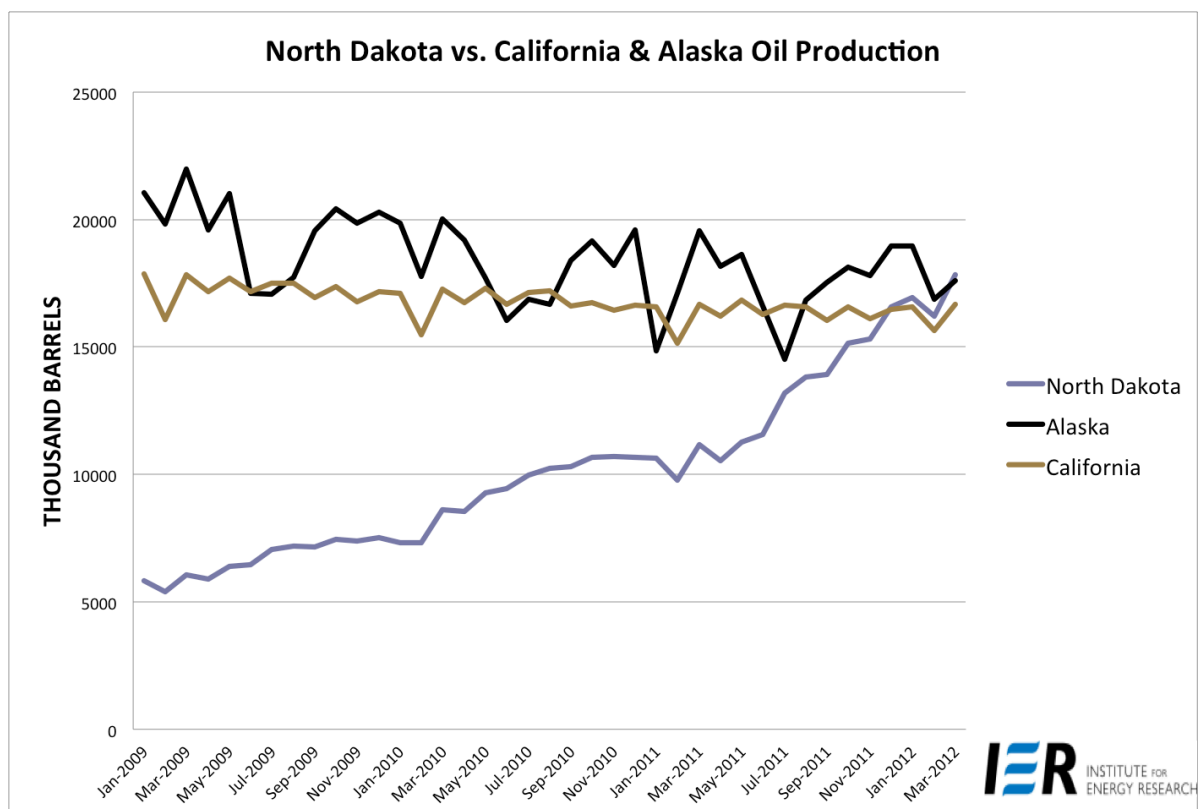


# Bakken Formation Fact Sheet

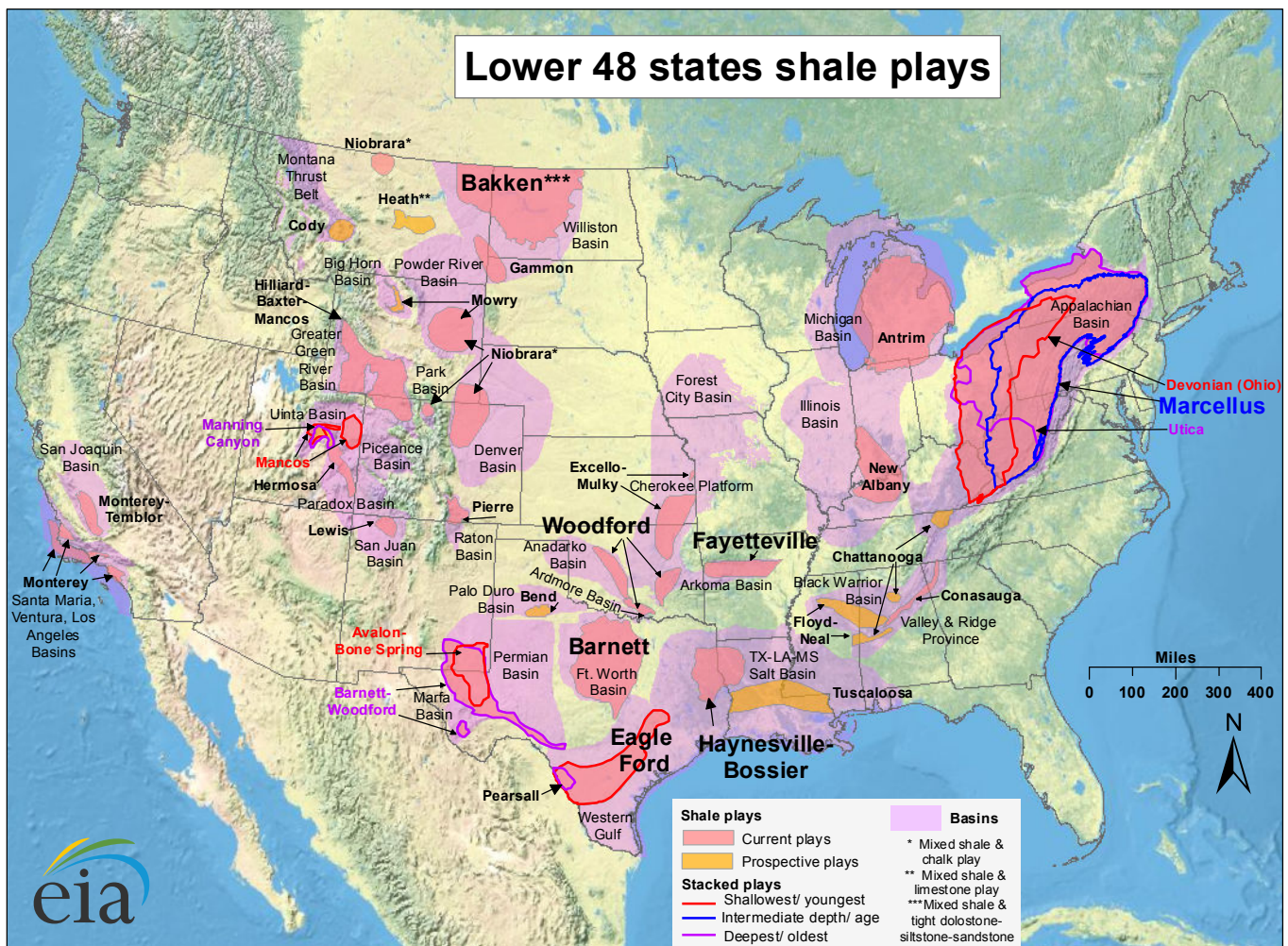
The Bakken Formation is an oil field located in western North Dakota, northeast Montana, and parts of Saskatchewan. Geologists have known for a long time that this formation contains a lot of oil, but because the oil is tightly locked in shale rock, have been unable to produce the oil economically. Due to technological developments and the combination of hydraulic fracturing and horizontal drilling, extraction of this oil is now possible at a reasonable price. This has greatly increased the oil reserves and production in North Dakota:

- In 1995, the United States Geological Survey (USGS) reported that the Bakken Formation had just **151 million barrels** of technically recoverable oil.<sup>i</sup>
- A 2008 estimate by the USGS reported **3.0-4.3 billion barrels** of technically recoverable oil, 25 times more than their 1995 report.<sup>ii</sup> Many believe the new report vastly underestimates actual recoverable oil.
- In 2011 468 rotary oil rigs were operating in North Dakota. This is 25% of the nation's supply of rotary rigs.<sup>iii</sup>
- From 2008-2009 the proved reserves in North Dakota went from **573 million barrels to 1046 million barrels**.<sup>iv</sup>
- In 2005, the Bakken Formation was producing about 3,000 barrels of oil per day. In 2010 the formation averaged **225,000 barrels per day, a 7,400% increase**.<sup>v</sup>
- In March 2012, North Dakota produced nearly **18 million barrels of oil**, surpassing Alaska and California, and second only to Texas.<sup>vi</sup>
- While North Dakota is taking advantage of its oil resources, California seems to be doing the opposite. Despite the lifting of the OCS moratorium and having some of the nation's largest oil reserves, California is at its lowest level of oil production in at least three decades.<sup>vii</sup>



The increased level of oil production comes with a great deal of positive effects. At a time when most other states have been struggling economically, North Dakota has been thriving in large part due to the Bakken Formation:

- As of May 2012, North Dakota's **unemployment stood at 3%**, while the average unemployment in the U.S. was 8.2%.<sup>viii</sup>
- In 2011, North Dakota ranked seventh in the U.S. in real GSP per capita at \$50,096, well above the national average.<sup>ix</sup>
- While States such as California have a large budget deficit, North Dakota boasts a **budget surplus of \$1 billion**.<sup>x</sup>
- The workforce for the oil industry in North Dakota went from 5,000 in 2005 to 18,000 in 2009 and it is now estimated to be over 30,000.<sup>xi</sup>



Along with the Bakken, there are 20 new onshore oil fields that could possibly increase the U.S. oil supply by 25% in the next 10 years.<sup>xii</sup> With increased production of these shale oil deposits the U.S. could potentially save over \$175 billion a year in imported oil<sup>xiii</sup> and could

surpass both Russia and Saudi Arabia in terms of oil production.<sup>xiv</sup> Two of the largest onshore oil fields are:

- **Eagle Ford:** Located in much of southern and eastern Texas. This field is producing around 100,000 barrels of oil a day and could reach 420,000 barrels a day by 2015.<sup>xv</sup>
- **Niobrara:** Located in parts of Colorado, Wyoming, Nebraska and Kansas. It is thought that the Niobrara field could hold more than two billion barrels of oil.<sup>xvi</sup>

The United States is an oil rich country. We are the world's third largest producers of oil, and with these new shale oil resources our oil production looks to increase in the coming years.

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<sup>i</sup> United States Geological Survey, 3 to 4.3 Billion Barrels of Technically Recoverable Oil Assessed in North Dakota and Montana's Bakken Formation, 25 Times More than 1995 Estimate. April 10, 2008 <http://www.usgs.gov/newsroom/article.asp?ID=1911#.T-tlVI73CRY>

<sup>ii</sup> United States Geological Survey, 3 to 4.3 Billion Barrels of Technically Recoverable Oil Assessed in North Dakota and Montana's Bakken Formation, 25 Times More than 1995 Estimate. April 10, 2008 <http://www.usgs.gov/newsroom/article.asp?ID=1911#.T-tlVI73CRY>

<sup>iii</sup> Energy Information Administration, North Dakota: Data. June 22, 2012. <http://www.eia.gov/state/state-energy-profiles-data.cfm?sid=ND#Reserves>

<sup>iv</sup> Energy Information Administration, Proved Oil Reserves. December 30, 2010. [http://www.eia.gov/dnav/pet/pet\\_crd\\_pres\\_a\\_EPC0\\_R01\\_mmbbl\\_a.htm](http://www.eia.gov/dnav/pet/pet_crd_pres_a_EPC0_R01_mmbbl_a.htm)

<sup>v</sup> CNN Money, Billions of Barrels of Untapped U.S. Oil. March 9, 2011. [http://money.cnn.com/2011/03/04/news/economy/oil\\_shale\\_bakken/index.htm](http://money.cnn.com/2011/03/04/news/economy/oil_shale_bakken/index.htm)

<sup>vi</sup> Energy Information Administration, Oil Production. May 30, 2012. [http://www.eia.gov/dnav/pet/pet\\_crd\\_crdpn\\_adc\\_mbbbl\\_m.htm](http://www.eia.gov/dnav/pet/pet_crd_crdpn_adc_mbbbl_m.htm)

<sup>vii</sup> Institute for Energy Research, Crude Oil Production from Shale Formations Jumps in 2011. March 29, 2012. <http://www.instituteforenergyresearch.org/2012/03/29/crude-oil-production-from-shale-formations-jumps-in-2011/>

<sup>viii</sup> Bureau of Labor Statistics, Local Area Unemployment Statistics. June 27, 2012. <http://data.bls.gov/timeseries/LASST38000003>

<sup>ix</sup> Bureau of Economic Analysis, Regional Data: Per capita real GDP by state. June 5, 2012. <http://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=3>

<sup>x</sup> Institute for Energy Research, North Dakota and the Economic Miracle. March 12, 2012. <http://www.instituteforenergyresearch.org/2012/03/12/north-dakota-and-the-economic-miracle/>

<sup>xi</sup> Institute for Energy Research, Shale Oil May Mirror the Shale Gas Boom. June 30, 2011. <http://www.instituteforenergyresearch.org/2011/06/30/shale-oil-may-mirror-the-shale-gas-boom/>

<sup>xii</sup> Institute for Energy Research, Shale Oil May Mirror the Shale Gas Boom. June 30, 2011. <http://www.instituteforenergyresearch.org/2011/06/30/shale-oil-may-mirror-the-shale-gas-boom/>

<sup>xiii</sup> Institute for Energy Research, Shale Oil May Mirror the Shale Gas Boom. June 30, 2011. <http://www.instituteforenergyresearch.org/2011/06/30/shale-oil-may-mirror-the-shale-gas-boom/>

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<sup>xiv</sup> Institute for Energy Research, Bring the Employees Back Home. December 8, 2011.  
<http://www.instituteforenergyresearch.org/2011/12/08/bring-the-oil-employees-back-home/>

<sup>xv</sup> Institute for Energy Research, Shale Oil May Mirror the Shale Gas Boom. June 30, 2011.  
<http://www.instituteforenergyresearch.org/2011/06/30/shale-oil-may-mirror-the-shale-gas-boom/>

<sup>xvi</sup> Denver Business Journal, Niobrara oil potential could be 2 billion barrels, November 26, 2010.  
<http://www.bizjournals.com/denver/print-edition/2010/11/26/Niobrara-oil-potential.html>