

# Pipelines are Not Needed

L. David Roper

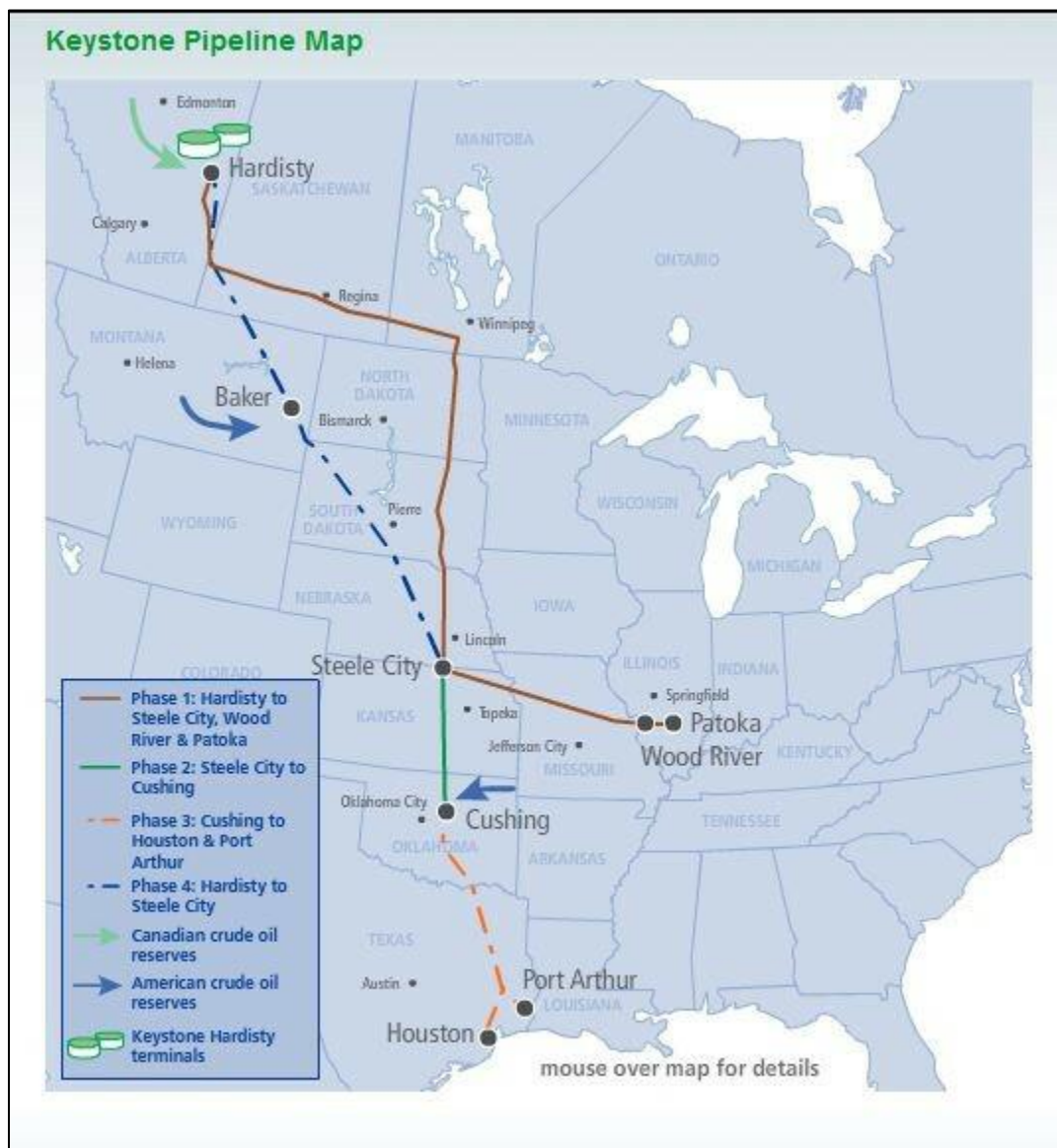
<http://arts.bev.net/RoperLDavid/>

25 January, 2015

There are many proposed crude-oil and natural-gas pipelines in 2015. It is shown in this document that large crude-oil and natural-gas pipelines are not needed in the U.S.

## Keystone XL Pipeline (KXL) for Crude Oil

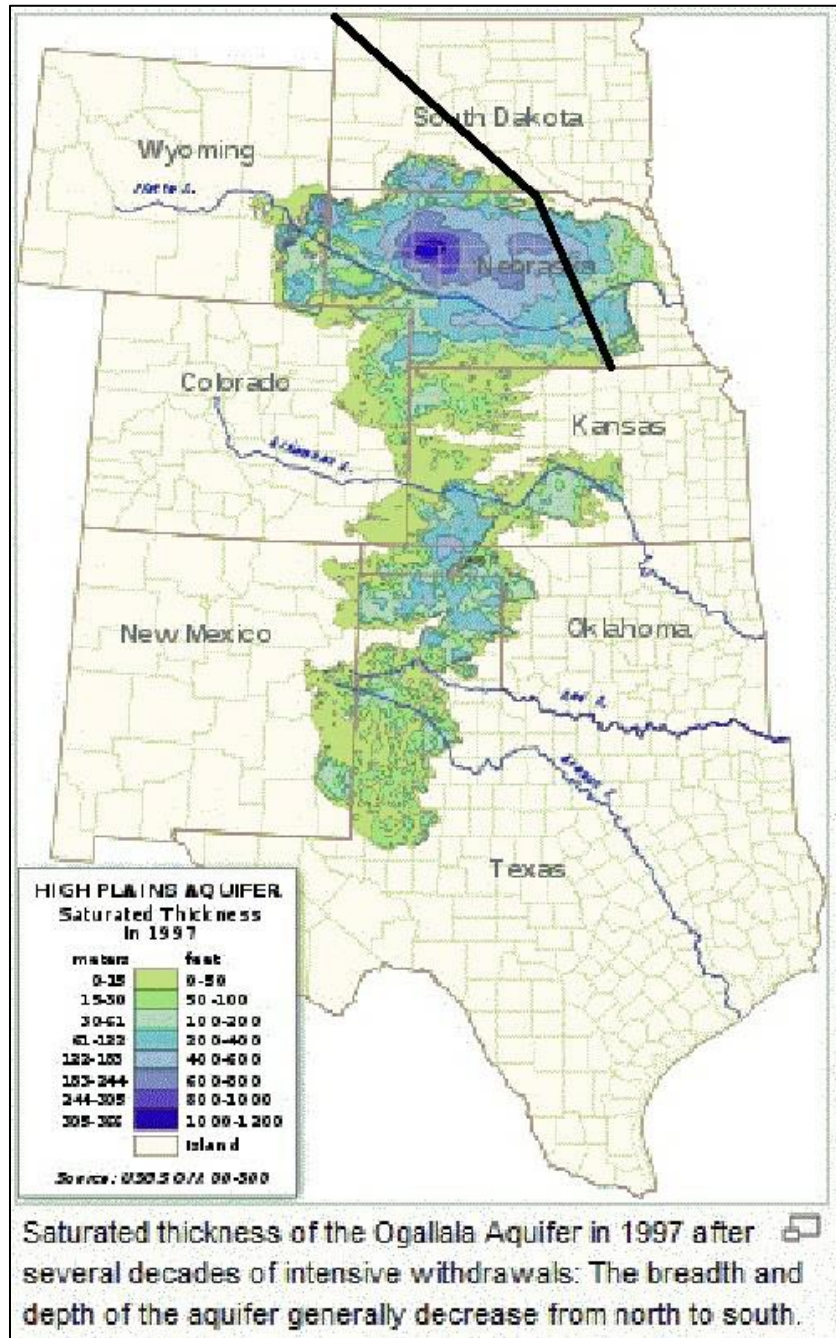
The major proposed crude-oil pipeline is the Keystone XL pipeline (KXL) ([http://en.wikipedia.org/wiki/Keystone\\_Pipeline](http://en.wikipedia.org/wiki/Keystone_Pipeline)):



The dashed-orange line is a section of the pipeline that is under construction. The dashed-blue line is the section that is being proposed.

The purpose of the KXL pipeline is to move heavy crude oil from the Athabasca oil sands area in Alberta, Canada ([http://en.wikipedia.org/wiki/Athabasca\\_oil\\_sands](http://en.wikipedia.org/wiki/Athabasca_oil_sands)) and fracked tight oil from the Bakken oil fields in North Dakota and Montana ([http://en.wikipedia.org/wiki/Bakken\\_formation](http://en.wikipedia.org/wiki/Bakken_formation)) to refineries on the Texan gulf coast. The refined oil will be sold to the highest bidder, which will probably be foreign oil companies. These crude oils contribute more to carbon-dioxide emissions into the atmosphere, a major cause of global warming, than does conventional crude oil. Many oppose the KXL pipeline for this reason.

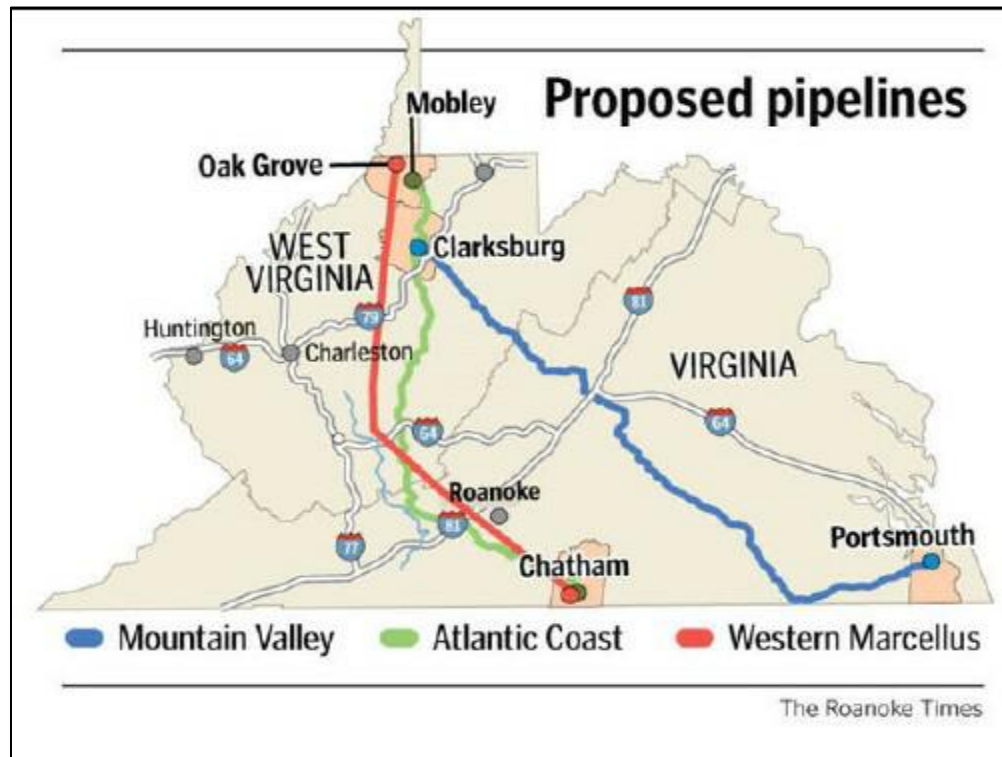
Another major objection to this pipeline proposal is that it crosses a major region of the massive Ogallala Aquifer ([http://en.wikipedia.org/wiki/Ogallala\\_Aquifer](http://en.wikipedia.org/wiki/Ogallala_Aquifer)).



A major pipeline leak above the Ogallala Aquifer could greatly affect water for agriculture and for cities in the area.

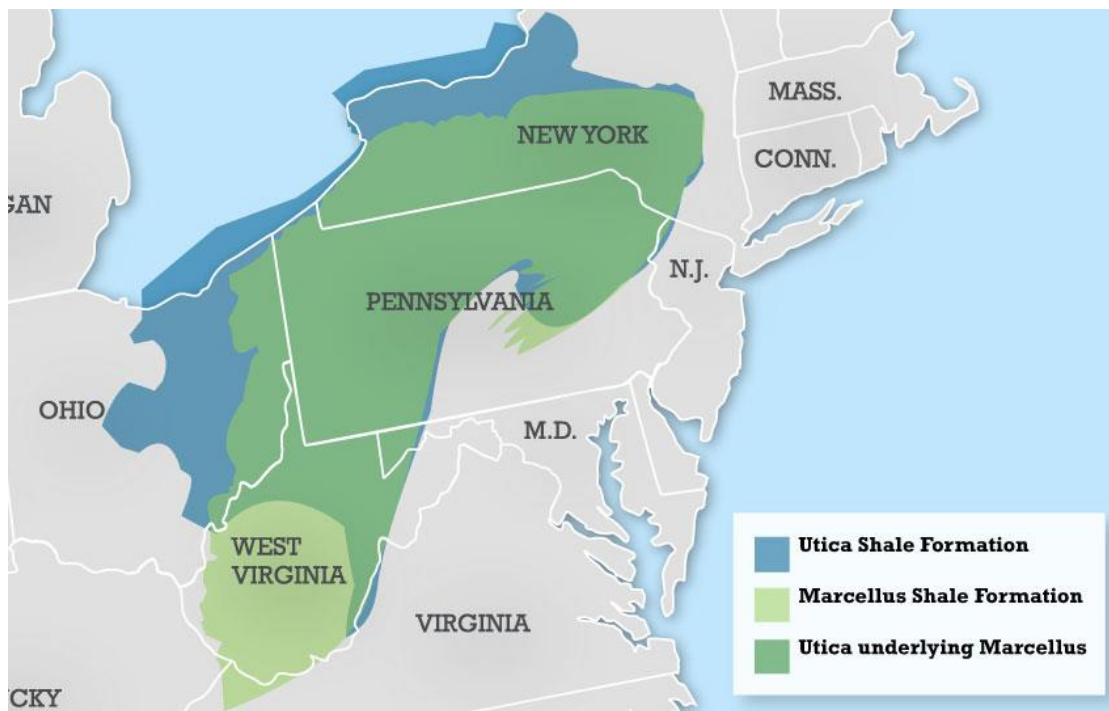
## Three Pipelines Proposed in Virginia

In 2014-5 three large natural-gas pipelines were proposed to cross the Allegheny and Blue Ridge mountains of West Virginia and Virginia (<http://www.roperld.com/science/minerals/PetroleumPipelines.htm> and <http://preservethenv.org/>).



The purpose of these pipelines is to move fracked natural gas from wells in the Marcellus and Utica geological formations to the coast of Virginia to be sold to the highest bidders, which will probably be foreign oil companies.

([http://en.wikipedia.org/wiki/Marcellus\\_Formation](http://en.wikipedia.org/wiki/Marcellus_Formation) and [http://en.wikipedia.org/wiki/Utica\\_Shale](http://en.wikipedia.org/wiki/Utica_Shale) )

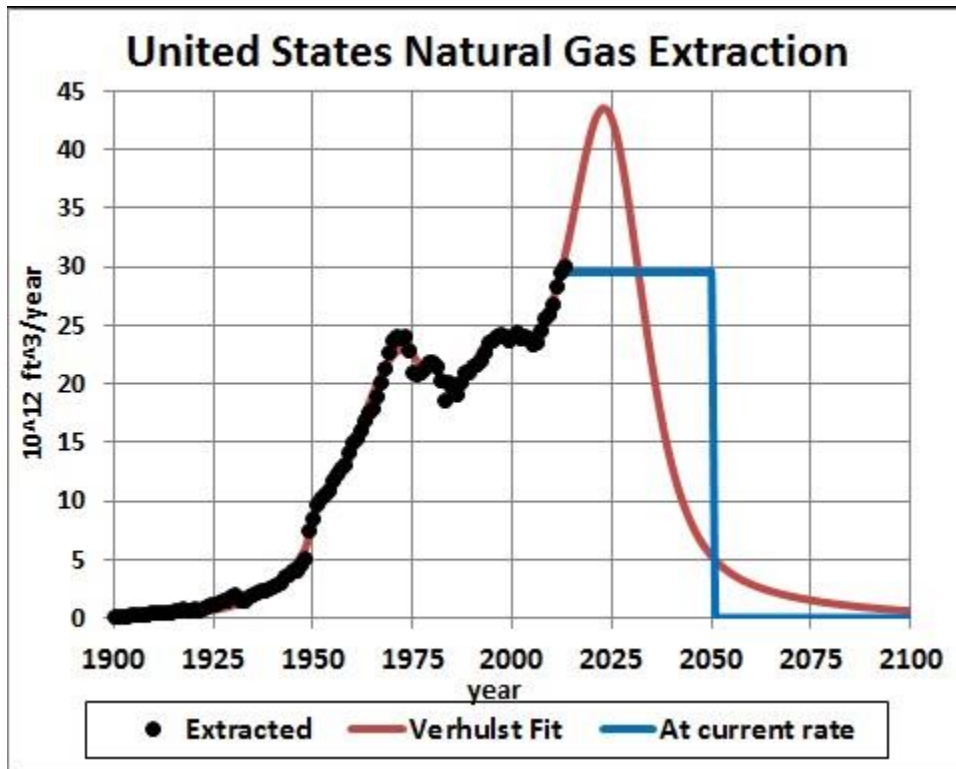


## More Pipelines are Not Needed

There are many reasons why the proposed pipelines discussed above are not needed.

### Extraction of natural gas and crude oil will soon peak:

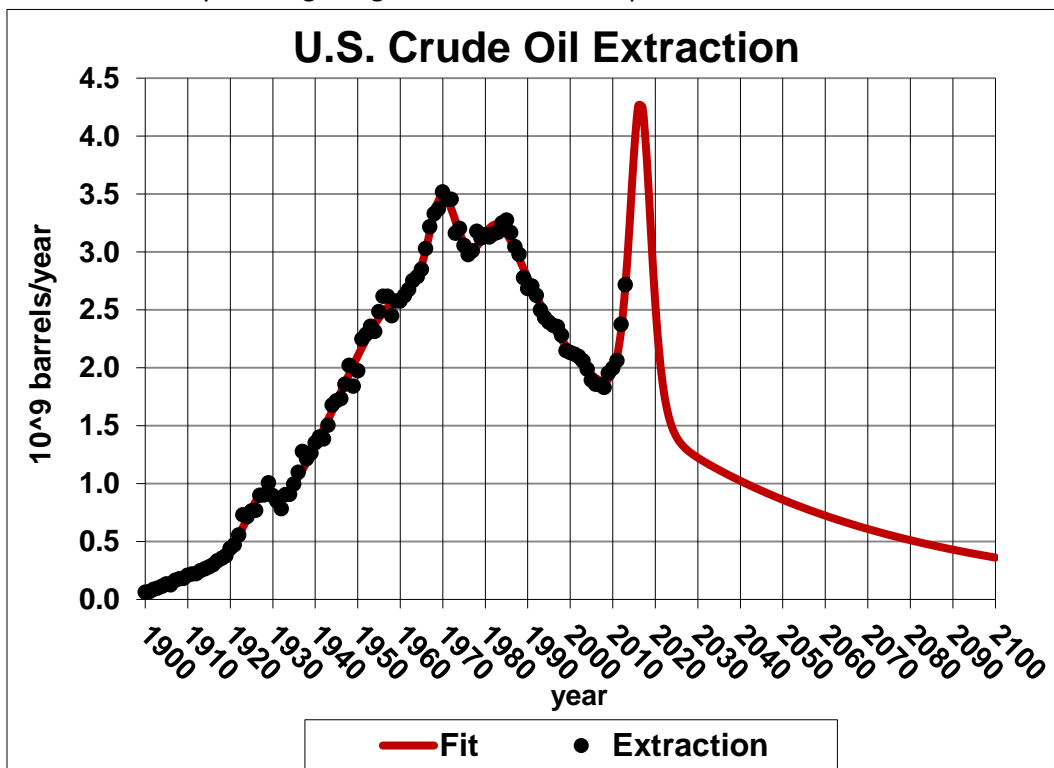
- The extraction by fracking of natural gas in the U.S. will peak within a decade:



[http://www.roperId.com/science/minerals/USGasBoom\\_Bust.htm](http://www.roperId.com/science/minerals/USGasBoom_Bust.htm)

So, there will not be much natural gas to pump through the natural-gas pipelines after 2030.

- The extraction by fracking of tight oil in the U.S. will peak with a decade:



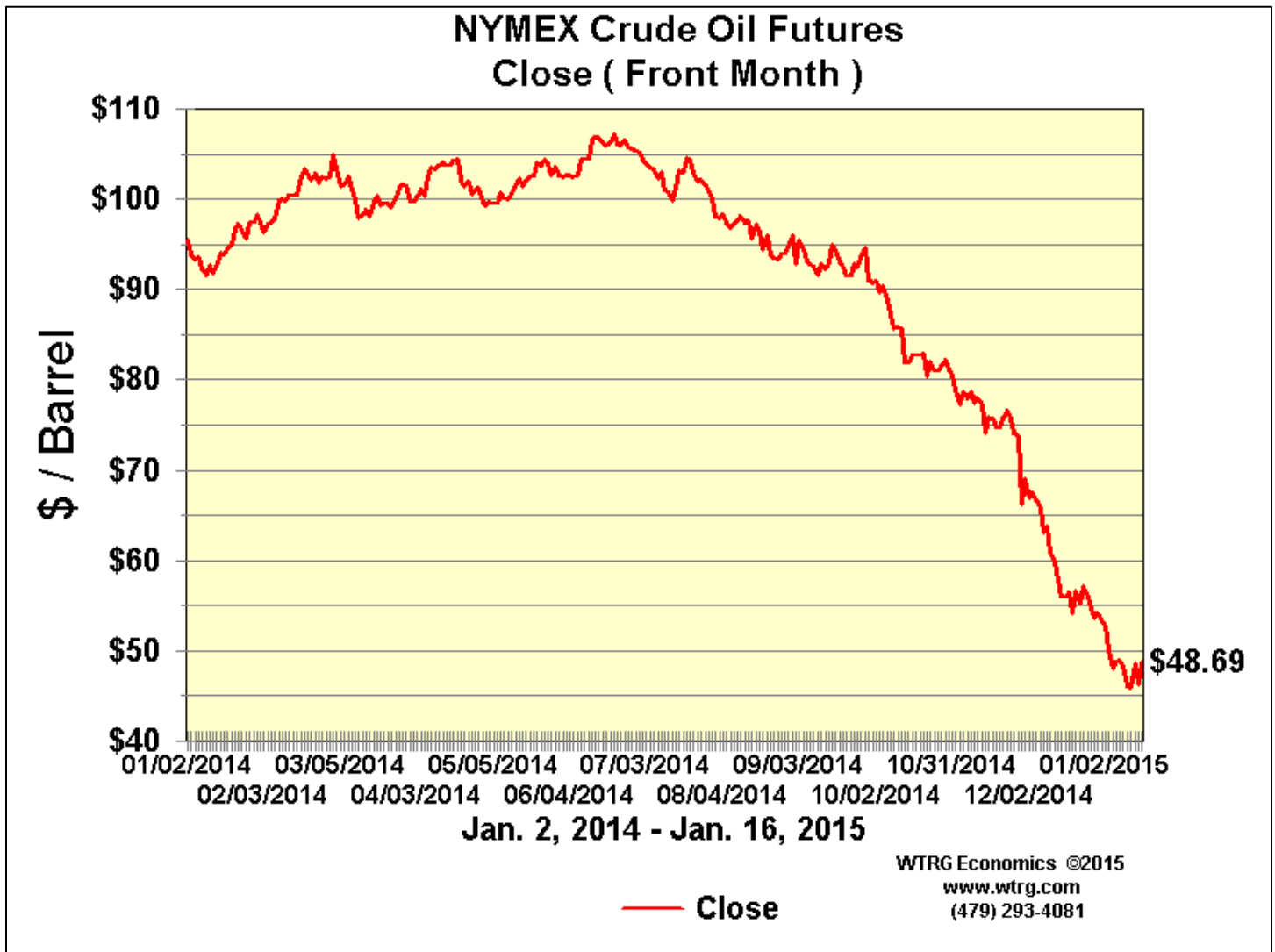
[http://www.roperId.com/science/minerals/USOilBoom\\_Bust.htm](http://www.roperId.com/science/minerals/USOilBoom_Bust.htm)

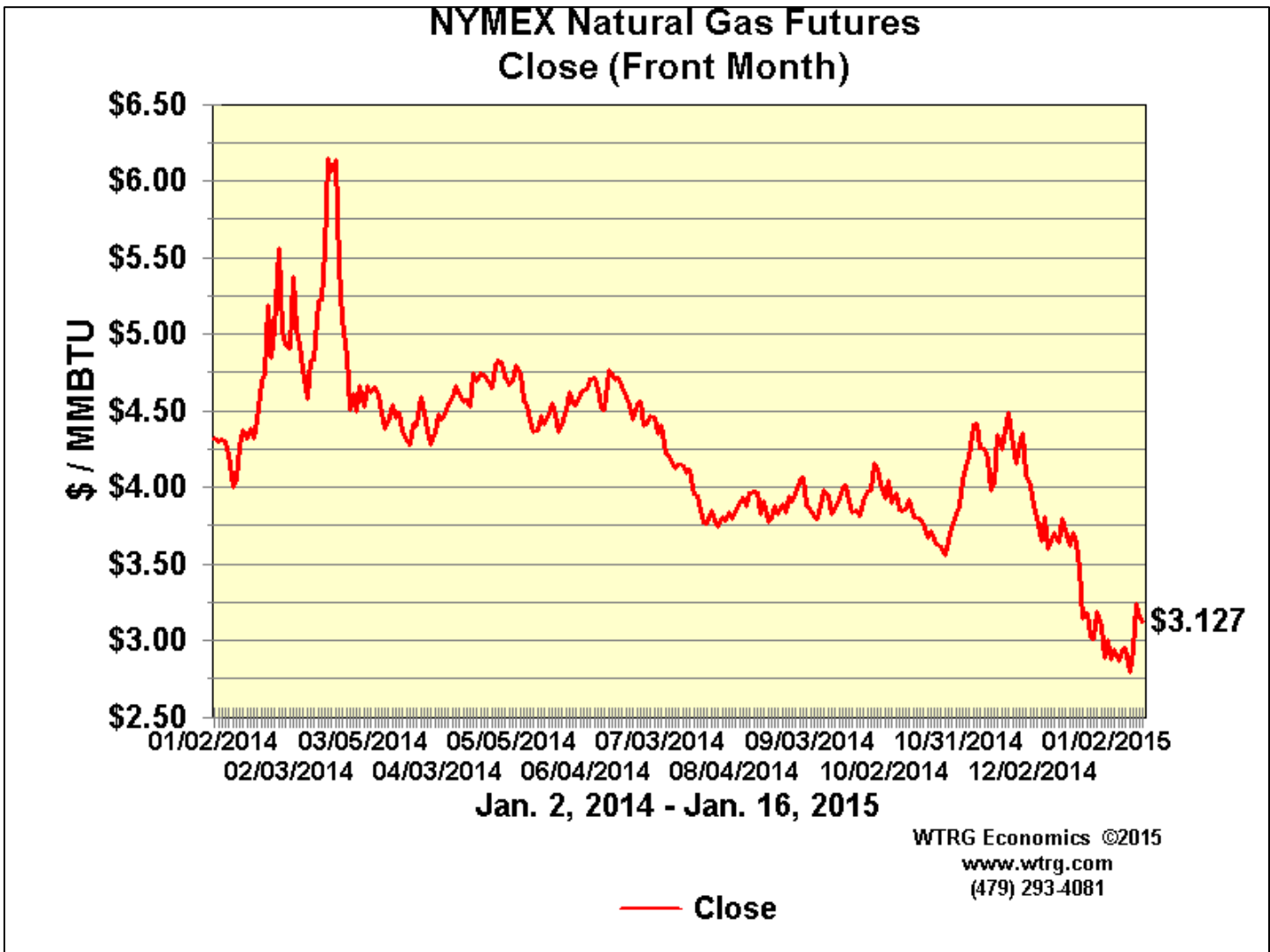
So, there will not be much tight oil to pump through the KXL pipeline after 2020.

- Global Warming will force rapid cessation of extracting heavy oil from tar sands in Canada within the next decade. So, there will not be much heavy oil to pump through the KXL pipeline after 2030

### Oil Companies are Going Bankrupt

Currently the extraction of fracked natural gas and tight oil in the U.S. has been at such a high rate that their prices have plummeted:





This plummeting of crude-oil and natural-gas prices is due to the extremely fast extraction of fracking operations in the U.S., not because foreign oil companies are “dumping” crude oil on the market, as some pundits have stated.

Despite the low price of crude oil, OPEC countries have not reduced their extraction of crude oil. Thus, U.S. oil companies, especially the many independent companies, are going bankrupt because they over-borrowed in the frenzy of rapid extraction by fracking.

<http://www.bloomberg.com/news/2015-01-22/oil-drillers-going-to-die-in-2q-on-crude-price-swoon.html>

“Oil drillers will begin collapsing under the weight of lower crude prices during the second quarter and energy explorers who employ them will shortly follow, according to Conway Mackenzie Inc., the largest U.S. restructuring firm.”

Latest U.S. bankruptcies by oil and gas companies (<http://www.reuters.com/article/2015/01/08/energy-bankruptcy-idUSL1N0UN2MA20150108> )

“Bankruptcy filings in the oil and gas sector are widely expected to increase in the coming months following a slide of more than 50 percent in crude oil prices since June, to about \$50 per barrel. The price decline has put acute pressure on small companies with weak balance sheets and hurt sales for related services companies that sell everything from sand to drilling rigs to temporary housing.”

So, even if there were enough crude oil and natural gas to keep the proposed pipelines busy for many decades, the planned lifetime of pipelines, the U.S. extraction industry for crude oil and natural gas will not be there to provide the liquid to be pumped.

In addition the companies that are planning to build the pipelines will not have the finances required to do the building.

In order to be able to sell a large fraction of the fracked natural gas to foreign oil companies the fracking companies have to spend huge sums to build more compression facilities on the coast and ships to transport the compressed gas.

<http://www.roperId.com/science/minerals/PetroleumPipelines.htm>

<http://arts.bev.net/roperIdavid/interdisciplinarystudies.htm>