"Remember Your Humanity, and Forget the Rest*"

Notes toward an Integral Response to Our Converging Crises With Emphasis on New Mexico and Nuclear Disarmament

July 23, 2014

Greg Mello, Los Alamos Study Group, gmello@lasg.org
with help from Trish Williams-Mello

Part II: Underappreciated: Peak Oil Scenarios



Los Alamos Study Group 2901 Summit Place NE Albuquerque, NM 87106 www.lasg.org, 505-265-1200

The world is very near the all-time peak, or perhaps past the peak, of oil supplies.

Consider just *one* recent analysis, which will illustrate the main points...

"Oil prices started to skyrocket when one quarter of global supplies went into irreversible decline," Matt Mushalik, June 25, 2014

This is the 1st post on the BP Statistical Review 2014 which has been published recently....

The 2.8 fold increase in oil prices since 2004 gives us an idea what will happen when a larger percentage of countries peaks and then declines, not to mention when the global peak is reached...

Total oil production does not show a peak although growth in 2013 was just 0.6% compared to 2.6 % the year before...

[The presentation followed Mushalik's excellent post, linked above.]

Now switch to DOE EIA data for crude + condensate, from Ron Patterson's blog

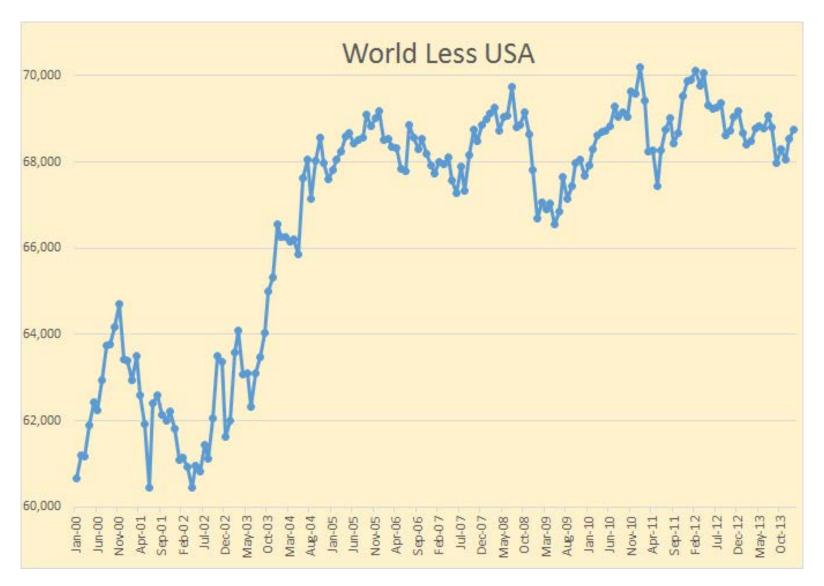
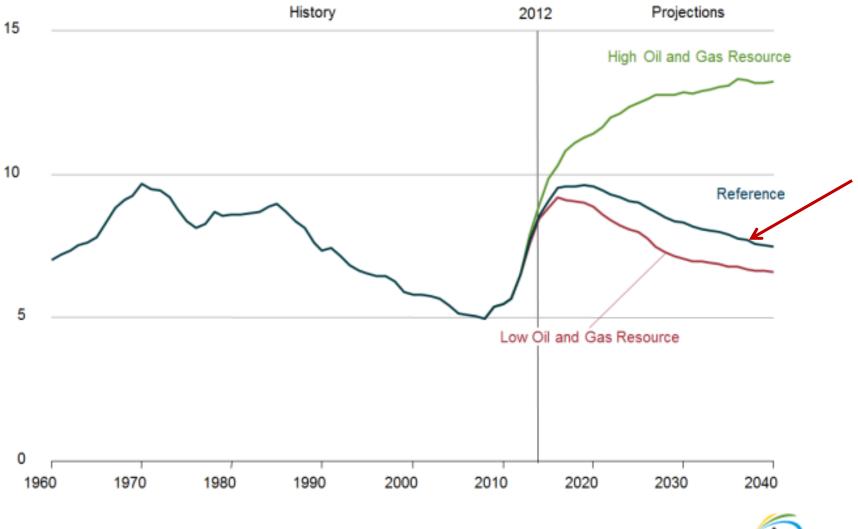




Figure IF2-1. U.S. crude oil production in three cases, 1960-2040

million barrels per day

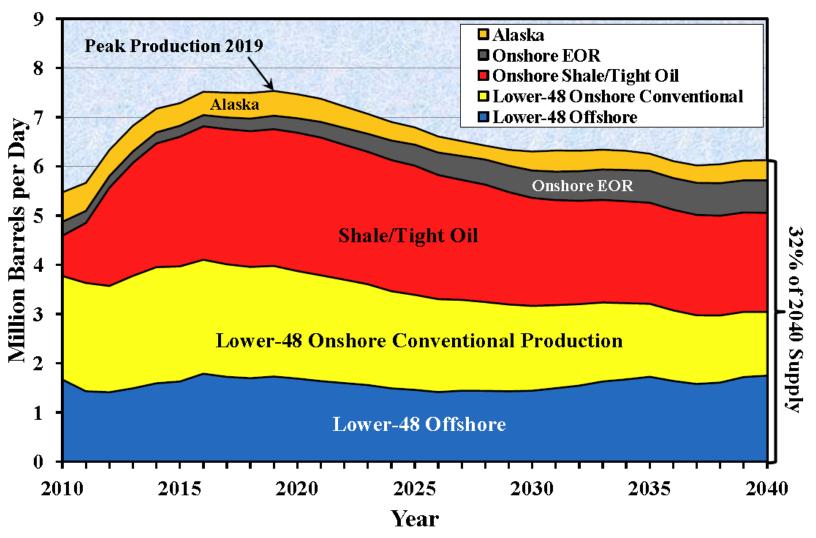


Tight Oil: A Solution to U.S. Import Dependence?

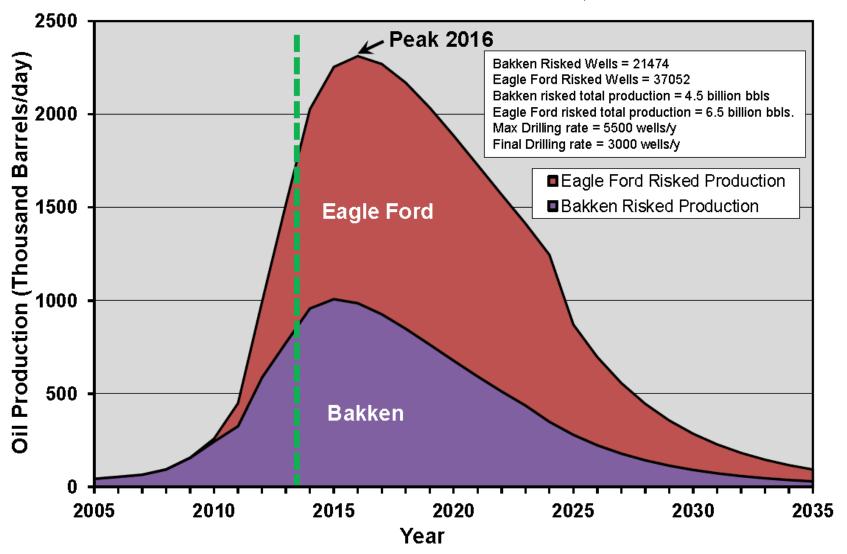
Geological Society of America Denver, Colorado October 28, 2013

J. David Hughes
Global Sustainability Research Inc.
Post Carbon Institute

U.S. Crude Oil Production Projection by Source and Region 2010-2040 (EIA 2013 Reference Case)



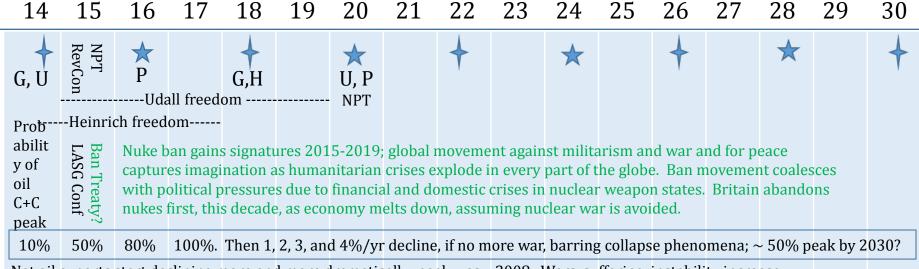
Bakken and Eagle Ford Oil Production – Declining Drilling Rate Risked at 80% for locations, 2005-2035



© Hughes GSR Inc, 2013

(data from Drillinginfo, October, 2013)

Now let's put just a few pieces together – realistic (black), possible (green)



Net oil exports start declining more and more dramatically; peak was \sim 2008. Wars, suffering, instability increase

Climate change impacts increasing unevenly in space & time, ability to rapidly reduce GHGs without attendant econ collapse gone

Abject European dependence on Russia, MENA for oil & gas finally perceived

U.S. economic and fiscal crisis with bimodal resolution: either a) higher & more progressive taxes, decreased militarism, or b) diminished social contract + militarism + vast inequality

Human population peaks and begins uneven decline. Mental health deteriorates further. Unprecedented cruelty continues, involving more people than WWII. Human rights advances fail and retreat. Disparities in all things increase. Shortages in materials, energy, water plague wide swaths of world. Wild animals killed and eaten *en mass* everywhere where not protected by militarized police. Forests at risk.

Over time, scenarios for the future are increasingly dominated by statistically contagious, interconnected "black swan" events, e.g. famine, political unrest and instability, "liquid" and other wars and insurrections, financial collapses, infrastructure failures, terrorism, great storms, nuclear meltdowns, earthquakes, normal accidents, mass unemployment and loss of faith in "system," epidemics/pandemics, supply chain failures, etc.

DoD procurement crisis heats up, this decade. Navy effectively kills "3 + 2" plan by 2016? LASG halts pit facility expansion by 2016? NNSA and DOE continue pattern of fiascos. It is critical to establish humanitarian values in the present decade. It will never be easier than now. Nuclear weapons ban must link with wider issues.

New Mexico's future is dire without revolt and a political renaissance



New Mexico Zero: "Downward Drift": Continuing exodus of non-military non-government professionals; continuing population declines in most rural counties; gradual loss of natural amenities, habitats, species ensembles; fracking bubble bursts (this decade); falling human development indices; increasing inequality; declining skills; corruption; failure of entrepreneurial model of business development ("Innovate ABQ") along with loss of some current economic anchors; some improvement in health coverage but quality of care poor; new slums and homeless encampments; political disenfranchisement and lassitude; demographic aging.

New Mexico One: "Collapse": Same as NM0 but also nuclear wasteplex and fracking petroplex; military and homeland security focus; slums expand as does Carlsbad WIPP culture and military culture; lab, military contractor, and uniformed military retirees and leave-holders frequently hold political office. Racism rises. Reputation and identity of state shift to national security, now including subsidized oil and gas, toxic and radioactive waste. Drugs, police wars, prisons, collapsed suburbs, lawless encampments, loss of tourism.

New Mexico Two: "Renewal": Civil discontent & honest appraisal of situation fuels progressive revolt, electoral sweep, fosters green "New Deal," the groundwork for which had been laid previously. Public investment and private incentives fuel locally-owned renaissance in sustainability. Distributed generation and microgrids popular as banks remove barriers and incentives put in place. PNM's role whittled down. Local ownership, increased political enfranchisement, trust, changed mentality, skills, pride. Protection of habitats, livelihoods as stewards, producers. Cultural renewal-in-depth as consumerism falters. Arts flourish.

It is critical to articulate green, human development values immediately. New Mexico risks a downward spiral from which it might never recover. Gradual reform within present political alignments has not worked and will now fail completely.