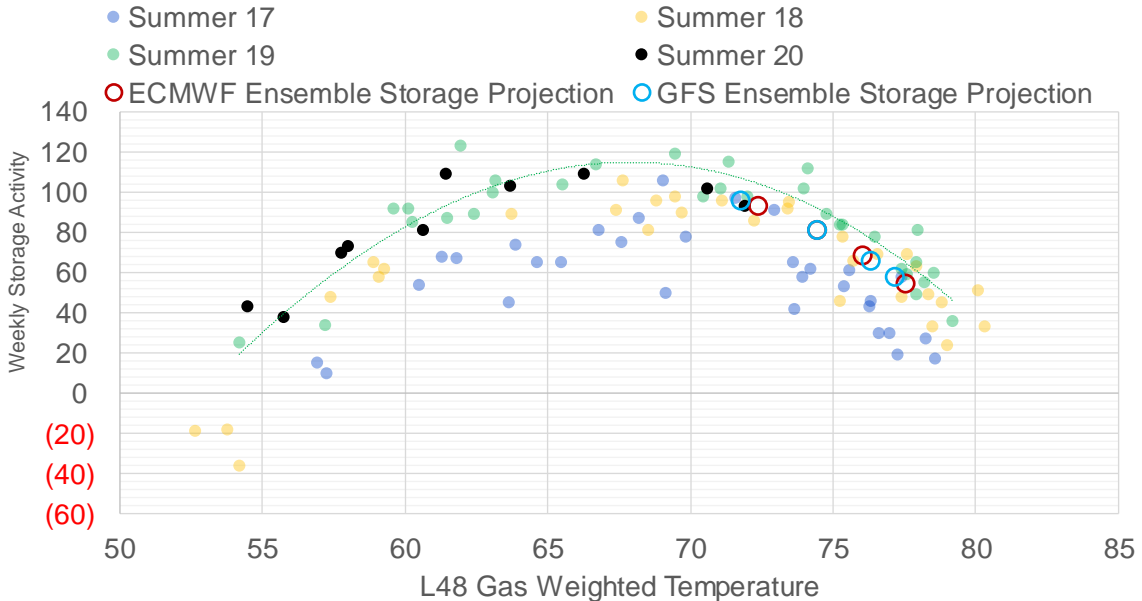
U.S. underground natural gas storage facilities by type (July 2015)



Weather Model Storage Projection

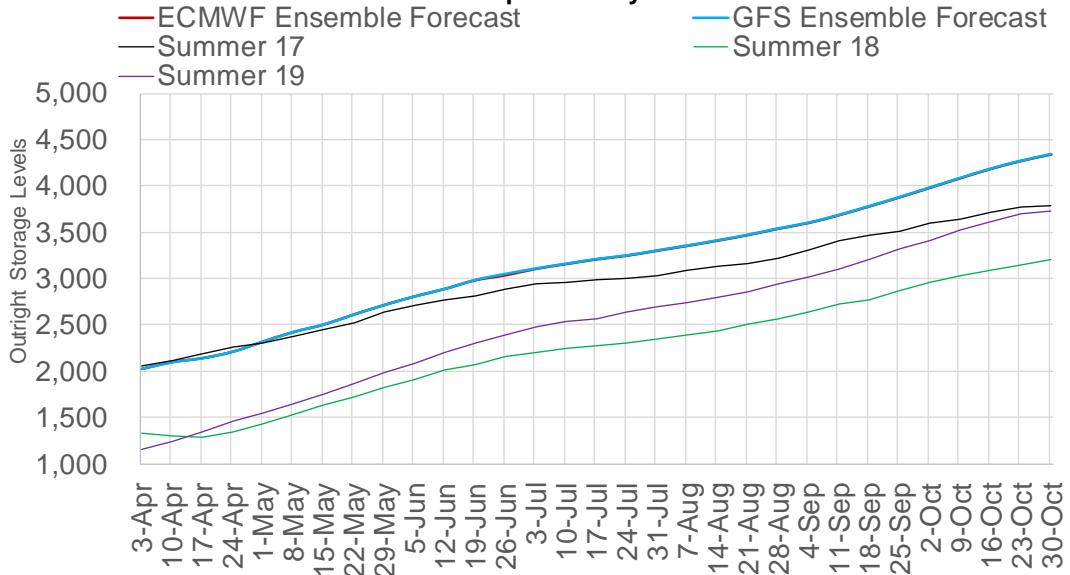
Week Ending	Week Storage Projection
12-Jun	81
19-Jun	95
26-Jun	60
3-Jul	63

Weather Storage Model - Next 4 Week Forecast



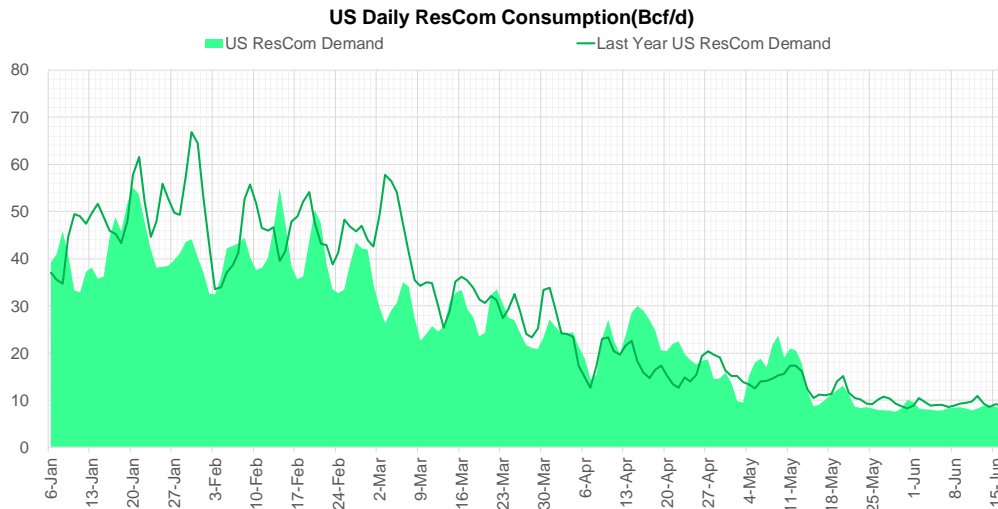
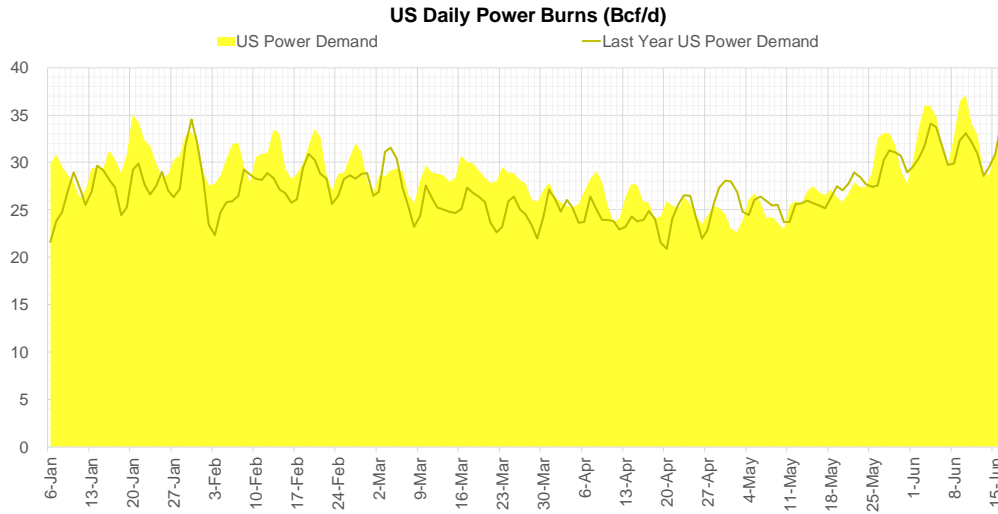
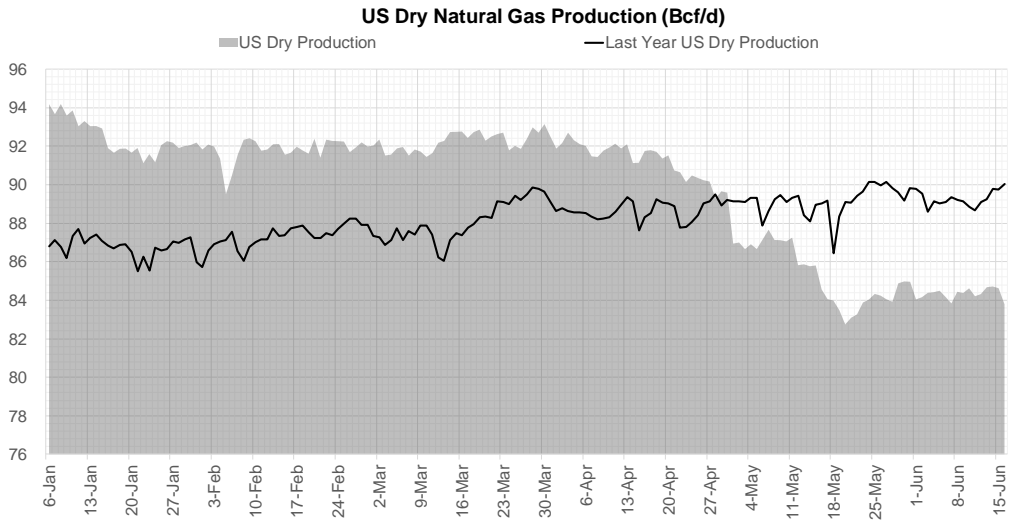
Weather Based End of Winter Projection (Bcf)

10Y normals past 15 day forecast window



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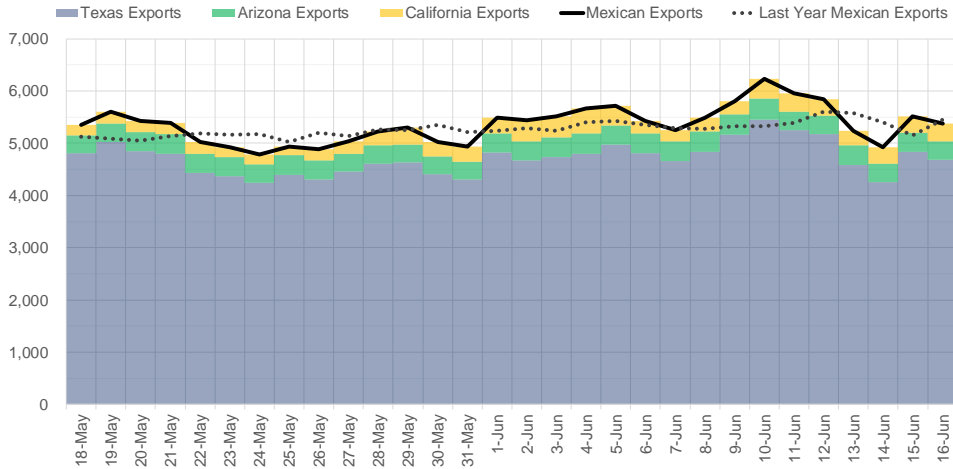
Supply – Demand Trends



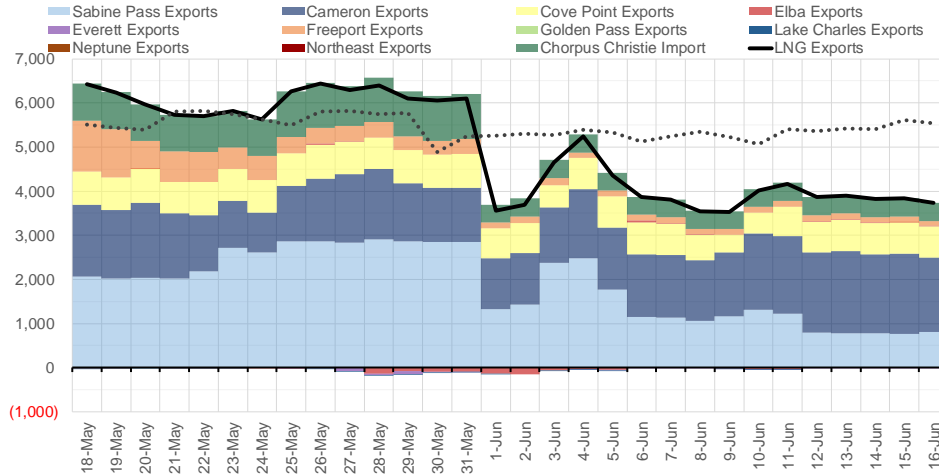
Source: Bloomberg

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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

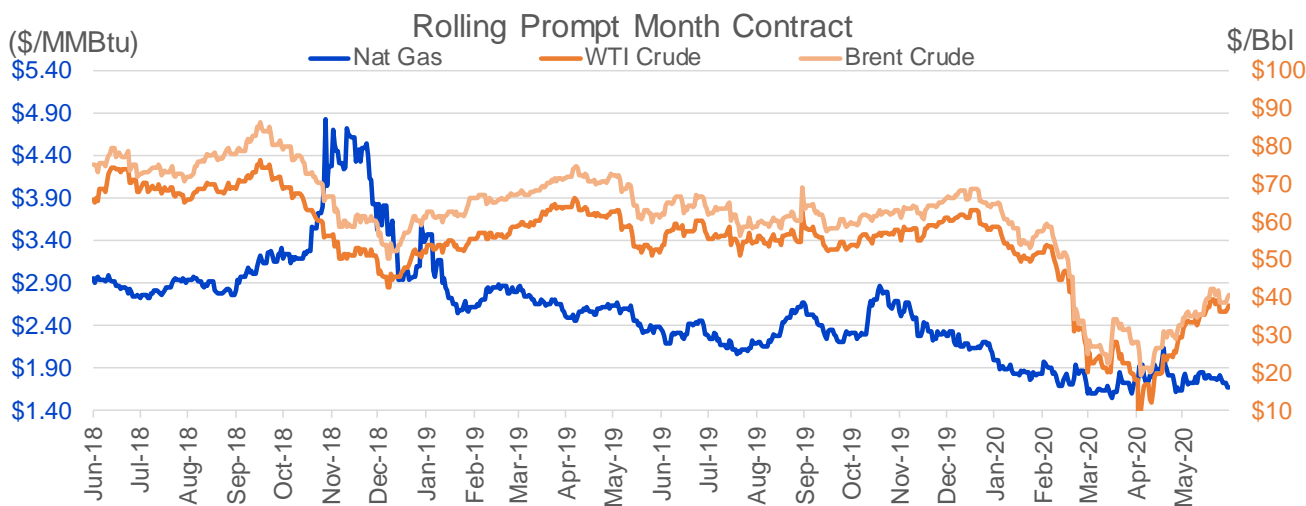
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
7	2020	P	1.50	7660	10	2020	P	1.50	40605
7	2020	P	1.65	3599	10	2020	C	2.75	37498
8	2020	P	1.60	3314	10	2020	C	3.00	34792
7	2020	P	1.60	3178	7	2020	P	1.75	34373
8	2020	C	2.50	3061	3	2021	P	2.00	32975
8	2020	C	2.25	2757	10	2020	P	1.60	32454
9	2020	P	1.75	2610	7	2020	P	1.50	31293
7	2020	C	2.00	2514	10	2020	C	2.50	29452
7	2020	C	1.85	2154	10	2020	P	2.00	28534
8	2020	C	1.80	2056	7	2020	C	2.50	25720
7	2020	P	1.55	1870	9	2020	C	2.50	25137
7	2020	C	1.80	1598	10	2020	P	1.25	25096
7	2020	C	1.95	1537	8	2020	C	2.50	24998
9	2020	C	2.75	1510	10	2020	P	1.75	23993
10	2020	P	1.60	1497	8	2020	P	1.50	23390
8	2020	C	2.00	1401	9	2020	P	1.50	21819
10	2020	P	1.50	1311	9	2020	P	1.00	21459
9	2020	C	3.00	1283	7	2020	C	2.25	21330
8	2020	C	1.90	1120	7	2020	C	2.00	20066
7	2020	P	1.70	1048	7	2020	P	2.00	20022
10	2020	P	1.90	1000	7	2020	C	3.00	19520
7	2020	P	1.45	930	9	2020	C	2.75	19510
7	2020	C	1.90	917	9	2020	P	1.20	19455
7	2020	P	1.75	906	9	2020	P	1.75	19436
9	2020	P	1.60	905	8	2020	P	1.20	19289
10	2020	P	2.00	901	7	2020	P	1.60	18734
10	2020	P	2.10	900	10	2020	P	1.20	18669
7	2020	C	1.75	887	10	2020	C	3.25	18342
8	2020	P	1.75	807	10	2020	P	2.10	18144
8	2020	C	2.35	701	7	2020	C	2.30	17960
2	2021	C	5.00	700	1	2021	C	3.50	17556
8	2020	P	1.40	622	8	2020	P	1.00	17397
7	2020	P	1.40	522	10	2020	C	2.25	17245
7	2020	C	1.65	515	1	2021	C	3.00	16518
8	2020	C	2.45	507	7	2020	C	2.75	16365
7	2020	P	1.25	505	7	2020	P	1.70	16194
9	2020	C	2.50	503	11	2020	C	4.00	16163
10	2020	C	2.25	501	10	2020	P	1.00	16044
8	2020	C	2.75	500	3	2021	C	3.00	15647
1	2021	C	3.50	500	9	2020	C	3.00	15124
1	2021	C	5.00	500	3	2021	C	7.00	14893
2	2021	C	3.50	500	8	2020	C	3.00	14881
3	2021	C	3.50	500	4	2021	C	3.00	14745
3	2021	C	5.00	500	7	2020	P	1.25	14495
7	2020	P	1.80	497	9	2020	C	2.25	13932
9	2020	P	1.50	484	9	2020	P	2.00	13646
8	2020	P	1.70	462	8	2020	C	2.75	13419
8	2020	C	3.25	460	8	2020	P	1.30	13298
7	2020	C	2.20	459	8	2020	C	2.25	13267
					7	2020	P	1	13099

Source: CME, Nasdaq, ICE

Nat Gas Futures Open Interest CME, ICE and Nasdaq Combined

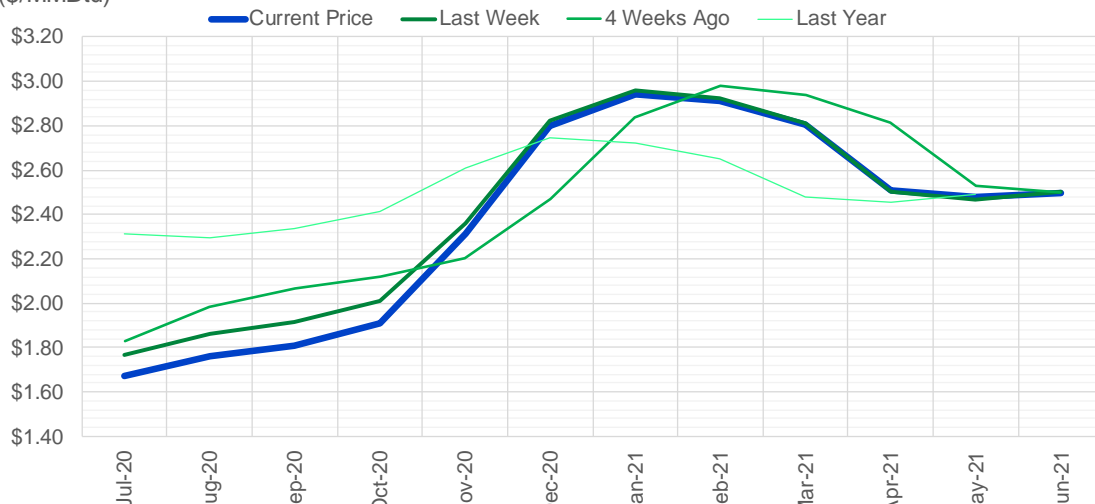
CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MM			
	Current	Prior	Daily Change		Current	Prior	Daily Change
JUL 20	156263	164092	-7829	JUL 20	78662	77745	916.25
AUG 20	194455	175109	19346	AUG 20	80098	79420	677.5
SEP 20	179240	179416	-176	SEP 20	70805	69422	1383
OCT 20	116768	114080	2688	OCT 20	81417	82043	-625.5
NOV 20	54600	53303	1297	NOV 20	62377	62301	76.75
DEC 20	63786	62840	946	DEC 20	58505	58138	367.25
JAN 21	112374	110424	1950	JAN 21	73785	73601	183.5
FEB 21	38708	38557	151	FEB 21	45611	45597	13.75
MAR 21	77882	77645	237	MAR 21	62404	62521	-117.5
APR 21	69114	68983	131	APR 21	49433	49183	250
MAY 21	26371	25762	609	MAY 21	46774	46690	84.25
JUN 21	17860	17729	131	JUN 21	43466	43439	27.5
JUL 21	15014	14997	17	JUL 21	44260	44437	-177.25
AUG 21	11597	11321	276	AUG 21	44995	45143	-147.25
SEP 21	14086	13827	259	SEP 21	42460	42479	-18.75
OCT 21	32401	31623	778	OCT 21	54502	54305	196.75
NOV 21	18708	18651	57	NOV 21	36824	36778	45.75
DEC 21	15533	15597	-64	DEC 21	37722	37754	-32
JAN 22	11775	11843	-68	JAN 22	29474	29494	-20.25
FEB 22	8249	8256	-7	FEB 22	25974	25958	15.5
MAR 22	15345	15362	-17	MAR 22	28165	28135	30.5
APR 22	11153	11112	41	APR 22	25571	25571	0
MAY 22	4763	4765	-2	MAY 22	22208	22185	22.5
JUN 22	2017	2013	4	JUN 22	21568	21545	22.5
JUL 22	1791	1791	0	JUL 22	22231	22204	27.75
AUG 22	1249	1249	0	AUG 22	21293	21270	22.75
SEP 22	1324	1322	2	SEP 22	21737	21715	22.5
OCT 22	1872	1854	18	OCT 22	24081	24056	25
NOV 22	1399	1367	32	NOV 22	19425	19375	50
DEC 22	1269	1269	0	DEC 22	20138	20087	51

Source: CME, ICE



(\$/MMBtu)

Nat Gas Term Structure



	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
Current Price	\$1.673	\$1.759	\$1.809	\$1.908	\$2.310	\$2.800	\$2.942	\$2.909	\$2.805	\$2.508	\$2.477	\$2.497
Last Week	\$1.767	\$1.863	\$1.918	\$2.009	\$2.360	\$2.821	\$2.956	\$2.922	\$2.812	\$2.503	\$2.468	\$2.500
vs. Last Week	-\$0.094	-\$0.104	-\$0.109	-\$0.101	-\$0.050	-\$0.021	-\$0.014	-\$0.013	-\$0.007	\$0.005	\$0.009	-\$0.003
4 Weeks Ago	\$1.830	\$1.985	\$2.064	\$2.122	\$2.206	\$2.472	\$2.838	\$2.980	\$2.940	\$2.812	\$2.532	\$2.502
vs. 4 Weeks Ago	-\$0.157	-\$0.226	-\$0.255	-\$0.214	\$0.104	\$0.328	\$0.104	-\$0.071	-\$0.135	-\$0.304	-\$0.055	-\$0.005
Last Year	\$2.328	\$2.311	\$2.296	\$2.336	\$2.414	\$2.612	\$2.745	\$2.720	\$2.651	\$2.478	\$2.455	\$2.493
vs. Last Year	-\$0.655	-\$0.552	-\$0.487	-\$0.428	-\$0.104	\$0.188	\$0.197	\$0.189	\$0.154	\$0.030	\$0.022	\$0.004

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	1.35	1.55	0.20
TETCO M3	\$/MMBtu	1.23	1.47	0.24
FGT Zone 3	\$/MMBtu	1.23	1.79	0.56
Zone 6 NY	\$/MMBtu	1.23	1.49	0.26
Chicago Citygate	\$/MMBtu	1.45	1.68	0.23
Michcon	\$/MMBtu	1.45	1.66	0.21
Columbia TCO Pool	\$/MMBtu	1.23	1.50	0.27
Ventura	\$/MMBtu	1.41	1.64	0.23
Rockies/Opal	\$/MMBtu	1.45	1.53	0.08
El Paso Permian Basin	\$/MMBtu	1.28	1.37	0.09
Socal Citygate	\$/MMBtu	1.90	1.92	0.02
Malin	\$/MMBtu	1.45	1.63	0.18
Houston Ship Channel	\$/MMBtu	1.48	1.77	0.29
Henry Hub Cash	\$/MMBtu	1.62	1.64	0.02
AECO Cash	C\$/GJ	1.33	1.42	0.09
Station2 Cash	C\$/GJ	1.17	1.63	0.46
Dawn Cash	C\$/GJ	1.46	1.68	0.22

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks		vs. Last Year
				Ago		
NatGas Jan/Apr	\$/MMBtu	-0.43	▲ 0.019	▲ 0.014	▼ -0.050	
NatGas Mar/Apr	\$/MMBtu	-0.297	▲ 0.012	▼ -0.577	▼ -0.541	
NatGas Oct/Nov	\$/MMBtu	0.40	▲ 0.051	▲ 0.136	▲ 0.339	
NatGas Oct/Jan	\$/MMBtu	1.03	▲ 0.087	▲ 0.260	▲ 0.711	
WTI Crude	\$/Bbl	37.85	▼ -1.090	▲ 5.350	▼ -16.050	
Brent Crude	\$/Bbl	40.58	▼ -0.600	▲ 5.930	▼ -21.560	
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000	
Heating Oil	cents/Gallon	116.32	▲ 0.850	▲ 18.960	▼ -66.460	
Propane, Mt. Bel	cents/Gallon	0.50	▲ 0.000	▲ 0.086	▲ 0.065	
Ethane, Mt. Bel	cents/Gallon	0.23	▼ -0.005	▼ -0.001	▲ 0.051	
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▼ -0.050	
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▼ -9.500	