## NYSERDA Heating Fuels Report

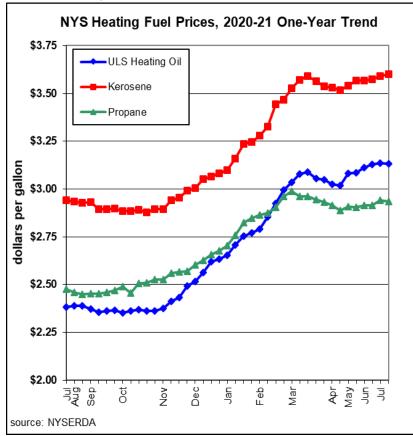
## Highlights

- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories decreased 0.1 million barrels (0.7%) since last week to 17.5 million barrels. Inventories are 51.3% below the year-ago level and 35.6% below the 5-year average.
- The weekly average U.S. WTI crude oil spot price decreased \$3.51 per barrel (4.8%) since last week to \$69.68 per barrel. Current prices are \$28.34 per barrel (68.6%) above the year-ago weekly average of \$41.34 per barrel.
- New York Statewide average retail prices of ultra-low sulfur (ULS) heating oil and propane decreased while the average retail price of kerosene increased since the last survey.

**Retail Petroleum Prices**—On a statewide basis since the last survey on July 12<sup>th</sup>, the price decreased \$0.005/gallon (0.2%) to \$3.132/gallon for ULS heating oil, increased \$0.009/gallon (0.3%) to \$3.601/gallon for kerosene, and the price decreased \$0.006/gallon (0.2%) to \$2.934/gallon for propane. Compared to a year earlier, prices increased \$0.748/gallon (31.4%) for heating oil, \$0.658/gallon (22.4%) for kerosene, and \$0.459/gallon (18.5%) for propane.

**Crude Oil Prices**—For the week ending 7/23/2021, WTI crude oil spot prices averaged \$69.68/bbl, a decrease of \$3.51/bbl (4.8%) from the week-ago average of \$73.19/bbl. WTI prices are now \$28.34/bbl (68.6%) above the year-ago weekly average of \$41.34/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

**Spot Natural Gas Prices**—For the week ending 7/23/2021, Henry Hub natural gas spot prices averaged \$3.910 per million Btu (mmBtu), an increase of \$0.202/mmBtu (5.4%) from the prior week level of \$3.708/mmBtu. Prices are currently \$2.222/mmBtu (131.6%) above the year-earlier weekly average of \$1.688/mmBtu.



**Residential Natural Gas Prices**—The NYS average price in April 2021 was \$1.331/therm, an increase of \$0.214/therm (19.2%) from the March 2021 price of \$1.117/therm, and was \$0.160/therm (13.7%) higher than the year earlier average of \$1.171/therm.

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Middle Atlantic Region, Weekly Inventories (million barrels)								
Fuel Type	7/23/2021	7/16/2021	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg	
ULS Distillate (0-15 ppm)	17.5	17.6	-0.7%	35.9	-51.3%	27.1	-35.6%	
Non-road Diesel (15-500 ppm)	0.4	0.4	17.7%	1.0	-55.4%	1.0	-55.3%	
High Sulfur Distillate ( >500 ppm)	1.8	1.9	-3.6%	1.5	20.3%	2.3	-22.7%	
Total Distillate Oil	19.7	19.8	-0.6%	38.4	-48.6%	30.4	-35.2%	
Propane	4.962	4.135	20.0%	5.236	-5.2%	3.839	29.3%	
#6 Residual Oil	5.4	5.4	-1.5%	7.5	-28.3%	6.4	-16.1%	
US Natural Gas	2,714	2,678	1.3%	3,237	-16.2%	2,882	-5.8%	
US Crude Oil	435.6	439.7	-0.9%	526.0	-17.2%	468.3	-7.0%	

Notes: Natural Gas in billion cubic feet (Bcf); Middle Atlantic is DE, DC, MD, NJ, NY, and PA

ppm = parts per million sulfur content

Source: US DOE/EIA



REGION	7/26/2021	7/12/2021	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	3.276	3.270	0.2%	2.563	27.8%
New York City	3.309	3.300	0.3%	2.534	30.6%
Lower Hudson	3.121	3.137	-0.5%	2.339	33.5%
Upper Hudson	3.065	3.071	-0.2%	2.190	39.9%
Capital District	2.888	2.894	-0.2%	2.189	31.9%
North Country	3.043	3.038	0.2%	2.392	27.2%
Central	2.860	2.896	-1.2%	2.125	34.6%
Western	3.403	3.410	-0.2%	2.716	25.3%
Statewide	3.132	3.137	-0.2%	2.384	31.4%
New York St	ate Retail Propane Po	sted Credit Prices -	1,100 gallon usage ca	ntegory (dollars p	er gallon)
Long Island	3.428	3.419	0.2%	3.007	14.0%
Mid-Hudson	3.101	3.112	-0.4%	2.719	14.0%
Capital District	2.787	2.803	-0.5%	2.310	20.7%
North Country	3.064	3.112	-1.5%	2.584	18.6%
Central	2.727	2.710	0.6%	2.307	18.2%
Western	2.814	2.805	0.3%	2.223	26.6%
Statewide	2.934	2.940	-0.2%	2.475	18.5%
	New York State Ret	ail Kerosene Posted	Credit Prices (dollar	rs per gallon)	
Mid-Hudson	3.730	3.692	1.0%	3.058	22.0%
Capital District	3.415	3.406	0.3%	2.749	24.3%
North Country	3.549	3.540	0.3%	3.028	17.2%
Central	3.421	3.452	-0.9%	2.717	25.9%
Western	3.859	3.859	0.0%	3.129	23.3%
Statewide	3.601	3.592	0.3%	2.943	22.4%
	New York State	Average Residentia	l Natural Gas Prices (	(\$/therm)	
REGIO N	April 2021	March 2021	% Change vs. Prior Month	April 2020	% Change vs. Last Year
Statewide	1.331	1.117	19.2%	1.171	13.7%

\* Revision

Historic Retail Prices—Statewide average high and low prices since Sept. 1997 for heating oil & propane & Sept. 2000 for kerosene.

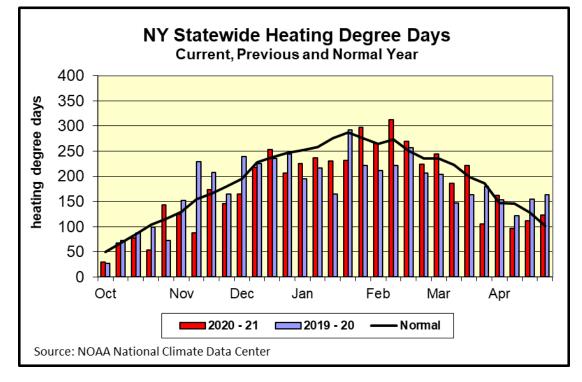
- Heating oil—highest price \$4.778/gallon on 7/14/08, lowest price \$0.876/gallon on 9/08/98.
- Propane—highest price \$3.811/gallon on 2/17/14, lowest price \$1.072/gallon on 9/20/99.
- Kerosene—highest price \$5.068/gallon on 7/14/08, lowest price \$1.309/gallon on 9/09/02.

**Residential Natural Gas Prices:** Statewide average prices are derived from US EIA most currently available data. NYS gas utility specific prices can be found on the NYS DPS website at http://www.dps.ny.gov/TypicalBills.htm#GasRes.

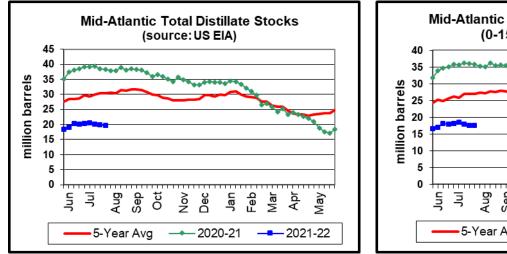
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, and Washington North Country: Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, St. Lawrence, and Warren Central: Broome, Cayuga, Chenango, Cortland, Delaware, Herkimer, Madison, Oneida, Onondaga, Oswego, Otsego, Tioga, and Tompkins Western: Allegany, Cattaraugus, Chautauqua, Chemung, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Wyoming, and Yates counties. Propane & Kerosene: Mid-Hudson: Columbia, Dutchess, Greene, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester counties. B5 heating oil is required for Downstate New York including Nassau, Suffolk, NYC, and Westchester counties.

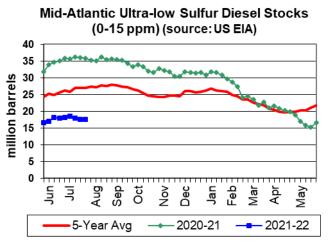
**Heating Degree Days**— Until the start of the next heating season in October, the heating degree-day information below reflects weekly information through April 24, 2021. Cumulative statewide heating degree-days from October 1<sup>st</sup> through April 24<sup>th</sup> end the current season at 5,287 HDDs, which is behind the year-ago level (5,328) by 0.8% and behind the normal trend (5,699) by 7.2%.

New York State Heating Degree Day Information, Weekly & Cumulative							
Week Ending April 24				Cumulative From October 1			
Region	2021	2020	Normal	2020-21	2019-20	Normal	
Albany	147	162	109	6,087	5,452	5,986	
Binghamton	162	203	129	6,084	6,199	6,535	
Buffalo	151	190	124	5,353	5,552	6,124	
Glens Falls	79	194	125	4,771	6,486	6,859	
Massena	143	203	135	6,687	6,985	7,409	
NYC	64	118	79	3,836	3,953	4,542	
Rochester	146	192	121	5,559	5,732	6,142	
Syracuse	127	176	120	5,465	5,697	6,233	
Watertown	146	200	136	6,283	6,448	6,936	
Statewide	123	164	102	5,287	5,328	5,699	

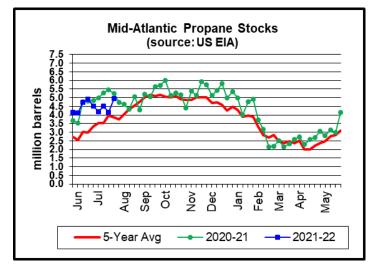


Distillate Stocks—Current and historic heating fuel inventory data is presented in the graphs below.

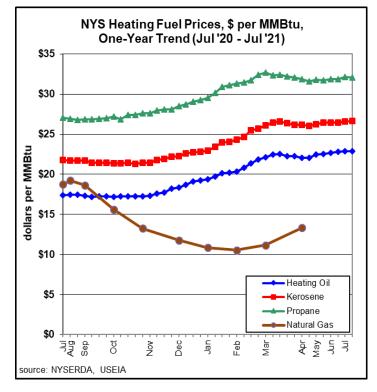




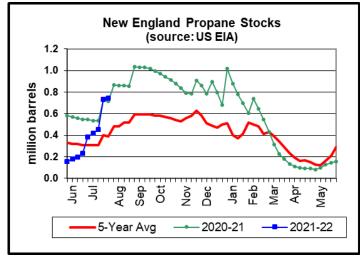
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



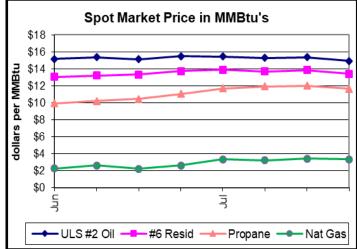
**Retail Btu Price Equivalents**—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide average residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



Note: Natural gas prices are from the U.S. EIA and provided on a monthly basis and delayed by 3 months. The monthly average price of natural gas is higher during the summer months due to low delivery volumes and fixed delivery charges and does not necessarily indicate a higher underlying supply price. Higher average natural gas prices in the summer months are not indicative of higher future prices during the winter months.



**Spot Btu Price Equivalents**—The Btu spot market graph equates the spot market price, in table below, for NY Harbor ultra-low sulfur diesel fuel and 0.3% sulfur high pour #6 residual fuel, Mont Belvieu propane, and the New York Citygate natural gas price on a dollar per million Btu (MMBtu) basis.



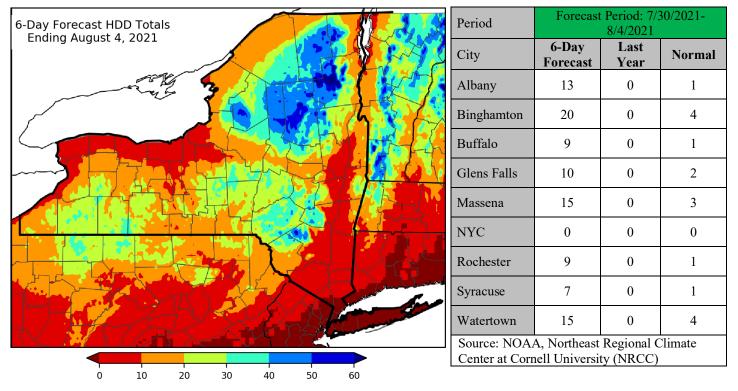
New York Spot Prices, Weekly Average						
Fuel	7/23/2021	Year Ago	% Change			
Ultra LS Diesel	2.069	1.264	63.6%			
#2 Fuel Oil	1.892	1.209	56.5%			
#6 Residual 0.3%	2.007	1.228	63.5%			
Propane	1.065	0.512	108.1%			
Natural Gas	3.337	1.746	91.1%			

Note: Fuel in \$/gallon, natural gas (\$/MMBtu)=NYCitygate

Weather Outlooks – Based on data and maps provided by the National Oceanic and Atmospheric Administration (NOAA) and the Northeast Regional Climate Center at Cornell University (NRCC).

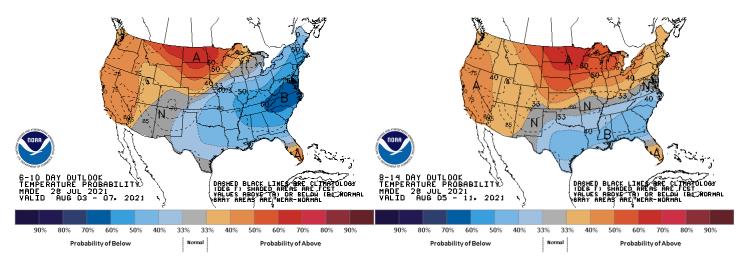
**Statewide Forecast HDD**: On a statewide basis for the week ending July  $31^{st}$ , the number of forecasted heating degree-days (0) is the same as last year (0) and 100% below the normal trend (3). Regional HDD forecasts are provided in the map and table below.

## **Regional Heating Degree-Day Forecast**



**6-10 Day Outlook** Temperature Probability from the Climate Prediction Center (NOAA). The forecasted map presents the 6-10 day temperature probability outlook for the United States for August 3, 2021 – August 7, 2021. This is in comparison to the 30-year normal (1981-2010).

**8-14 Day Outlook** Temperature Probability from the Climate Prediction Center (NOAA). The forecasted map presents the 8-14 day temperature probability outlook for the United States for August 5, 2021 – August 11, 2021. This is in comparison to the 30-year normal (1981-2010).



Additional historic <u>regional specific prices and supply information</u> is available at NYSERDA's website. For more information, please contact Matthew Milford at (518) 862-1090 ext. 3416, e-mail <u>matthew.milford@nyserda.ny.gov.</u>