

# Early Indicators for Winter Fuels Markets



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*August 30, 2017*

## Key takeaways

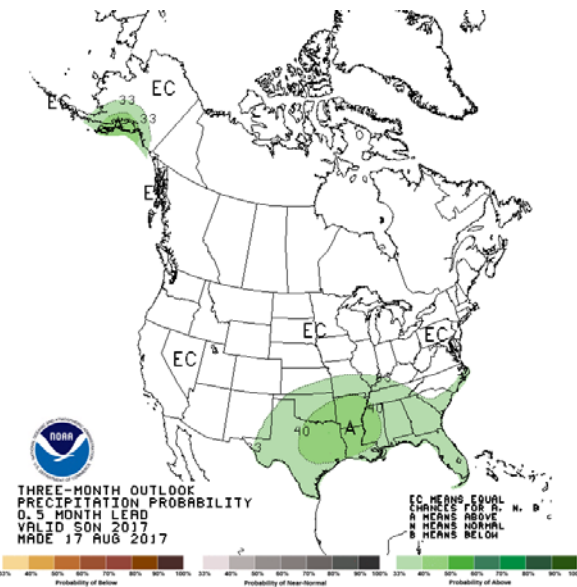
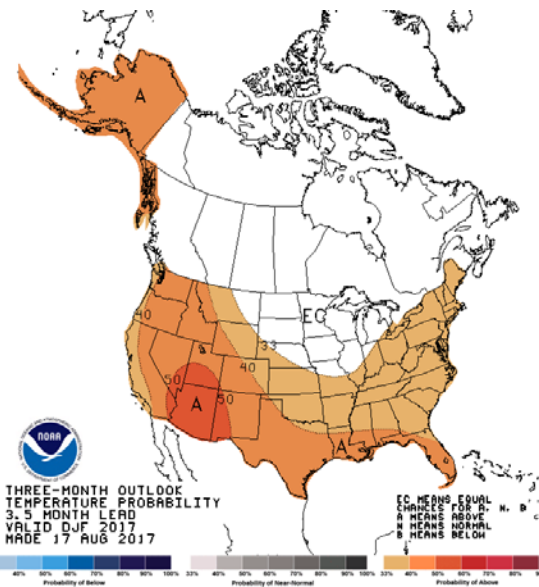
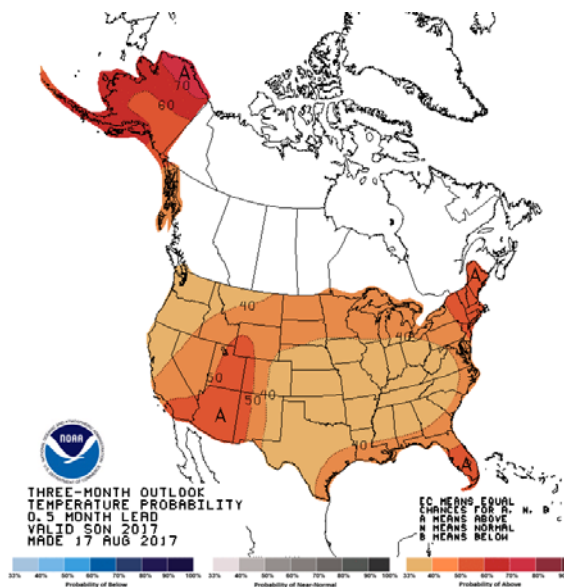
- EIA is closely watching Midwest propane inventories, which reached 23 million barrels (mb) as of August 25; stocks, which typically range between 25 and 28 mb by the start of October, would be between 26 mb and 27 mb by then if weekly builds continue at their average pace since the start of June
- Distillate inventories in the Northeast (PADDs 1A and 1B), the main region where distillate is used for space heating, are above the five-year average level but below last year's high levels
- Natural gas inventories are continuing to build and are currently above the five-year average
- Although weather is uncertain, the current NOAA forecast suggests close-to-normal winter temperatures and an early corn harvest with minimal propane use for drying
- EIA will continue to monitor winter fuels supply and prices. We plan to work with NASEO to offer a full winter fuels update briefing in early October and will provide updated information throughout the winter on the EIA Winter Fuels webpage

# Weather forecast suggests an early corn crop, with normal rain at harvest; winter temperature outlook is normal to above-normal

**Sep.-Oct.-Nov.**  
**Temperature Outlook**

**Dec.-Jan.-Feb.**  
**Temperature Outlook**

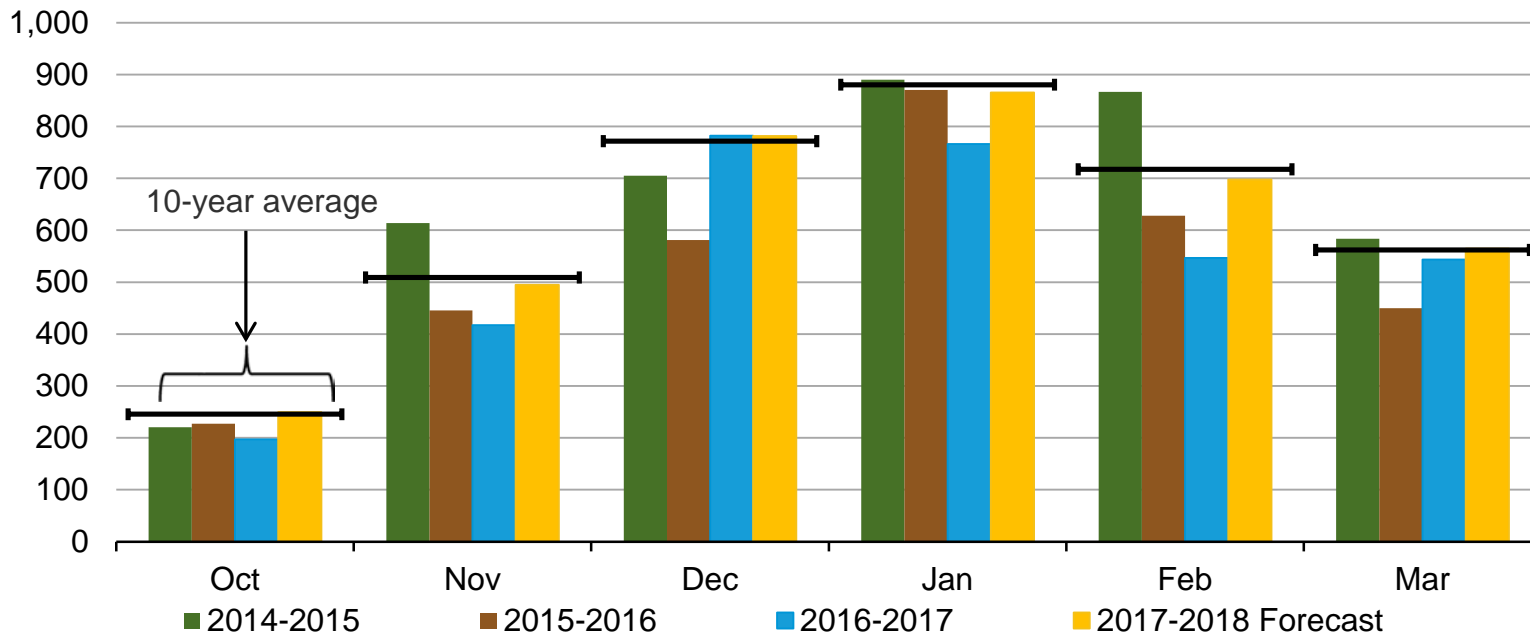
**Sep.-Oct.-Nov.**  
**Precipitation Outlook**



Source: National Oceanic and Atmospheric Administration [0.5-month Outlook \(S.O.N.\)](#), [3.5 month Outlook \(D.J.F.\)](#), Projections made 17 Aug. 2017

# Despite warmer than normal forecast temperatures, NOAA forecasts that the upcoming winter will be colder than last year's mild winter

U.S. current population-weighted heating degree days



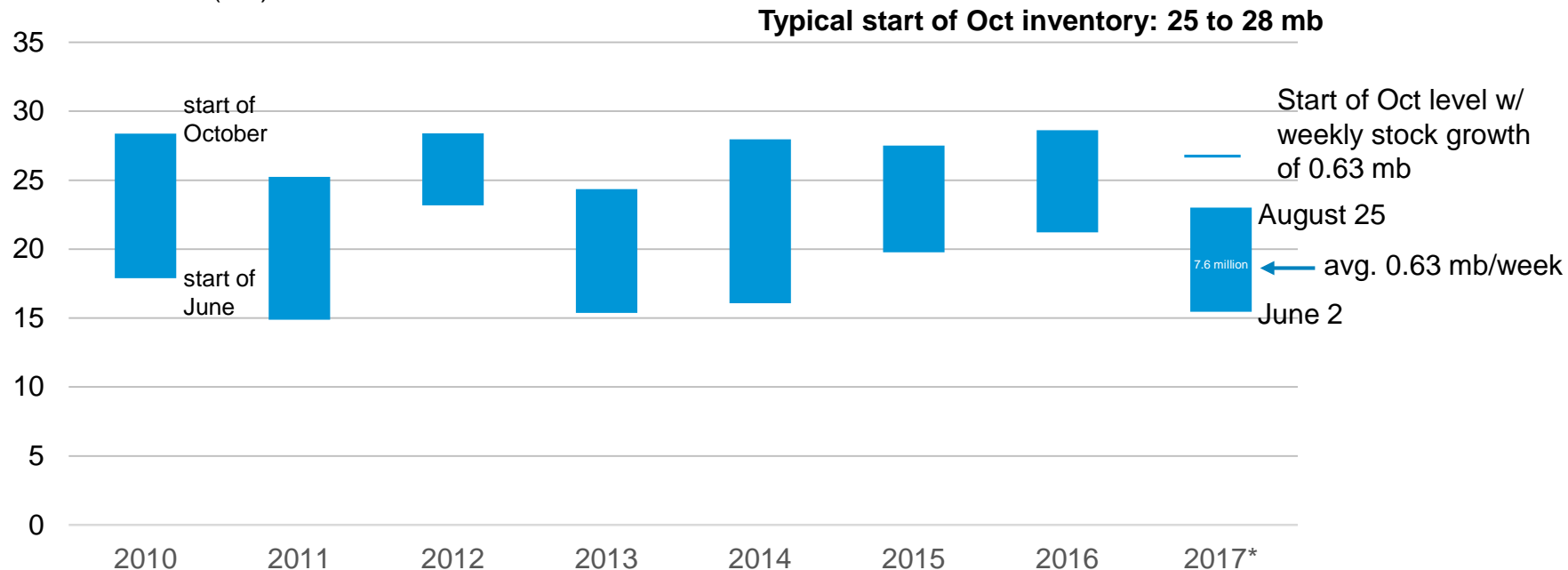
Source: EIA calculations based on National Oceanic and Atmospheric Administration forecasts

# Midwest (PADD 2) propane inventories

- The current injection season started in April with Midwest inventories at the low end of the five-year range and below five-year average.
- Inventories at Conway, where the bulk of Midwest propane stocks are held, is also the origin point for pipelines moving propane north into NE, SD, MO, IA, MN, and WI, are currently below the five-year range
- Inventories in Michigan, as well as IL-IN-OH, at or above five-year average
- Inventories in Western Canada (source of railed propane into Upper Midwest) are well above the five-year range; inventories in Eastern Canada (source of railed and piped propane into Great Lakes states and Northeast), are near their five-year average

# Midwest propane stocks in historical context: start-of-October stock level depends on inventory build rate over June through September

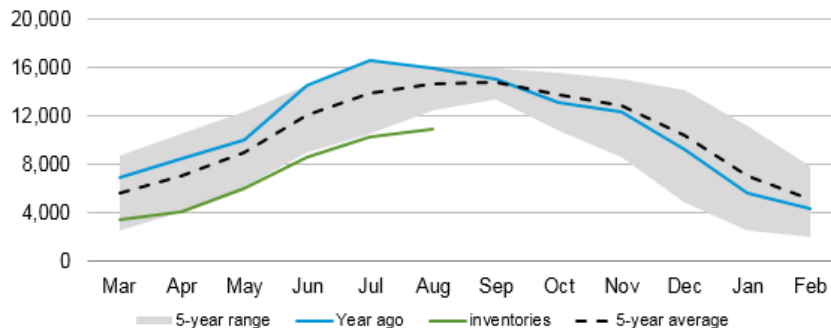
June through September Midwest propane stock build  
million of barrels (mb)



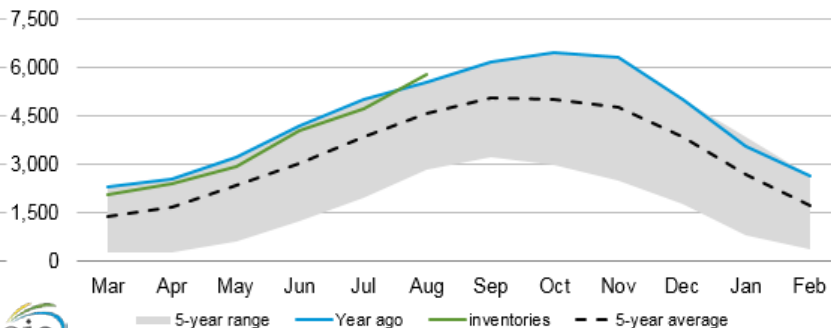
Source: EIA, Weekly Petroleum Status Report, data through August 25, 2017

# Selected state propane\* stocks – data through week ending August 25

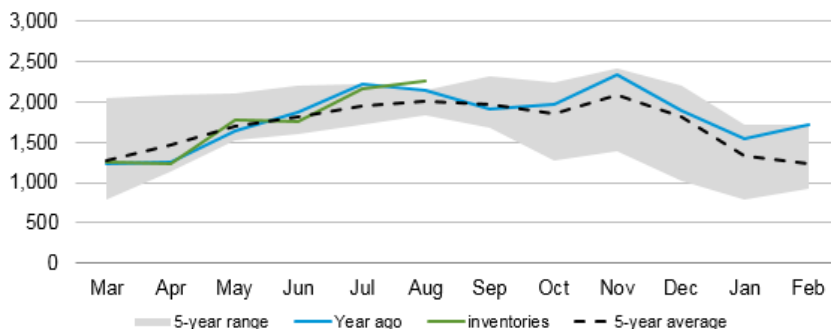
Kansas propane stocks  
thousand bbls



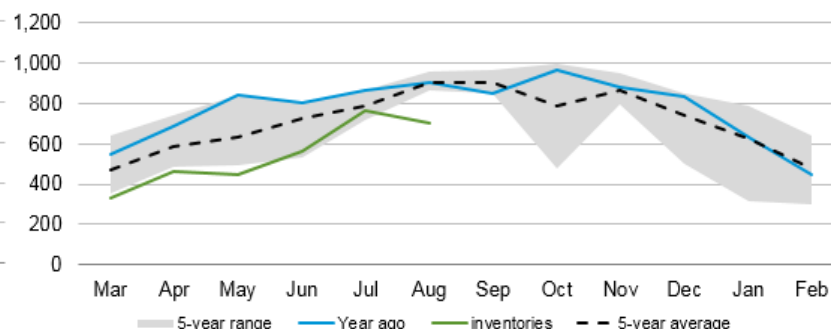
Michigan propane stocks  
thousand bbls



Illinois, Indiana, Ohio propane stocks  
thousand bbls



Iowa, Minnesota, Wisconsin propane stocks  
thousand bbls



Source: EIA, Weekly Petroleum Status Report, data through August 25, 2017

\*propane/propylene for fuel use only; inventories include stocks at terminals, gas plants, and refineries only (excluding pipelines)

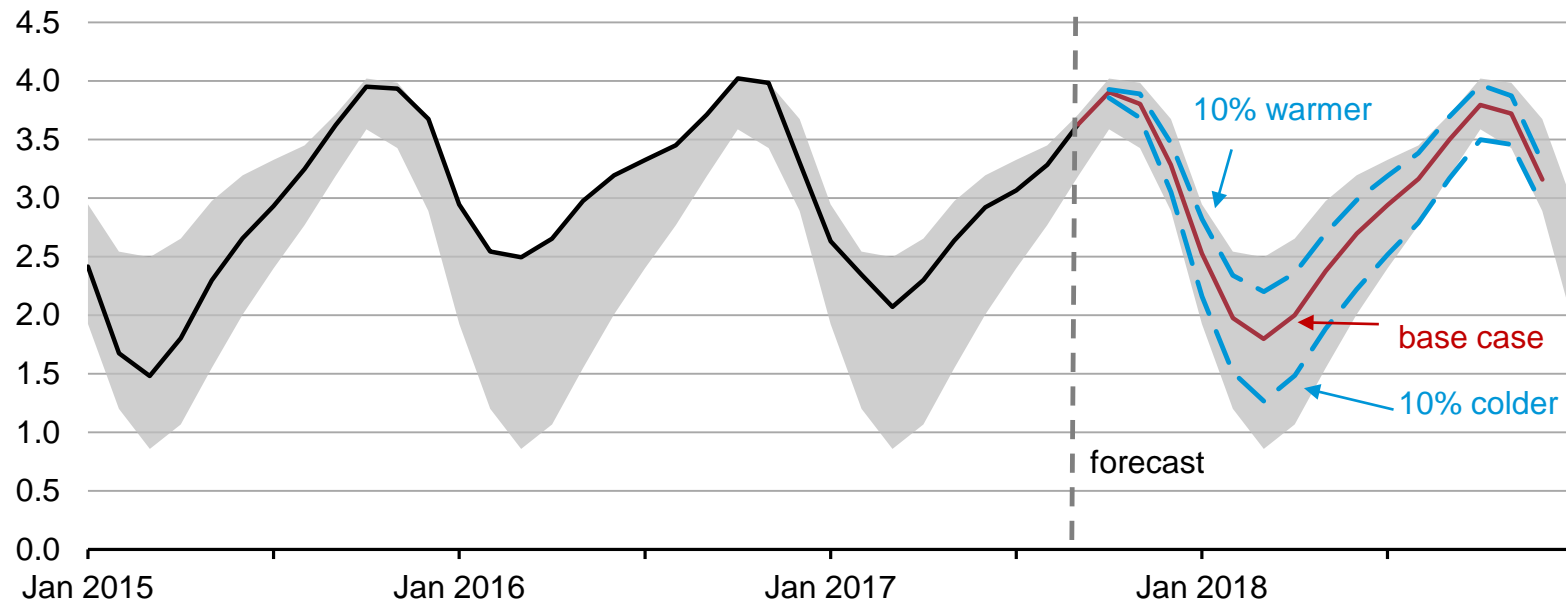
# Winter 2017-18 takeaways – Natural gas

- As of August 18, inventories of natural gas in working storage were 2% above the five-year average, but 7% below last year's level; however, inventories began last heating season at record-high levels
- In the August STEO, EIA forecast natural gas inventory to end October at 3.9 Tcf, slightly above the five-year average



# Natural gas inventories are expected to be close to the five-year average this winter, based on a forecast of relatively normal weather

U.S. total end-of-month working natural gas inventories  
trillion cubic feet



Note: Gray band represents the range between the minimum and maximum from 2012 to 2016

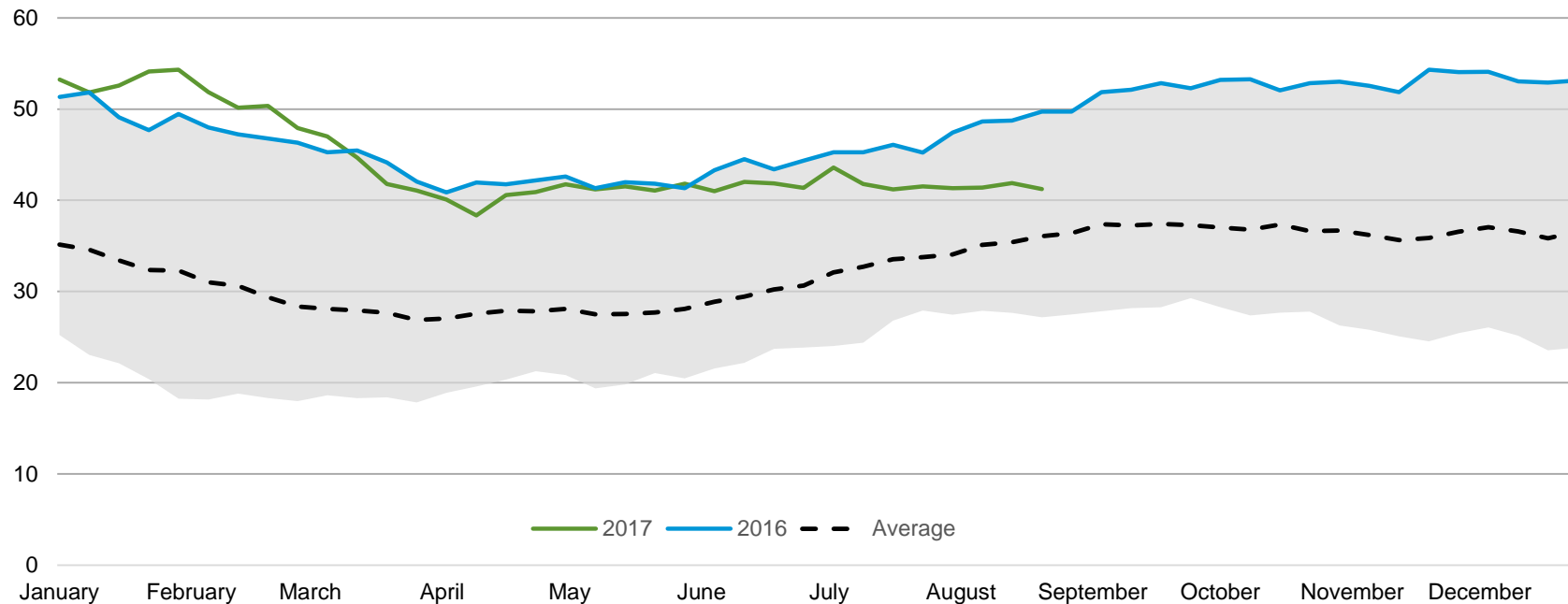
Source: EIA Short-Term Energy Outlook, August 2017.

# Winter 2017-18 takeaways – Heating oil

- Distillate stocks in the Northeast totaled 41.2 million barrels on August 25, 4.8 million barrels (13%) above the five-year average but 8.5 million barrels below year-ago levels
- Unless severely cold temperatures in the Northeast coincide with severely cold temperatures in Europe, ample supplies should be available to meet demand, but localized supply issues are possible

# Northeast distillate inventories are roughly 13% above the 5-year average but about 17% below levels last year

PADD 1A and 1B total distillate fuel  
million of barrels

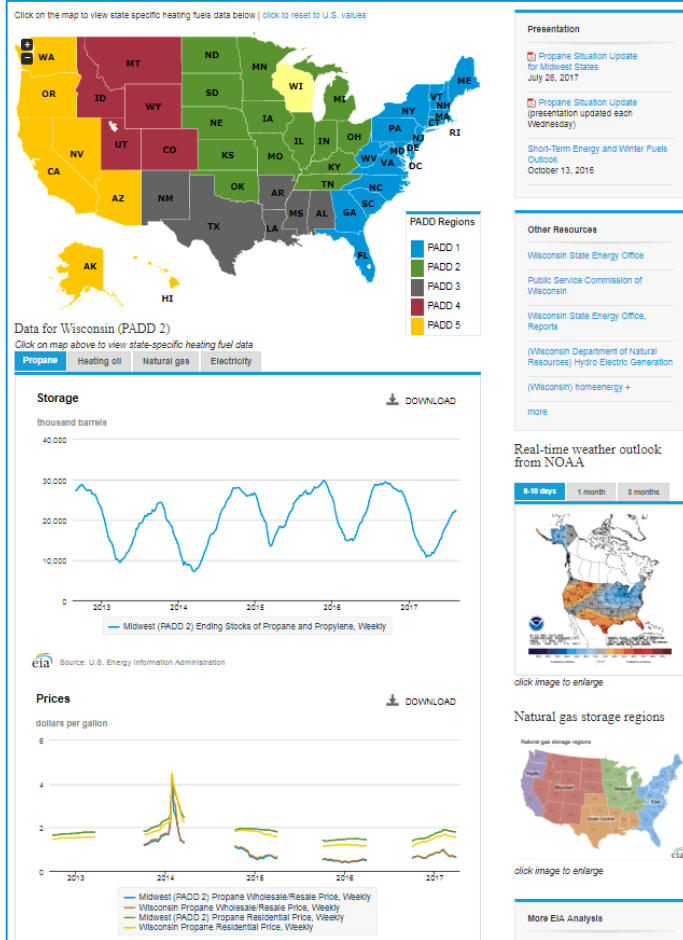


Source: EIA, Weekly Petroleum Status Report, data through August 25, 2017

# Winter Heating Fuels Webpage

[www.eia.gov/special/heatingfuels](http://www.eia.gov/special/heatingfuels)

- Availability and pricing for the four principals heating fuels
  1. propane
  2. heating oil
  3. natural gas
  4. electricity
- Data relevant to each state available through clickable map
- Links to resources for each state
- Current week and 3-month weather forecasts from NOAA
- Every graph can be downloaded as an image or as a spreadsheet



# For more information

U.S. Energy Information Administration home page | [www.eia.gov](http://www.eia.gov)

State Energy Portal | [www.eia.gov/state](http://www.eia.gov/state)

Winter Heating Fuels Site | [www.eia.gov/special/heatingfuels/](http://www.eia.gov/special/heatingfuels/)

Movements of Propane by Rail |  
[http://www.eia.gov/dnav/pet/pet\\_move\\_railNA\\_a\\_EPLLPA\\_RAIL\\_mbb1\\_m.htm](http://www.eia.gov/dnav/pet/pet_move_railNA_a_EPLLPA_RAIL_mbb1_m.htm)

Today in Energy | [www.eia.gov/todayinenergy](http://www.eia.gov/todayinenergy)

Short-Term Energy Outlook | [www.eia.gov/steo](http://www.eia.gov/steo)

Energy Explained – Hydrocarbon Gas Liquids |  
[http://www.eia.gov/energyexplained/index.cfm?page=hgls\\_home](http://www.eia.gov/energyexplained/index.cfm?page=hgls_home)

Monthly Energy Review | [www.eia.gov/mer](http://www.eia.gov/mer)