NYSERDA Heating Fuels Report

September 27, 2021

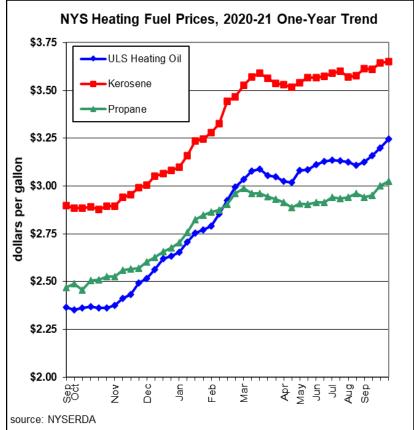
Highlights

- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories decreased 0.6 million barrels (3.0%) since last week to 18.6 million barrels. Inventories are 44.2% below the year-ago level and 30.1% below the 5-year average.
- The weekly average U.S. WTI crude oil spot price increased \$0.49 per barrel (0.7%) since last week to \$72.18 per barrel. Current prices are \$32.40 per barrel (81.4%) above the year-ago weekly average of \$39.78 per barrel.
- New York Statewide average retail prices of ultra-low sulfur (ULS) heating oil, kerosene, and propane all increased since the last survey.

Retail Petroleum Prices—On a statewide basis since the last survey on September 20^{th} , prices increased 0.045/gallon (1.4%) to 3.245/gallon for ULS heating oil, 0.007/gallon (0.2%) to 3.651/gallon for kerosene, and 0.024/gallon (0.8%) to 3.026/gallon for propane. Compared to a year earlier, prices increased 0.879/gallon (37.2%) for heating oil, 0.754/gallon(26.0%) for kerosene, and 0.558/gallon (22.6%) for propane.

Crude Oil Prices—For the week ending 9/24/2021, WTI crude oil spot prices a veraged \$72.18/bbl, an increase of \$0.49/bbl(0.7%) from the week-ago average of \$71.69/bbl. WTI prices are now \$32.40/bbl (81.4%) above the year-ago weekly a verage of \$39.78/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 9/24/2021, Henry Hub natural gas spot prices averaged \$4.954 per million Btu (MMBtu), a decrease of \$0.412/MMBtu (7.7%) from the prior week level of \$5.366/MMBtu. Prices are currently \$3.274/MMBtu (194.9%) above the year-earlier weekly a verage of \$1.680/MMBtu.



Middle Atlantic Stocks	-Current and historic h	eating fuel inventor	y data is presented	in the table below.
-------------------------------	-------------------------	----------------------	---------------------	---------------------

Middle Atlantic Region, Weekly Inventories (million barrels)							
Fuel Type	9/24/2021	9/17/2021	% Change vs. Last Week	Year Ago	% Change vs. Last Year	5-Year Average	% Change vs. 5-Year Avg
ULS Distillate (0-15 ppm)	18.6	19.2	-3.0%	33.4	-44.2%	26.6	-30.1%
Non-road Diesel (15-500 ppm)	0.4	0.4	0.7%	0.7	-40.7%	1.1	-62.2%
High Sulfur Distillate (>500 ppm)	1.9	2.0	-4.7%	1.8	7.2%	2.2	-15.1%
Total Distillate Oil	20.9	21.6	-3.1%	35.9	-41.6%	30.0	-30.2%
Propane	6.185	5.327	16.1%	5.727	8.0%	5.176	19.5%
#6 Residual Oil	4.7	4.3	10.7%	6.4	-25.6%	6.2	-23.6%
US Natural Gas	3,170	3,082	2.9%	3,745	-15.4%	3,383	-6.3%
US Crude Oil	418.5	414.0	1.1%	492.4	-15.0%	450.8	-7.2%

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



REGIO N	9/27/2021	9/20/2021	% Change vs. Prior Survey	Year Ago	% Change vs. Last Year
Long Island	3.436	3.378	1.7%	2.532	35.7%
New York City	3.459	3.409	1.5%	2.500	38.4%
Lower Hudson	3.255	3.168	2.7%	2.310	40.9%
Upper Hudson	3.097	3.070	0.9%	2.218	39.6%
Capital District	2.990	2.954	1.2%	2.153	38.9%
North Country	3.101	3.098	0.1%	2.384	30.1%
Central	3.000	2.955	1.5%	2.109	42.2%
Western	3.468	3.468	0.0%	2.711	27.9%
Statewide	3.245	3.200	1.4%	2.366	37.2%
New York St	ate Retail Propane Po	sted Credit Prices	- 1,100 gallon usage ca	itegory (dollars p	er gallon)
Long Island	3.591	3.528	1.8%	3.025	18.7%
Mid-Hudson	3.181	3.185	-0.1%	2.668	19.2%
Capital District	2.883	2.870	0.4%	2.311	24.7%
North Country	3.161	3.143	0.5%	2.578	22.6%
Central	2.864	2.818	1.6%	2.304	24.3%
Western	2.835	2.807	1.0%	2.261	25.4%
Statewide	3.026	3.002	0.8%	2.468	22.6%
	New York State Ret	ail Kerosene Poste	d Credit Prices (dollar	s per gallon)	
Mid-Hudson	3.660	3.663	-0.1%	2.951	24.0%
Capital District	3.512	3.486	0.7%	2.729	28.7%
North Country	3.629	3.613	0.5%	3.018	20.2%
Central	3.526	3.526	0.0%	2.656	32.8%
Western	4.020	4.020	0.0%	3.182	26.3%
Statewide	3.651	3.644	0.2%	2.897	26.0%
	New York State	Average Residentia	l Natural Gas Prices ((\$/therm)	2
REGIO N	July 2021	June 2021	% Change vs. Prior Month	July 2020	% Change vs. Last Year
Statewide	2.057	1.699	21.1%	1.872	9.9%

* Revision

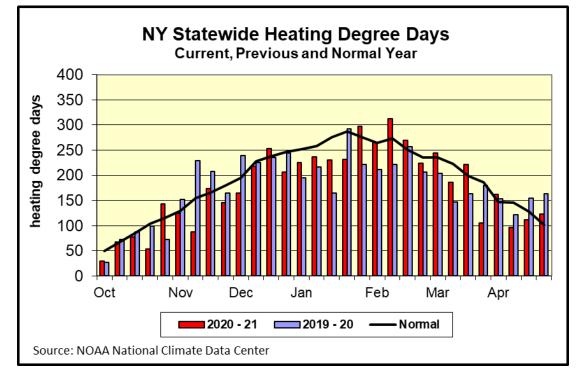
Historic Retail Prices—Statewide average high and low prices since Sept. 1997 for heating oil & propane & Sept. 2000 for kerosene.

- 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.

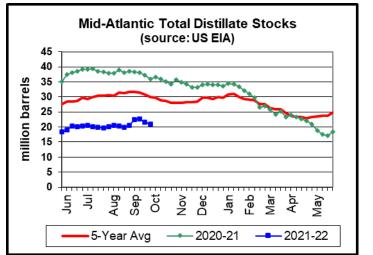
Residential Natural Gas Prices: Statewide average prices are derived from US EIA most currently a vailable data. NYS gas utility specific prices can be found on the NYS DPS website at http://www.dps.ny.gov/TypicalBills.htm#GasRes.

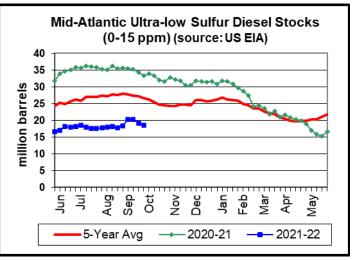
New York State Regions: Long Island: Na ssau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Sa atoga, Schenectady, Schoharie, and Washington North Country: Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, St. La wrence, and Warren Central: Broome, Cayuga, Chenango, Cortland, Dela ware, Herkimer, Madison, Oneida, Onondaga, Oswego, Otsego, Tioga, and Tompkins Western: Allegany, Cattaraugus, Chautauqua, Chemung, Erie, Genesee, Livingston, Monroe, Nia gara, 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 1st through April 24th 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

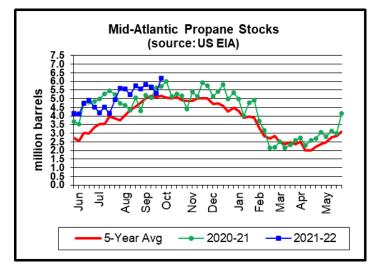


Distillate Stocks-Current and historic heating fuel inventory data is presented in the graphs below.

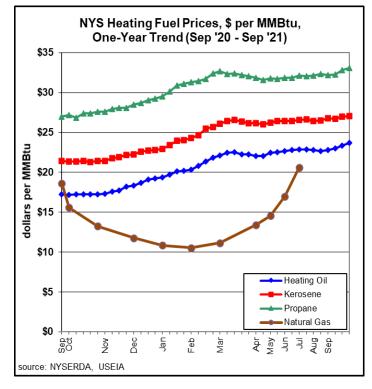




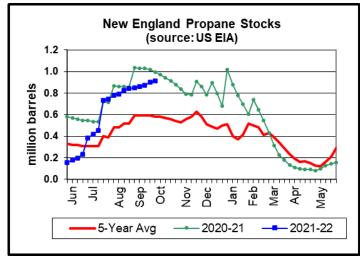
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



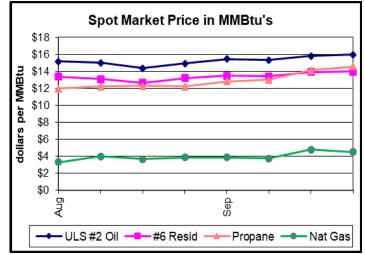
Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide a verage residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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 a verage 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.

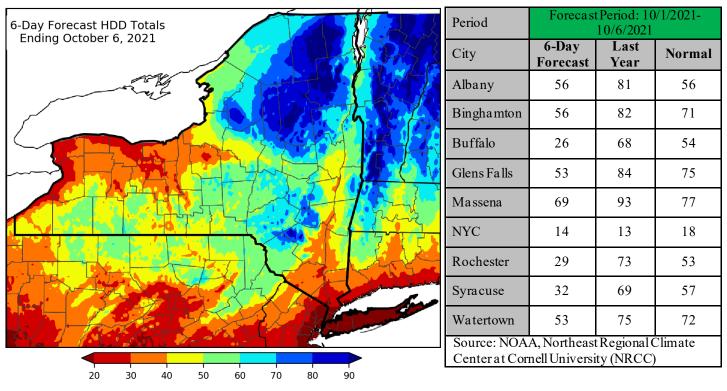


New York Spot Prices, Weekly Average							
Fuel	9/24/2021	Year Ago	% Change				
Ultra LS Diesel	2.217	1.117	98.4%				
#2 Fuel Oil	2.074	1.054	96.8%				
#6 Residual 0.3%	2.092	1.194	75.3%				
Propane	1.332	0.499	166.9%				
Natural Gas	4.506	1.075	319.2%				

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).

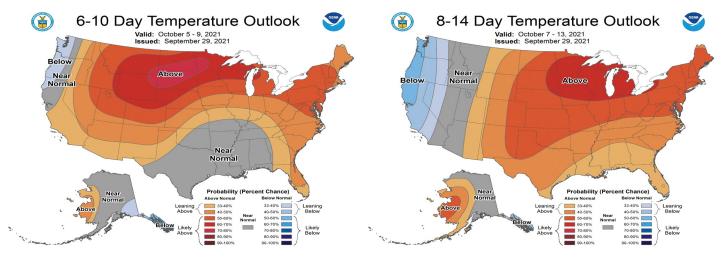
Statewide Forecast HDD: On a statewide basis for the week ending October 2^{nd} , the number of forecasted heating degree-days (28) is 86.7% above last year (15) and 46.2% below the normal trend (52). Regional HDD forecasts are provided in the map and table below.



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 October 5, 2021 – October 9, 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 October 7, 2021 – October 13, 2021. This is in comparison to the 30-year normal (1981-2010).



Additional historic <u>regional specific prices and supply information</u> is a vailable 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>.