NYSERDA Heating Fuels Report

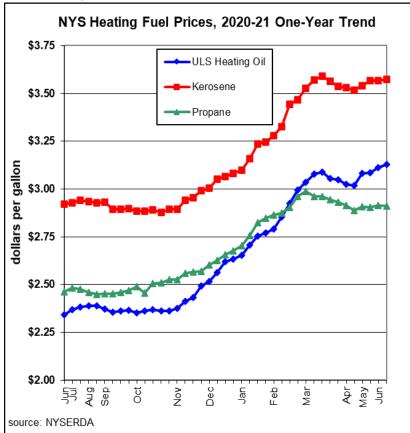
Highlights

- Mid-Atlantic ultra-low sulfur (ULS) distillate inventories increased 0.1 million barrels (0.5%) since last week to 18.1 million barrels. Inventories are 49.3% below the year-ago level and 30.4% below the 5-year average.
- The weekly average U.S. WTI crude oil spot price increased \$1.93 per barrel (2.7%) since last week to \$73.48 per barrel. Current prices are \$34.26 per barrel (87.4%) above the year-ago weekly average of \$39.22 per barrel.
- New York Statewide average retail prices of ultra-low sulfur (ULS) heating oil and kerosene increased while the average retail propane price decreased since the last survey.

Retail Petroleum Prices—On a statewide basis since the last survey on June 14^{th} , prices increased 0.016/gallon (0.5%) to 3.128/gallon for ULS heating oil, 0.006/gallon (0.2%) to 3.573/gallon for kerosene, and the price decreased 0.002/gallon (0.1%) to 2.912/gallon for propane. Compared to a year earlier, prices increased 0.787/gallon (33.6%) for heating oil, 0.653/gallon (22.4%) for kerosene, and 0.448/gallon(18.2%) for propane.

Crude Oil Prices—For the week ending 6/25/2021, WTI crude oil spot prices a veraged \$73.48/bbl, an increase of \$1.93/bbl (2.7%) from the week-ago a verage of \$71.55/bbl. WTI prices are now \$34.26/bbl (87.4%) above the year-ago weekly a verage of \$39.22/bbl. The all-time weekly average high of \$142.52/bbl occurred on 7/04/08.

Spot Natural Gas Prices—For the week ending 6/25/2021, Henry Hub natural gas spot prices averaged \$3.280 per million Btu (mmBtu), an increase of \$0.058/mmBtu (1.8%) from the prior week level of \$3.222/mmBtu. Prices are currently \$1.752/mmBtu (114.7%) above the year-earlier weekly a verage of \$1.528/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.

| Middle Atlantic Stocks—Curren | t and historic heating fuel inventory | data is presented in the table below. |
|-------------------------------|---------------------------------------|---------------------------------------|
|-------------------------------|---------------------------------------|---------------------------------------|

| Middle Atlantic Region, Weekly Inventories (million barrels) | | | | | | | |
|--|-----------|-----------|---------------------------|----------|---------------------------|-------------------|----------------------------|
| Fuel Type | 6/25/2021 | 6/18/2021 | % Change vs. Last Week | Year Ago | % Change vs. Last Year | 5-Year Average | % Change vs. 5-Year Avg |
| ULS Distillate (0-15 ppm) | 18.1 | 18.0 | 0.5% | 35.7 | -49.3% | 26.0 | -30.4% |
| Non-road Diesel (15-500 ppm) | 0.5 | 0.4 | 0.9% | 1.0 | -53.2% | 0.8 | -43.1% |
| High Sulfur Distillate (>500 ppm) | 1.7 | 1.6 | 8.1% | 2.5 | -30.9% | 2.6 | -33.4% |
| Total Distillate Oil | 20.3 | 20.1 | 1.1% | 39.2 | -48.3% | 29.4 | -31.0% |
| Propane | 4.496 | 4.920 | -8.6% | 4.846 | -7.2% | 3.355 | 34.0% |
| #6 Residual Oil | 5.0 | 5.4 | -8.4% | 8.3 | -40.2% | 6.4 | -22.5% |
| US Natural Gas | 2,558 | 2,482 | 3.1% | 3,068 | -16.6% | 2,701 | -5.3% |
| US Crude Oil | 452.3 | 459.1 | -1.5% | 533.5 | -15.2% | 484.8 | -6.7% |

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 | 6/28/2021 | 6/14/2021 | % Change vs. Prior Survey | Year Ago | % Change vs. Last Year |
|------------------|-----------------------|----------------------|------------------------------|--------------------|---------------------------|
| Long Island | 3.273 | 3.237 | 1.1% | 2.495 | 31.2% |
| New York City | 3.303 | 3.321 | -0.5% | 2.496 | 32.4% |
| Lower Hudson | 3.137 | 3.126 | 0.4% | 2.269 | 38.3% |
| Upper Hudson | 3.070 | 3.048 | 0.7% | 2.157 | 42.3% |
| Capital District | 2.879 | 2.858 | 0.7% | 2.157 | 33.5% |
| North Country | 3.010 | 2.994 | 0.5% | 2.375 | 26.7% |
| Central | 2.868 | 2.840 | 1.0% | 2.082 | 37.8% |
| Western | 3.370 | 3.370 | 0.0% | 2.716 | 24.1% |
| Statewide | 3.128 | 3.112 | 0.5% | 2.341 | 33.6% |
| New York St | ate Retail Propane Po | sted Credit Prices - | 1,100 gallon usage ca | ntegory (dollars p | er gallon) |
| Long Island | 3.374 | 3.357 | 0.5% | 2.988 | 12.9% |
| Mid-Hudson | 3.053 | 3.043 | 0.3% | 2.691 | 13.4% |
| Capital District | 2.795 | 2.758 | 1.3% | 2.308 | 21.1% |
| North Country | 3.076 | 3.141 | -2.1% | 2.620 | 17.4% |
| Central | 2.693 | 2.694 | 0.0% | 2.319 | 16.1% |
| Western | 2.803 | 2.796 | 0.3% | 2.177 | 28.8% |
| Statewide | 2.912 | 2.914 | -0.1% | 2.464 | 18.2% |
| | New York State Ret | ail Kerosene Posted | l Credit Prices (dollar | s per gallon) | 2 |
| Mid-Hudson | 3.693 | 3.701 | -0.2% | 3.036 | 21.6% |
| Capital District | 3.412 | 3.386 | 0.8% | 2.719 | 25.5% |
| North Country | 3.504 | 3.513 | -0.3% | 3.018 | 16.1% |
| Central | 3.425 | 3.395 | 0.9% | 2.665 | 28.5% |
| Western | 3.792 | 3.792 | 0.0% | 3.141 | 20.7% |
| Statewide | 3.573 | 3.567 | 0.2% | 2.920 | 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

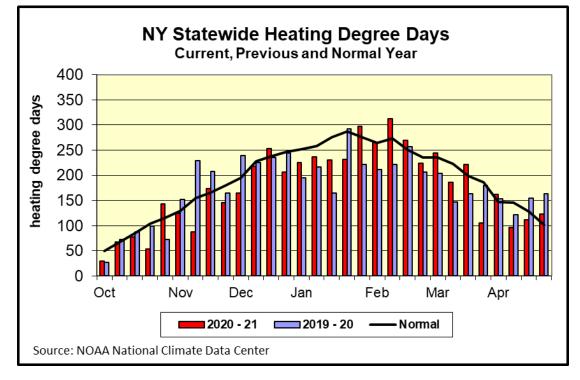
Historic Retail Prices—Statewide average high and low prices since Sept. 1997 for heating oil & propane & Sept. 2000 for kerosene.

- 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.

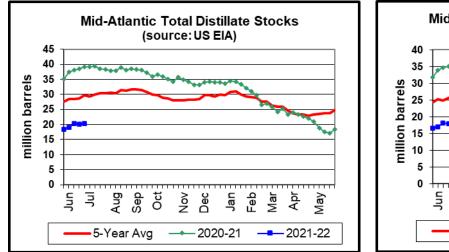
Residential Natural Gas Prices: Statewide average prices are derived from US EIA most currently a vailable data. NYS gas utility specific prices can be found on the NYS DPS website at http://www.dps.ny.gov/TypicalBills.htm#GasRes.

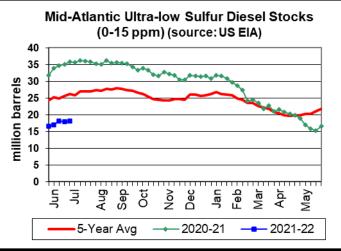
New York State Regions: Long Island: Nassau and Suffolk New York City: Bronx, Kings, New York, Queens, and Richmond Lower Hudson: Dutchess, Putnam, Rockland, and Westchester Upper Hudson: Columbia, Greene, Orange, Sullivan, and Ulster Capital District: Albany, Fulton, Montgomery, Rensselaer, Saratoga, 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, 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 |

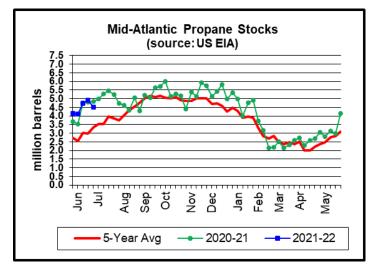


Distillate Stocks-Current and historic heating fuel inventory data is presented in the graphs below.

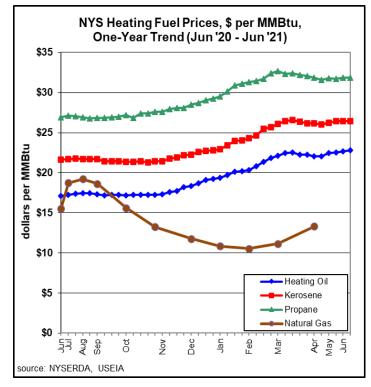




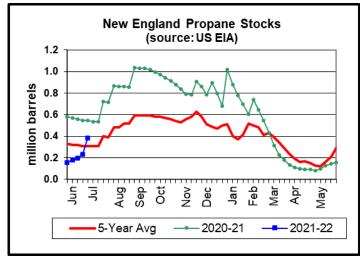
Propane Stocks—Current and historic heating fuel inventory data is presented in the graphs below.



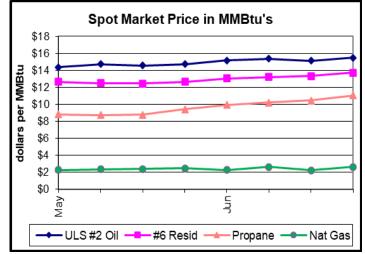
Retail Btu Price Equivalents—The New York State heating fuel prices Btu graph equates the retail price for New York Statewide a verage residential ultra-low sulfur heating oil, kerosene, propane, and natural gas on a dollar per million Btu (MMBtu) basis.



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.



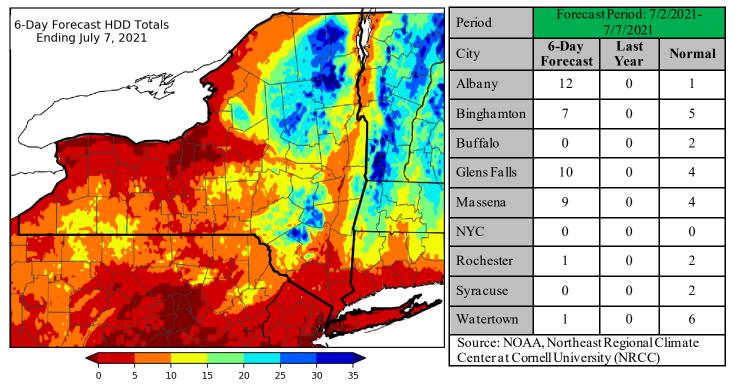
| New York Spot Prices, Weekly Average | | | | | | |
|--------------------------------------|-----------|----------|----------|--|--|--|
| Fuel | 6/25/2021 | Year Ago | % Change | | | |
| Ultra LS Diesel | 2.149 | 1.178 | 82.5% | | | |
| #2 Fuel Oil | 1.957 | 1.121 | 74.6% | | | |
| #6 Residual 0.3% | 2.055 | 1.141 | 80.1% | | | |
| Propane | 1.011 | 0.497 | 103.5% | | | |
| Natural Gas | 2.614 | 1.499 | 74.4% | | | |

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).

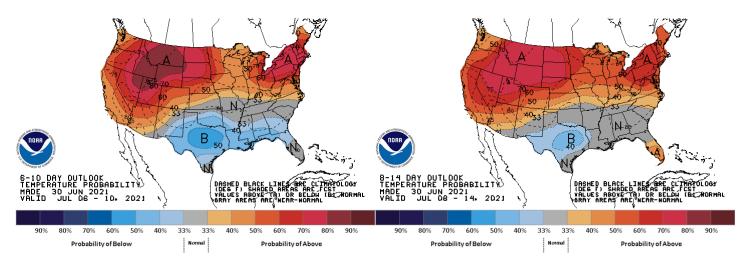
Statewide Forecast HDD: On a statewide basis for the week ending July 3^{rd} , the number of forecasted heating degree-days (0) is the same as last year (0) and 100% below the normal trend (2). Regional HDD forecasts are provided in the map and table below.

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 July 6, 2021 – July 10, 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 July 8, 2021 – July 14, 2021. This is in comparison to the 30-year normal (1981-2010).



 $\label{eq:additional historic regional specific prices and supply information is a vailable at NYSERDA's website. For more information, please contact Matthew Milford at (518) 862-1090 ext. 3416, e-mail matthew.milford@nyserda.ny.gov.$