

Is Poor Federal Stewardship Threatening the American Energy Renaissance?*

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Abstract

Government “stewardship” of energy and mineral resources on federal lands—almost one third of US territory—has historically underperformed and is now demonstrably underserving the nation. Current federal land management policies are largely out of step with the nation's requirements and expectations of a stable resource base of oil and gas (and minerals) and an adherence to proper multiple land use practices. Most of our onshore oil and gas are currently produced from private and some state lands, indicating access to federal lands through leasing has been largely choked off. There have been steady decreases in the number of federal leases, total acres leased, and exploration permits issued for onshore and offshore oil and gas in the past thirty years. Another example of poor federal stewardship is the practice of “withdrawals” of public land that preclude resource development under existing mineral laws, meaning that the practice eliminates future development on those lands for some period of time, irrespective of the occurrence of valuable mineral resources on those lands. Withdrawals are initiated by very few government officials (sometimes one), can be political, may involve disproportionately large acreages, and are usually irreversible. Large withdrawals that are irreversible are among the worst examples of stewardship on federal lands because they are decided without regard to the occurrence of unique geologic deposits, banning all future development of those resources. Withdrawing large tracts that contain key energy or mineral resources has the potential to create artificial shortages, setting up the need to import those resources, possibly from adversaries. A critical question regarding the cumulative effect (and threat) of ongoing federal land withdrawal is: has the government already removed so much land from energy and mineral exploration and development that it poses a serious threat to the long-term resource availability for our nation? Policymakers at all levels of government need to quickly find alternatives to inefficient federal control of vast tracts of lands in western states—such as helping to enable the states themselves to effectively manage the lands in their best interest and that of the nation.

Selected Reference

Lee, C., and D. Russell, 1977, Federal leasing: the need for a perspective: Mining Engineering, v. 29/5, p. 23-34.

Is Poor Federal Stewardship Threatening the American Energy Renaissance?

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Federal Stewardship “Elevator Brief”

- Declining trend in federal leasing by successive administrations
- Negative trends in oil and gas leases on all federal lands over the past 30 years
- Percentage of onshore oil and gas production on federal (versus non-federal) lands is sharply decreasing, esp. in western states
- Access to offshore for exploration and leasing is being chocked off
- American energy renaissance is being threatened long term
- Progress toward “energy independence” in this decade or the next is not a federal priority—the question is why not?
- Americans being cheated out of revenue without federal leasing

Lucas Gusher at Spindletop, January 10, 1901. First Texas gusher, beginning of federal “stewardship” of energy



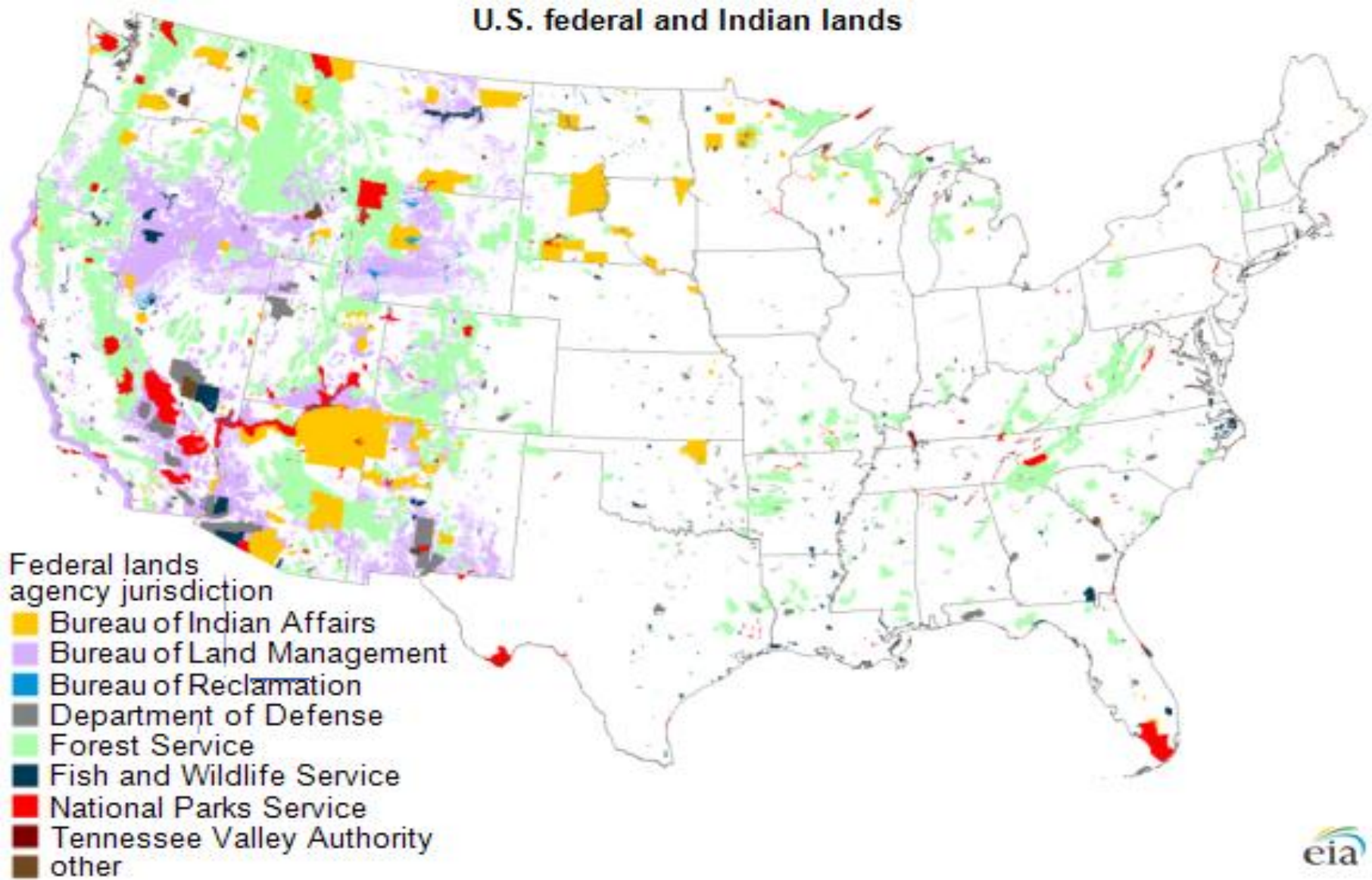
Source: AAPG

Key Questions Regarding Federal Stewardship

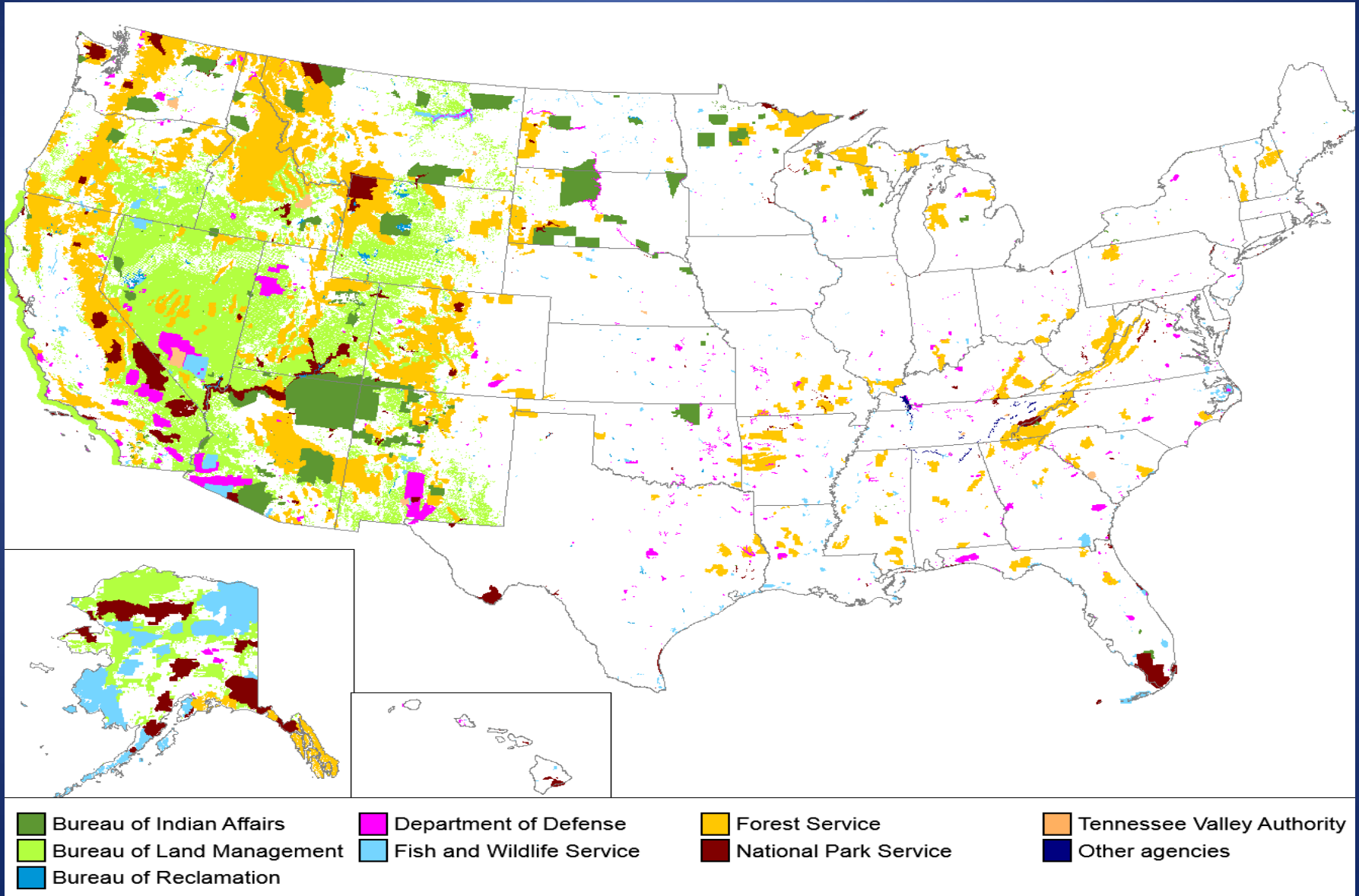
- **What** is meant by federal “stewardship “—how defined?
- **Why** is stewardship of energy resources so important?
- What is current **impact** of federal stewardship on energy resources?
 - **Is the American “energy renaissance” being threatened?**
- **Implications** of today’s stewardship practices on future production?
- **Opportunities** to expand “energy renaissance”. What must happen?
- **Analysis** of this Issue begs for attention. Americans deserve highest and best use and maximum revenues (rentals and royalties)and a greater chance at energy independence. We deserve to have a full “federal partner” and we do NOT! How do states handle resources?

Federal and Indian Lands Ownership

U.S. federal and Indian lands



Federal and Indian Lands Ownership With Alaska and Hawaii



What is Stewardship?

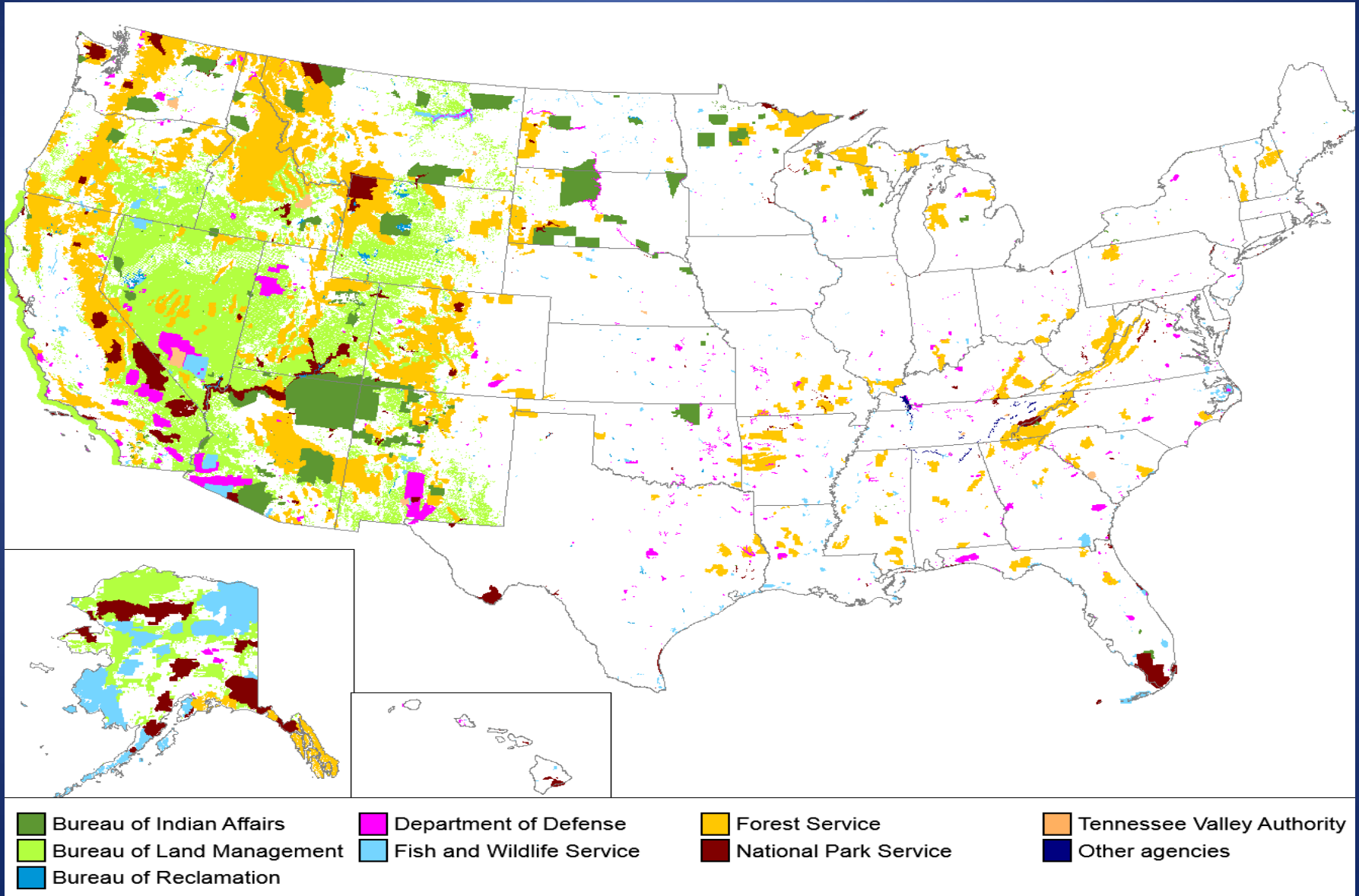
-Is an ethic that embodies responsible planning and management of resources—in this case, “energy” resources
-also includes mineral resources—which are no less important ,and would merit a separate presentation—beginning with The Mining Law of 1872!
- ...It is about the disposition of all resources on federal lands...and it extends beyond federal lands, therefore it is a true mix of responsibilities!

The concept of stewardship is also applicable to the environment, economics, health, property, and information issues

What is Federal Stewardship?

- Federal “Stewardship” is the administration of federally-owned lands by the executive or legislative branches, or judicial rulings that otherwise affect their access and use
- Federal regulations and executive actions and congressional actions (laws) can impact energy resource development everywhere
- Therefore, Federal “stewardship” of energy resources can extend into the state and private domains, via regulations but most concerning impacts are mainly on federal lands

Federal and Indian Lands Ownership With Alaska and Hawaii



WHY is stewardship important 100+ years after Spindletop?

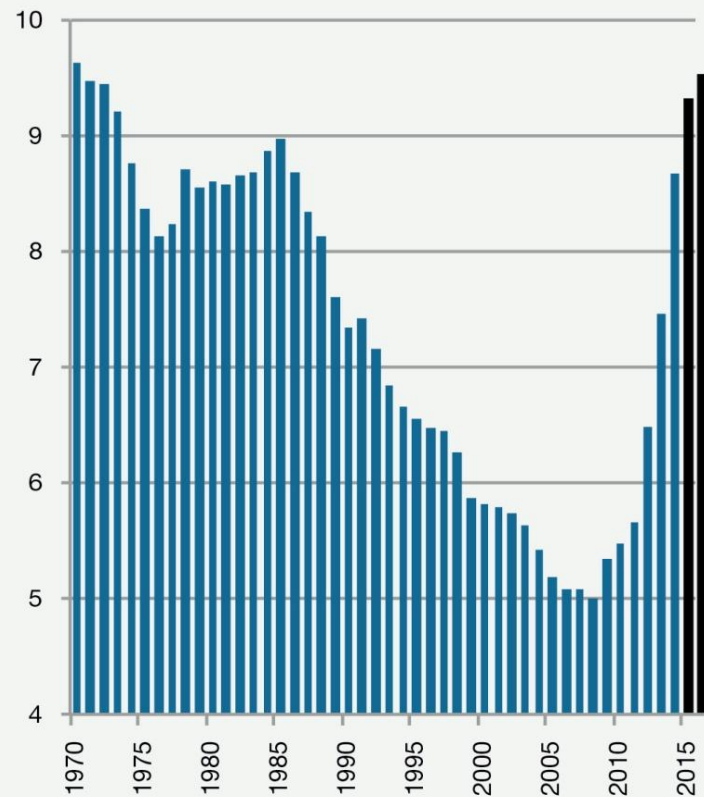


Because the U.S. “Energy Renaissance” Driven by the “Shale Revolution” Looks Like This !

U.S. oil and natural gas production is increasing as a result of technological innovation

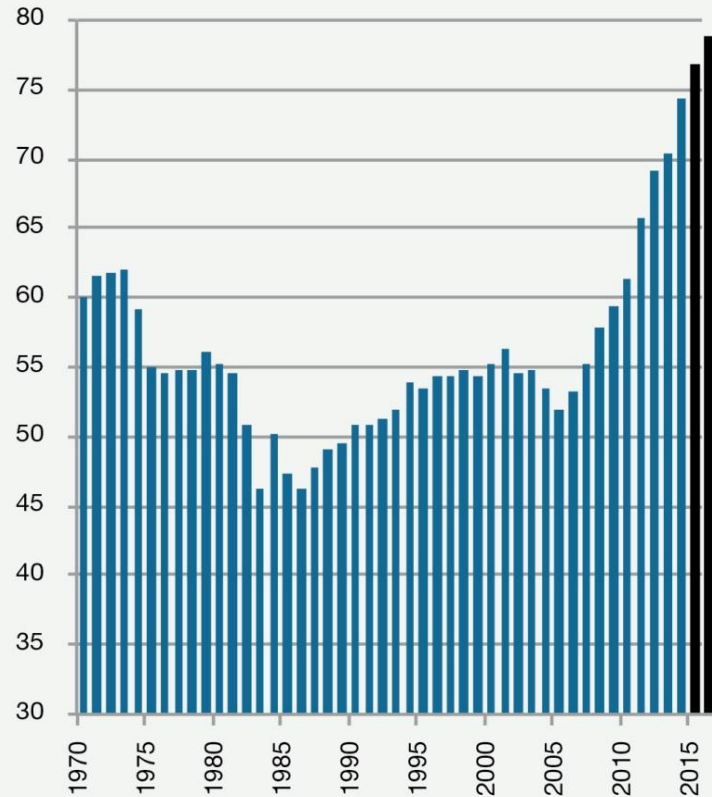
U.S. Crude Oil Production

(millions of barrels per day 1970-2015)



U.S. Natural Gas Marketed

(billions cubic feet per day 1970-2015)

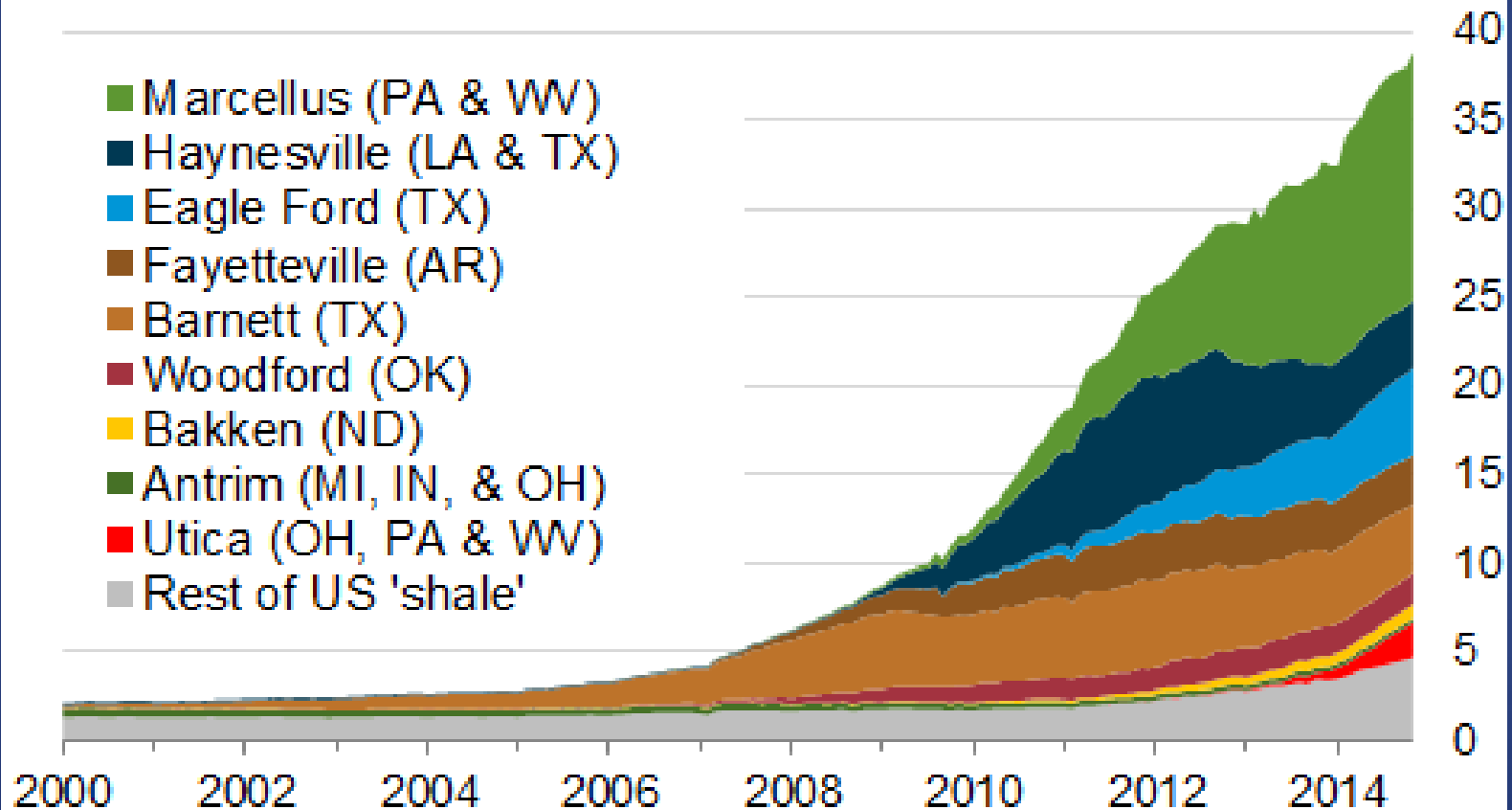


Note: Bars in black show EIA's Short-term Energy Outlook forecast.
Source: EIA.

U.S. shale gas production

Monthly dry shale gas production

billion cubic feet per day



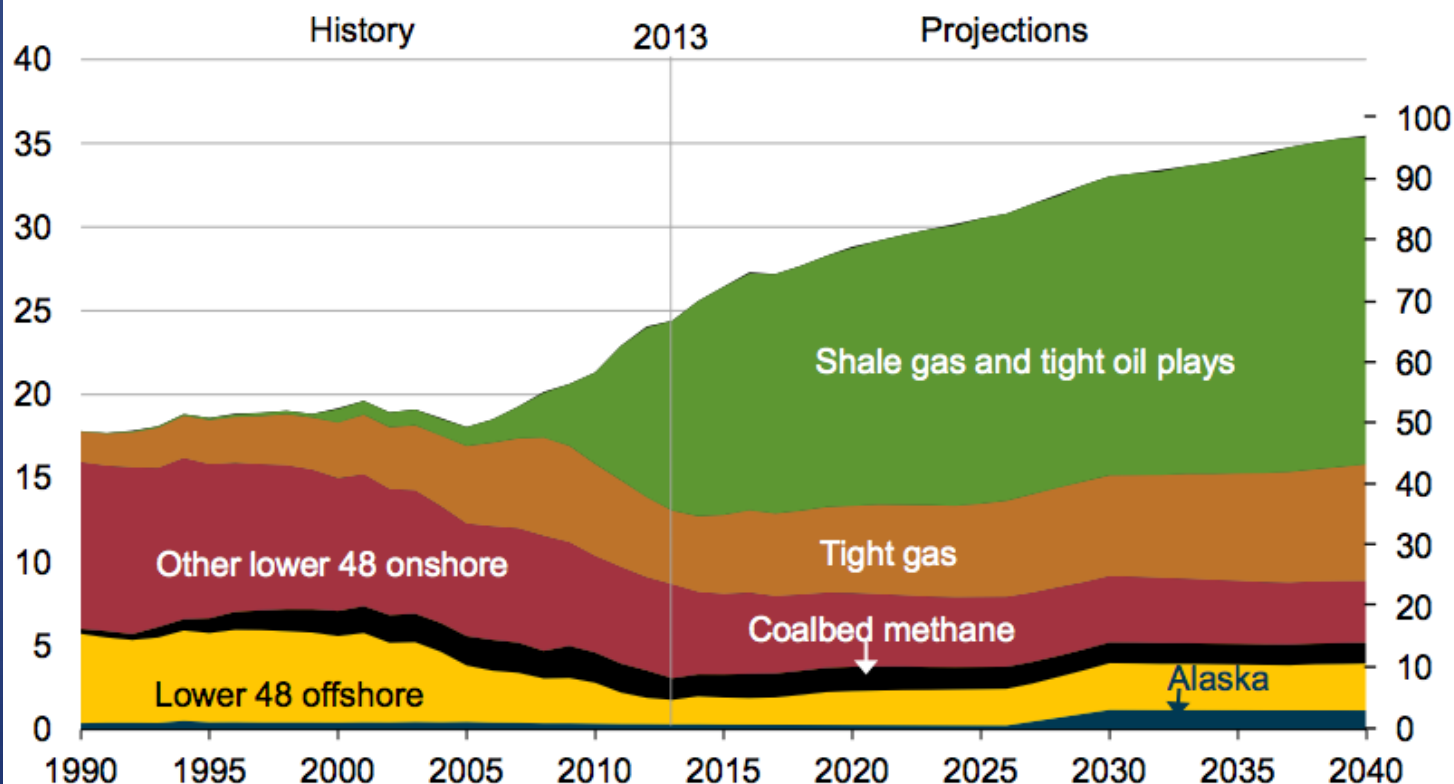
Sources: EIA derived from state administrative data collected by DrillingInfo Inc. Data are through November 2014 and represent EIA's official shale gas estimates, but are not survey data. State abbreviations indicate primary state(s).

Types of U.S. natural gas production 1990-2040

Shale resources remain the dominant source of U.S. natural gas production growth

U.S. dry natural gas production
trillion cubic feet

billion cubic feet per day



Source: EIA, Annual Energy Outlook 2015 Reference case

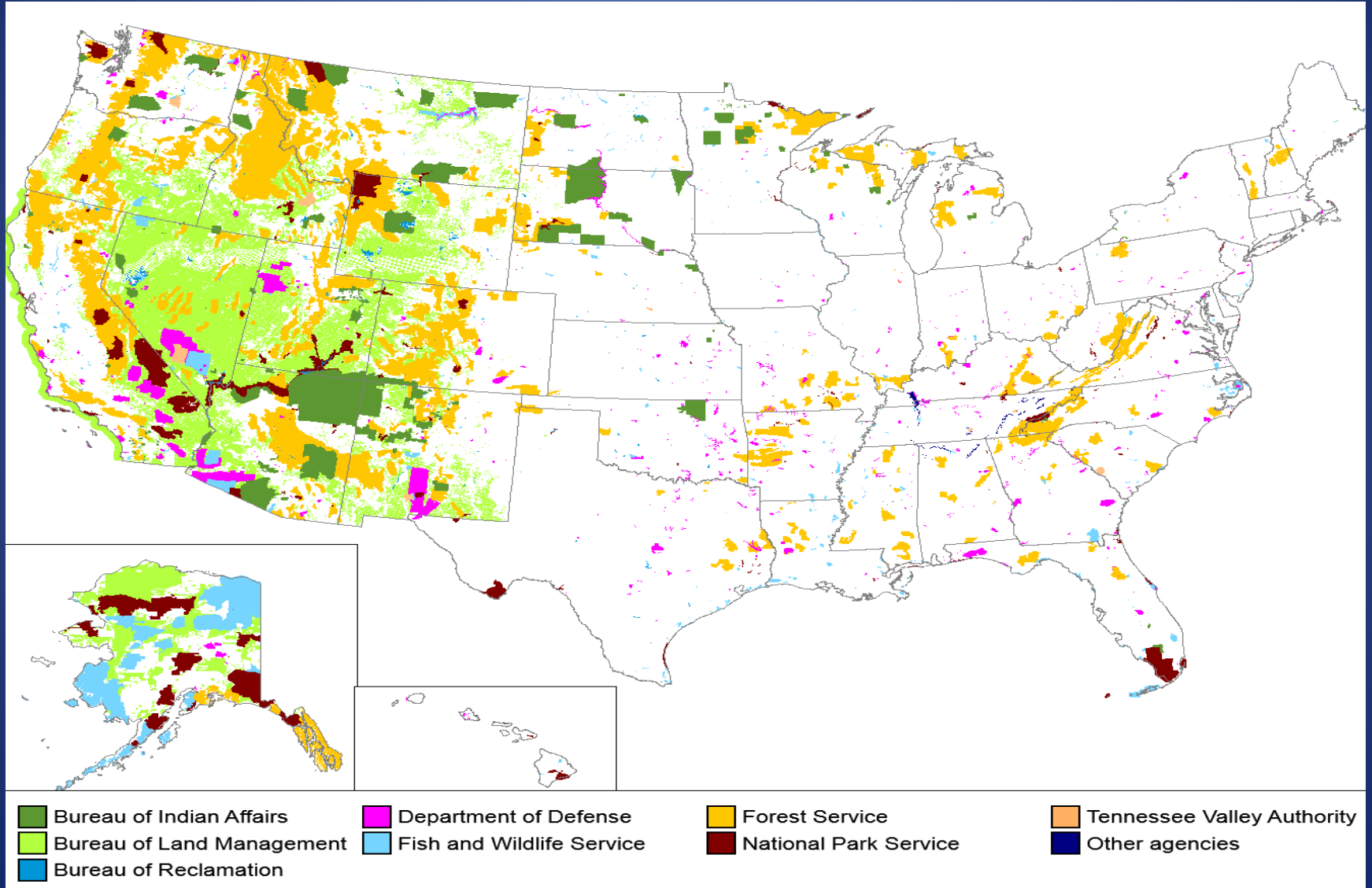
And Poor Federal Stewardship Will Not Sustain the U.S. “Energy Renaissance”—Especially Because of.....

- Federal Permitting, Leasing, and Access Issues
 - Further restrictions of access, permitting/leasing—multiple fed
 - Sharp increases in royalty rates for oil and gas leases—Interior
 - Prohibitive arctic drilling regulations—multiple fed
- “Blizzard” of federal regulations pending 2015, 2016
 - Tougher blanket hydraulic fracking regulations —multiple fed
 - Restrictive methane emissions standards—EPA
 - Conflicting ozone standards—EPA
- Hidden “Secret” of Federal Land Withdrawals
 - Continuation of unwarranted withdrawals of large acreage containing energy and mineral resources—Executive/Congress
 - 40th Anniversary of Landmark Reporting on Federal Withdrawals

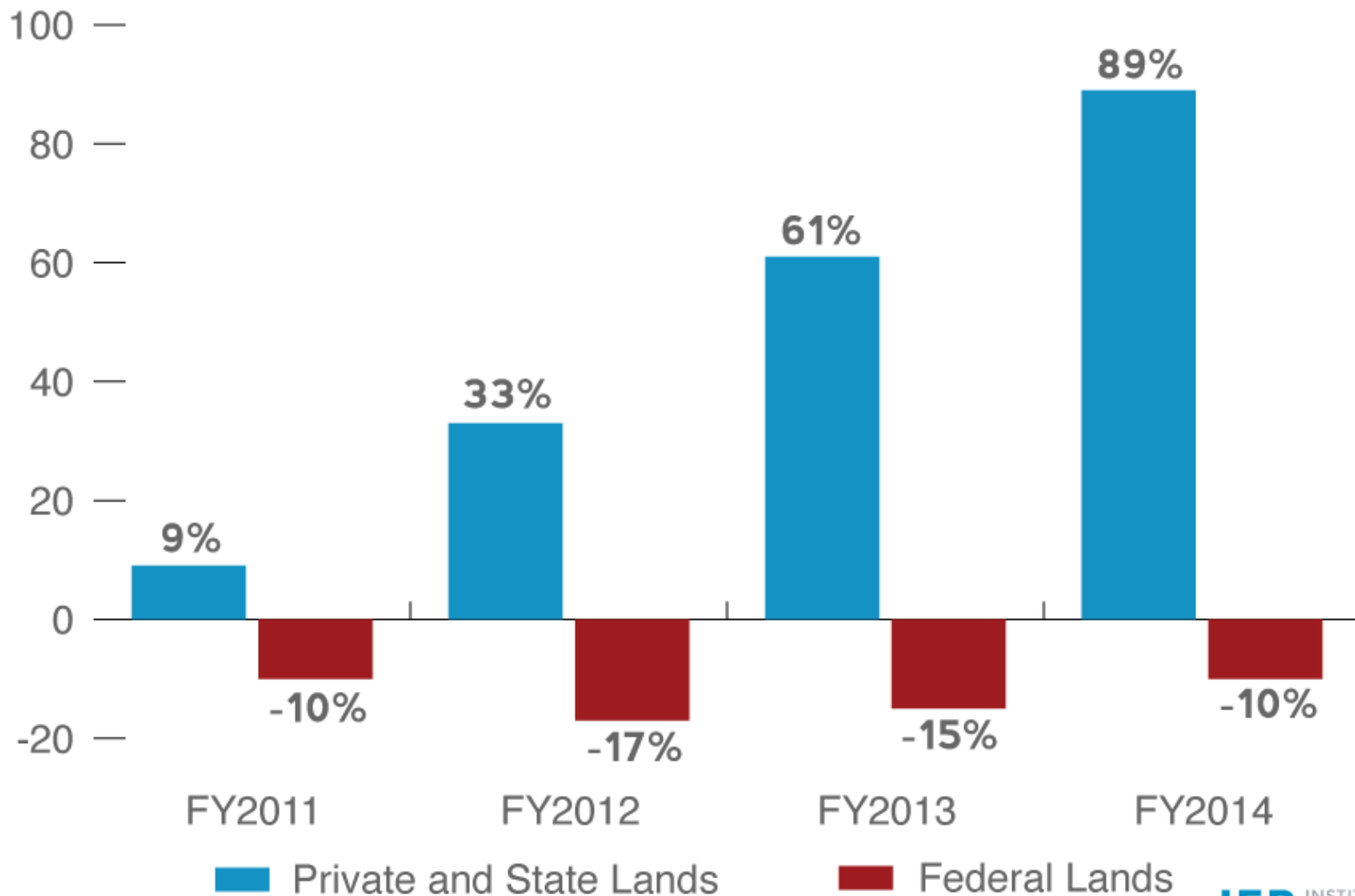
Shale Basin Plays in Lower 48...Many Are on Federal Lands



What Will Be the Impact of Stewardship on Energy Development on Federal and Indian Lands

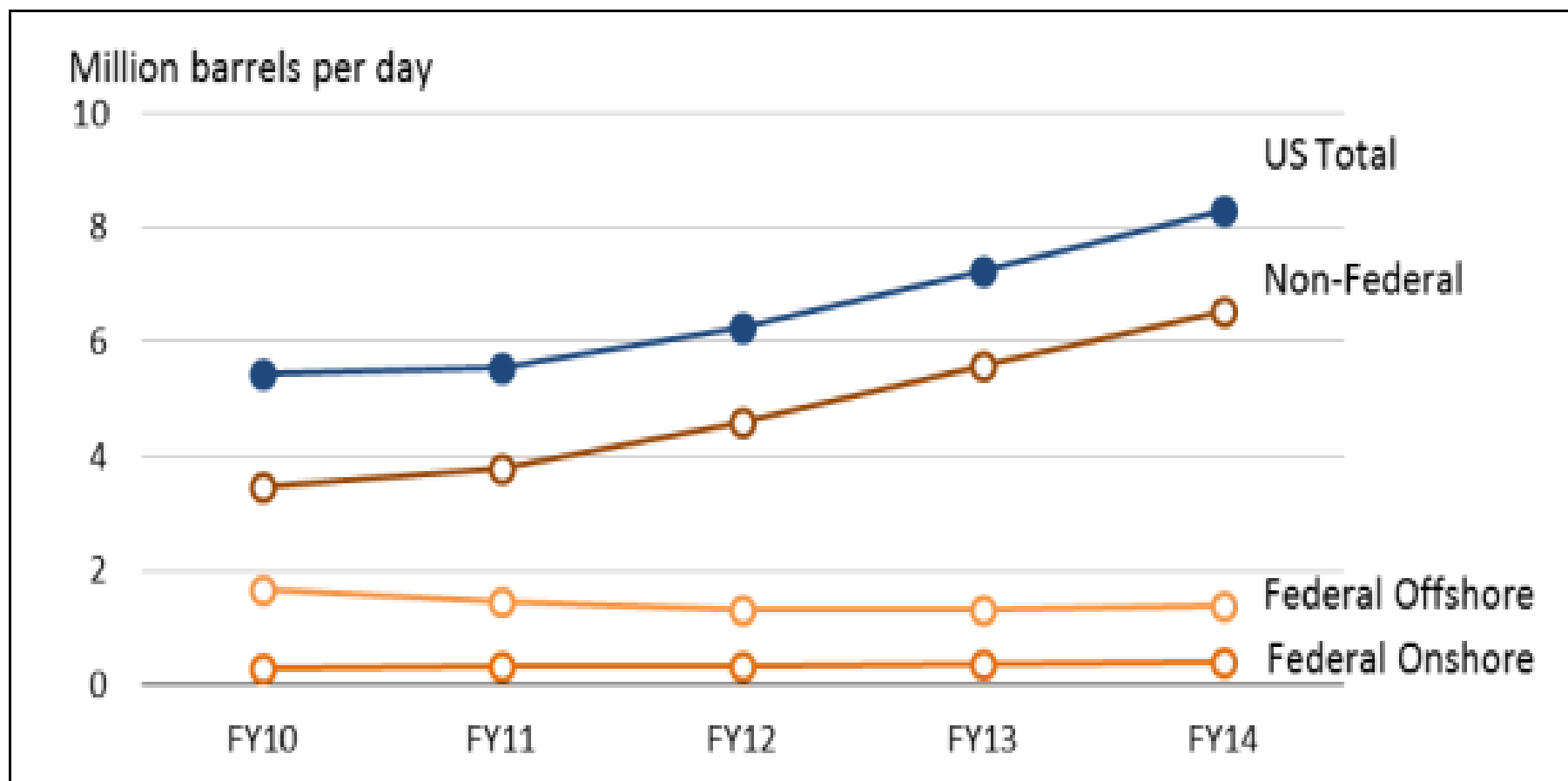


Impact of Stewardship on Oil Produced From Federal vs. Private and State Lands Percent Change FY2010-2014



Crude Oil Production on Federal vs. Non-Federal Lands FY2010-2014

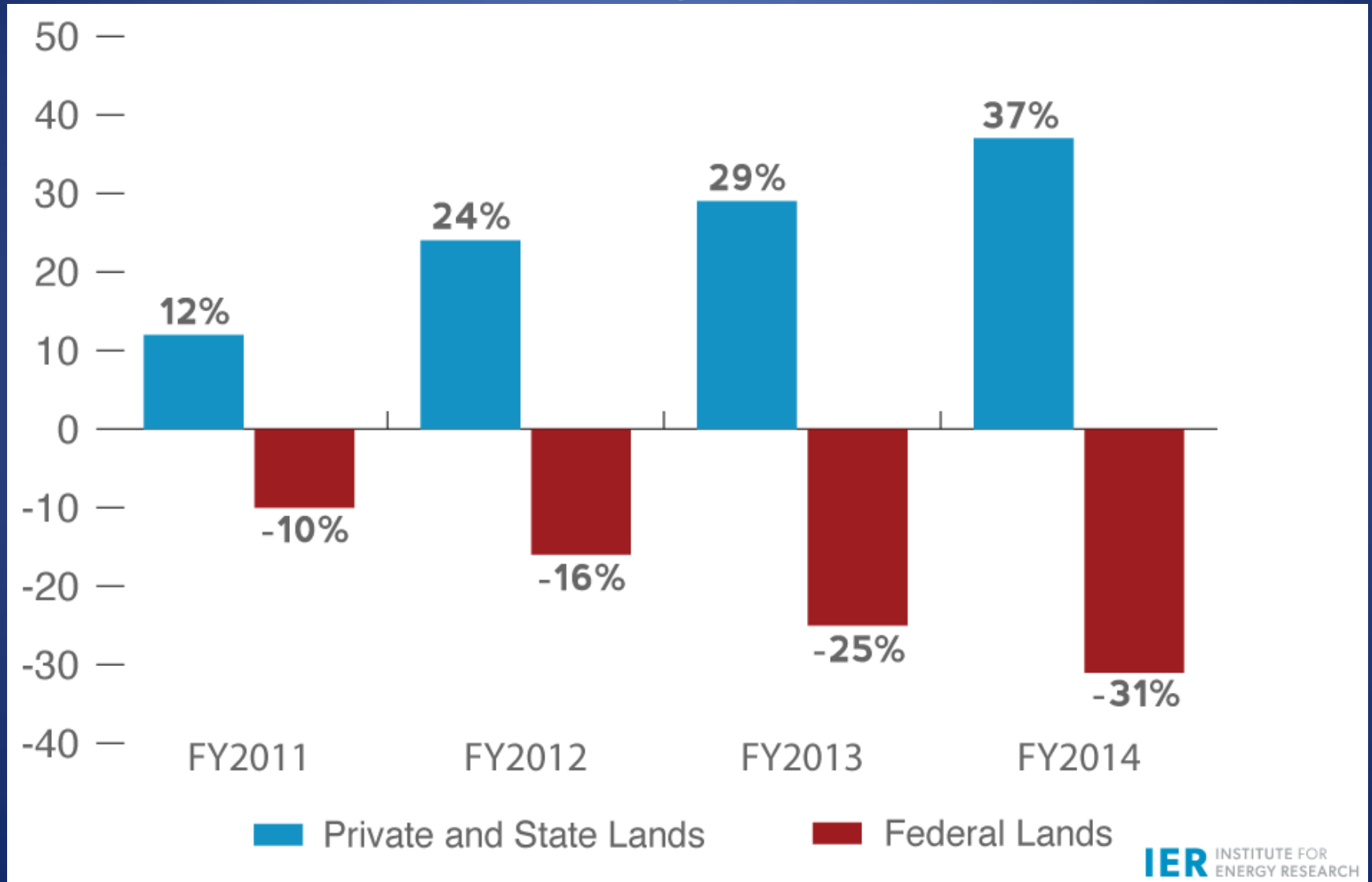
Million barrels per day (Mb/d)



Source: Federal data obtained from ONRR Statistics, <http://www.onrr.gov> (using sales year data). Non-federal from EIA. Figure created by CRS.

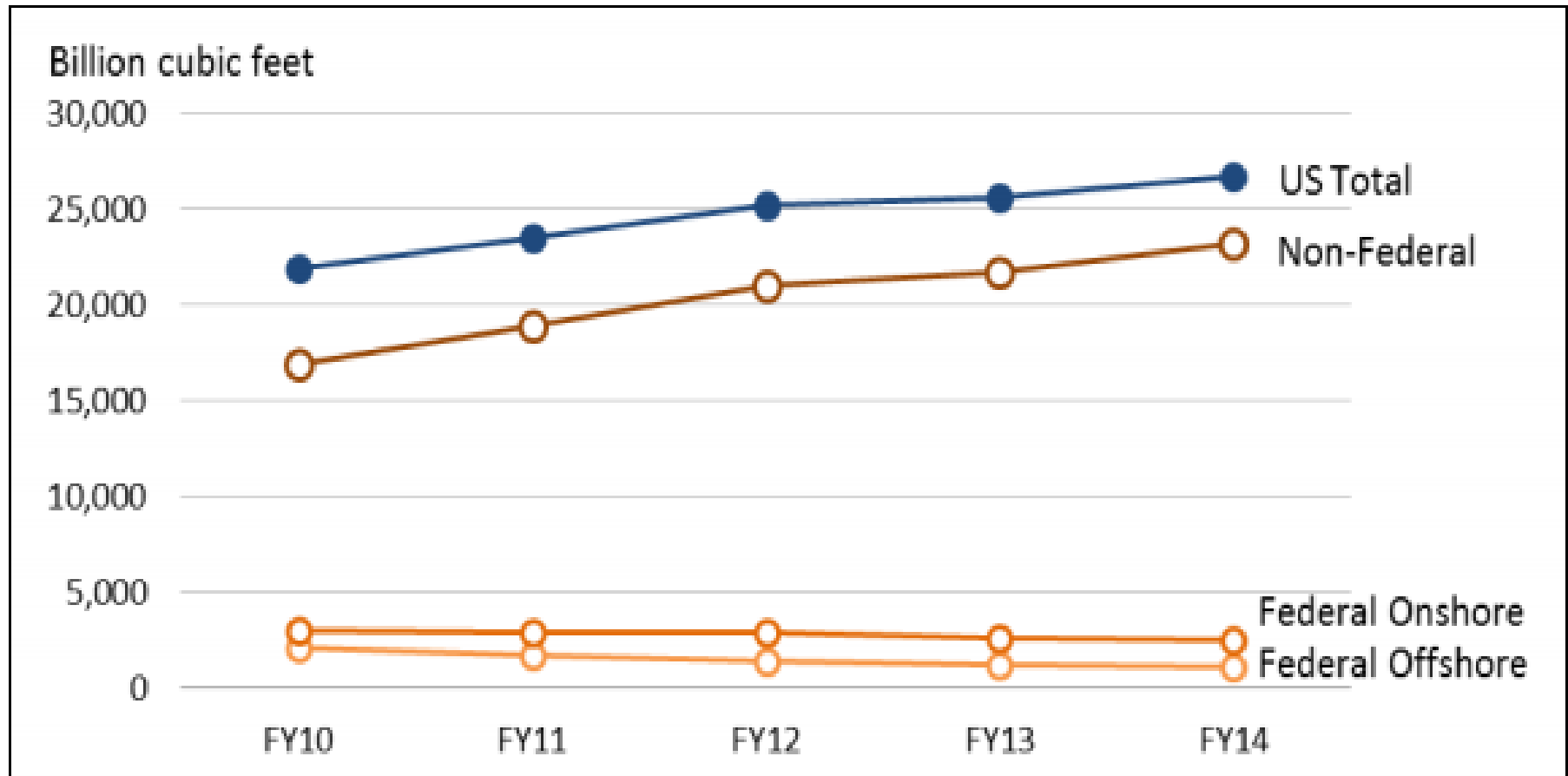
Impact of Stewardship on Natural Gas Produced From Federal vs. Private and State Lands

Percent Change FY2010-2014



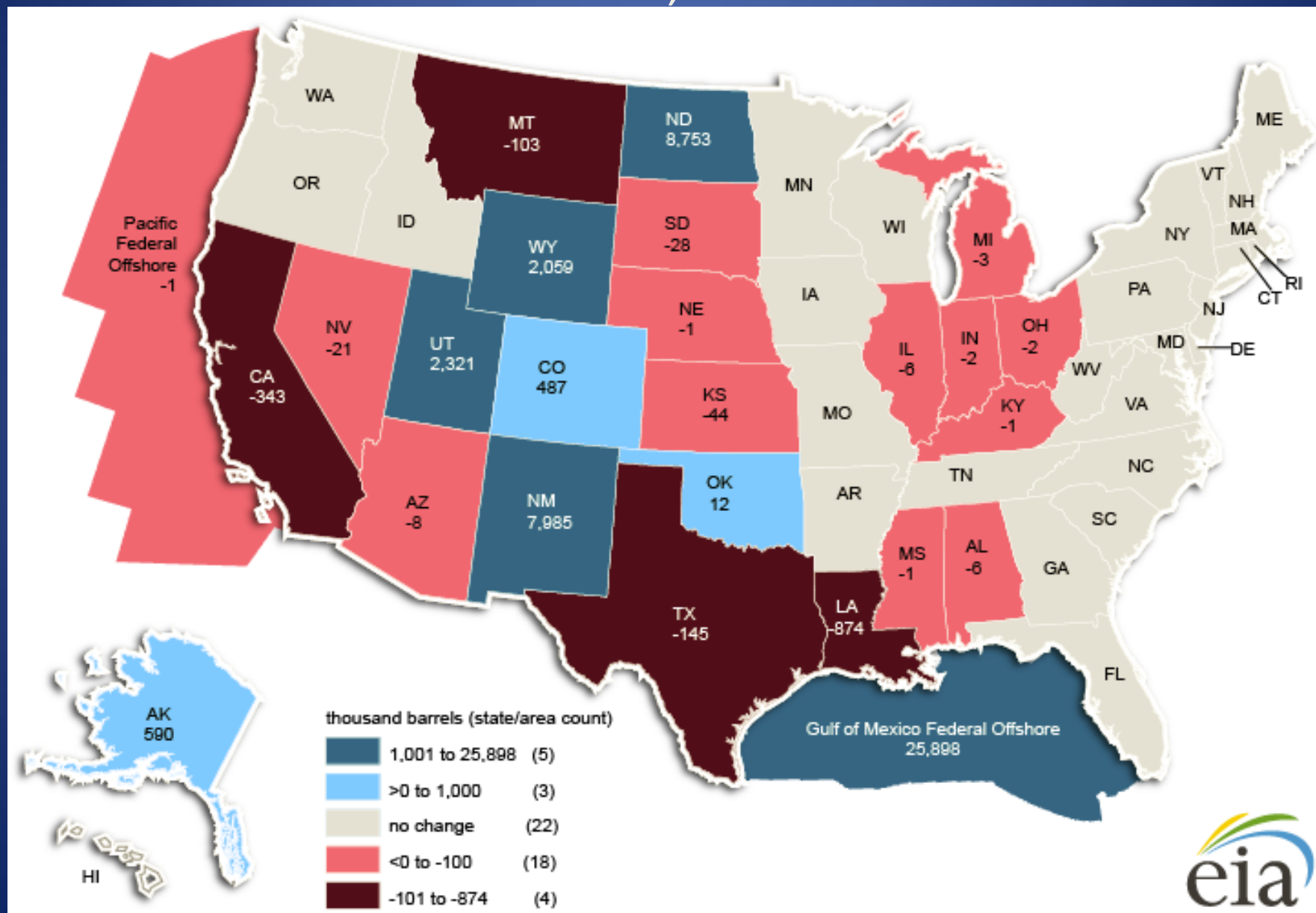
Natural Gas Production on Federal vs Non-Federal Lands

FY2010-2014

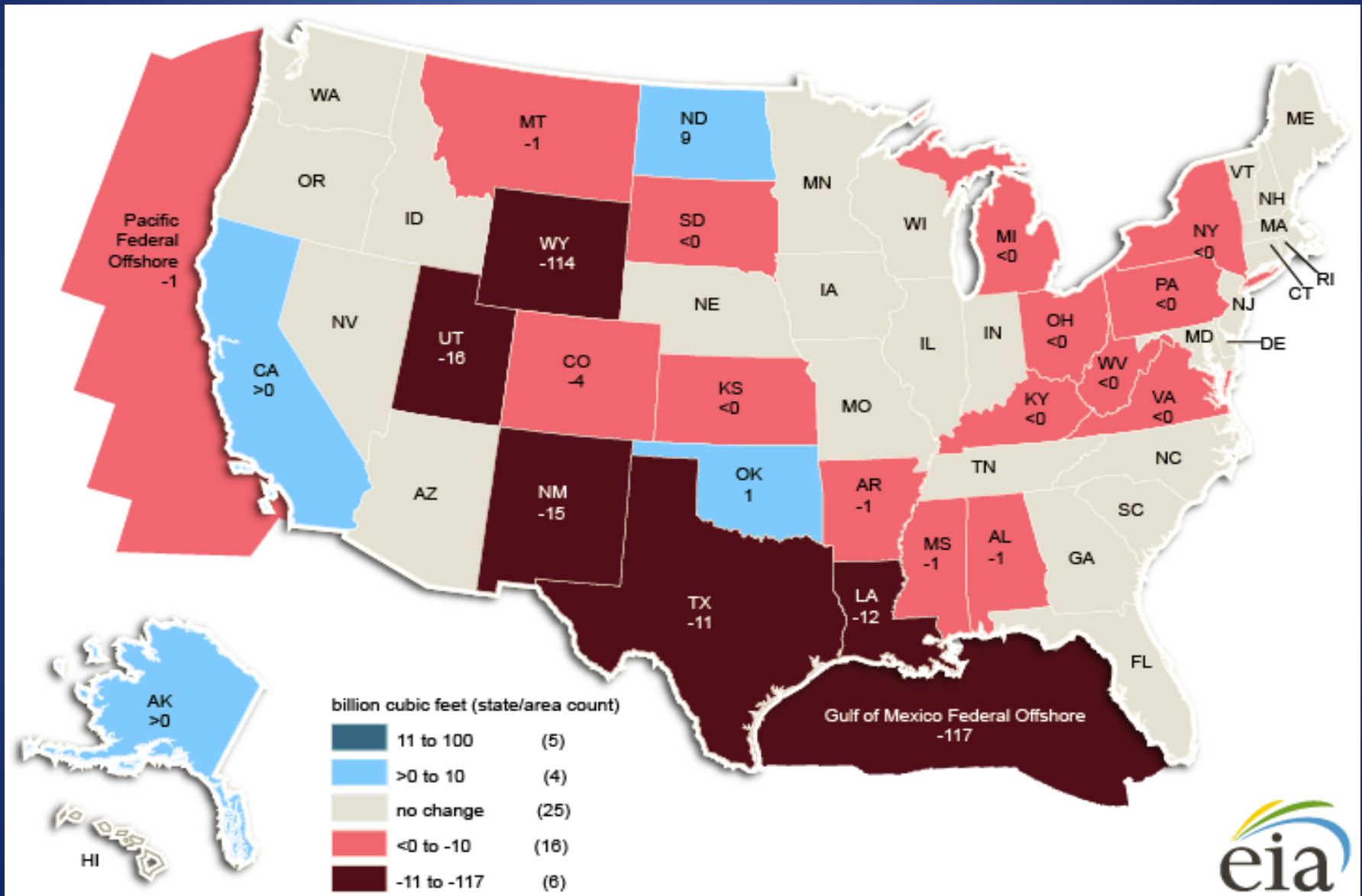


Source: Federal data obtained from ONRR Statistics, <http://www.onrr.gov> (using sales year data). Figure created by CRS.

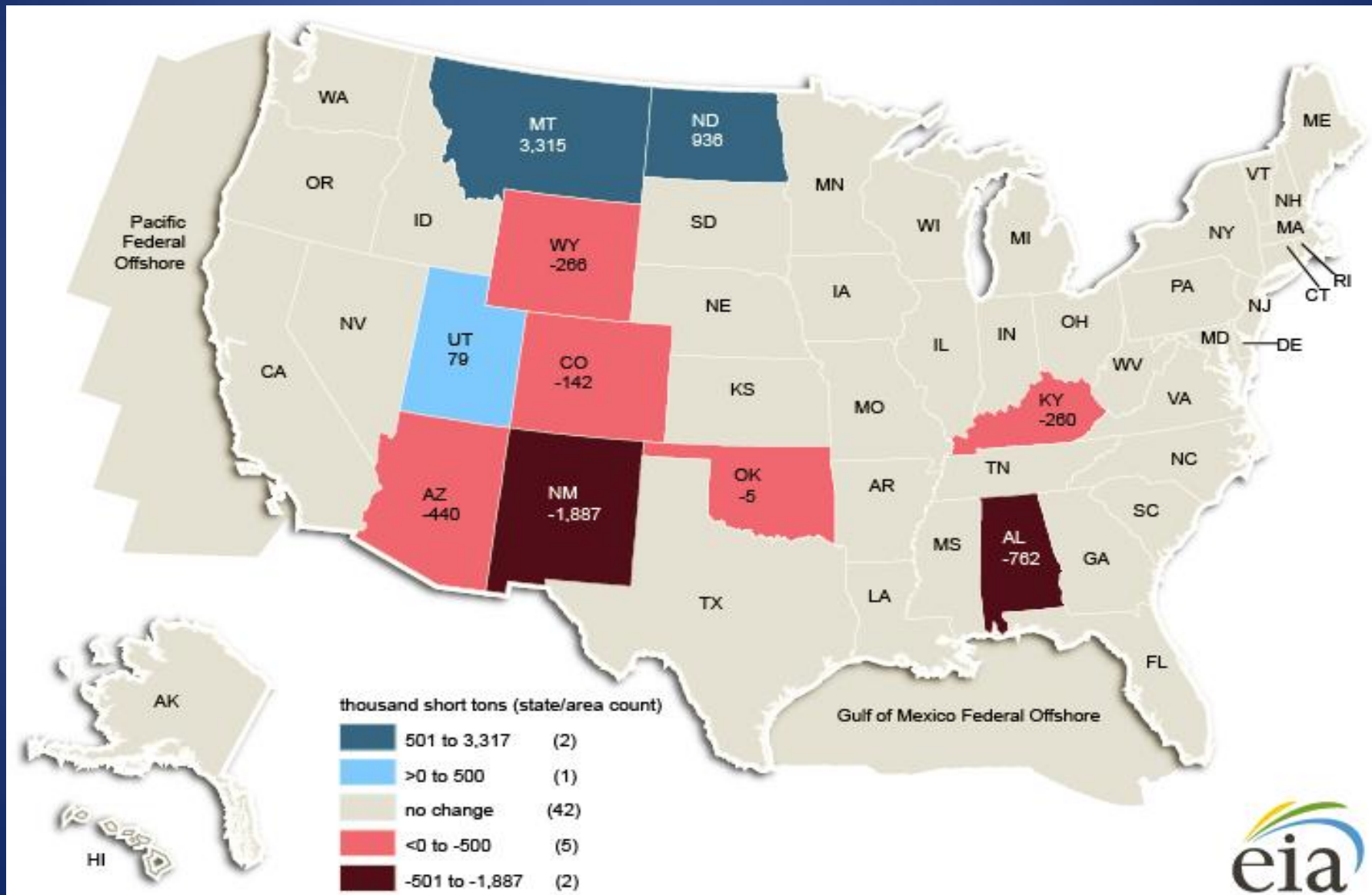
Impact on Crude Oil Production on Federal and Indian Lands, FY 2013-14



Impact on Natural Gas Production on Federal and Indian Lands, FY 2013-14



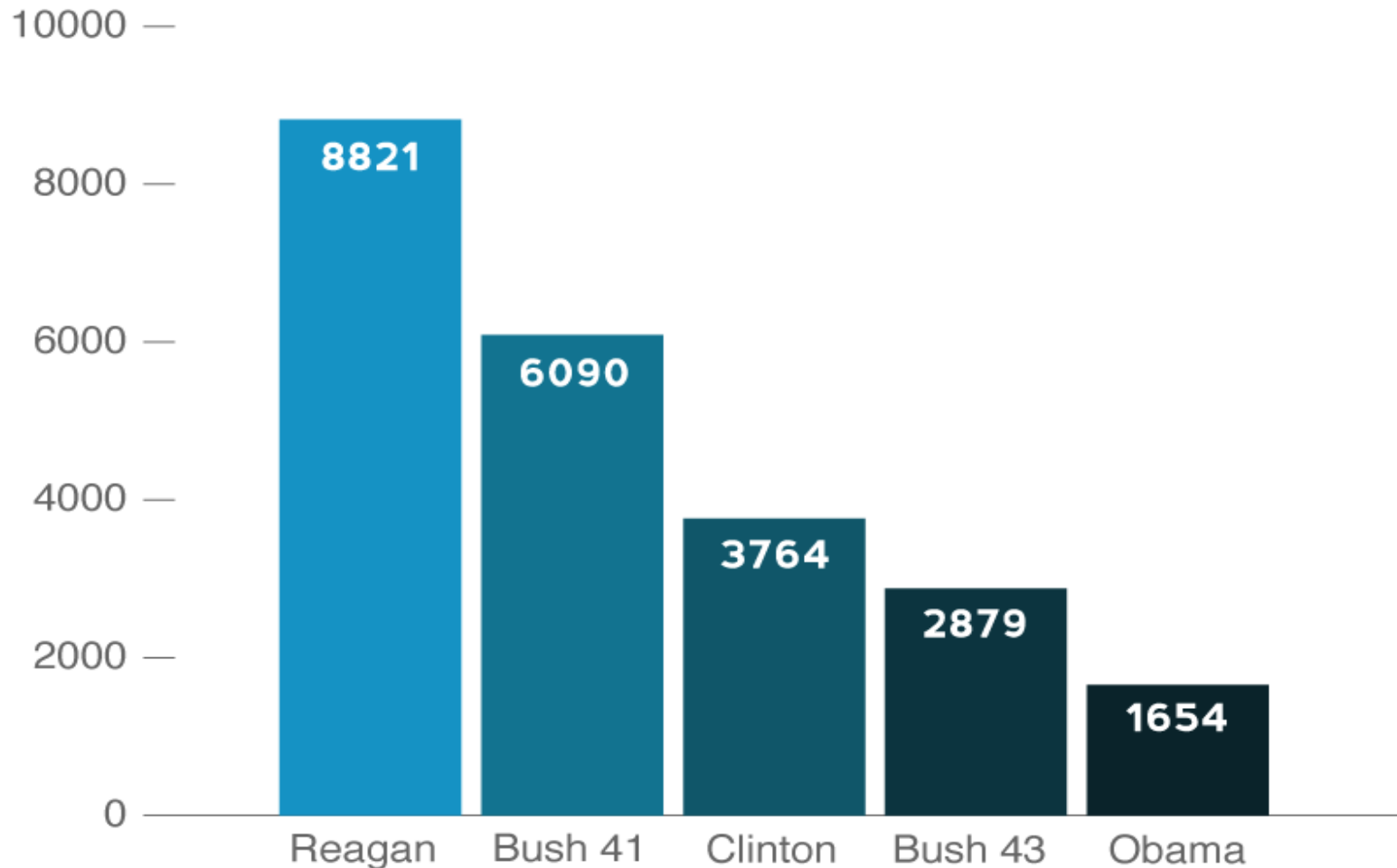
Impact in Coal Production on Federal and Indian Lands, FY 2013-14



Is the Future of the U.S. Energy Renaissance Being Threatened by Poor Federal Stewardship?

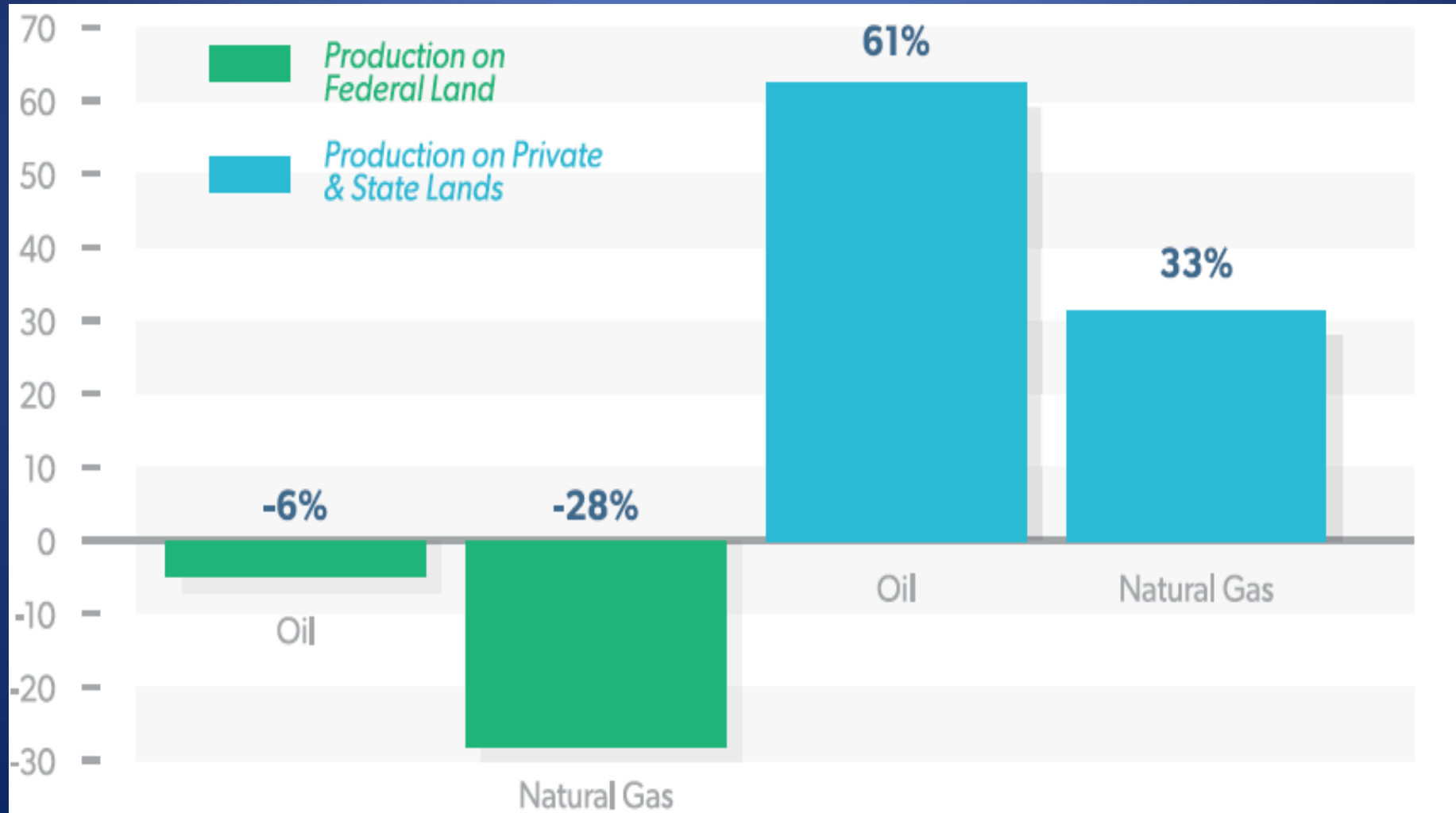


Number of Onshore BLM Leases Issued By Each Administration 1981 to Present —80 percent reduction !

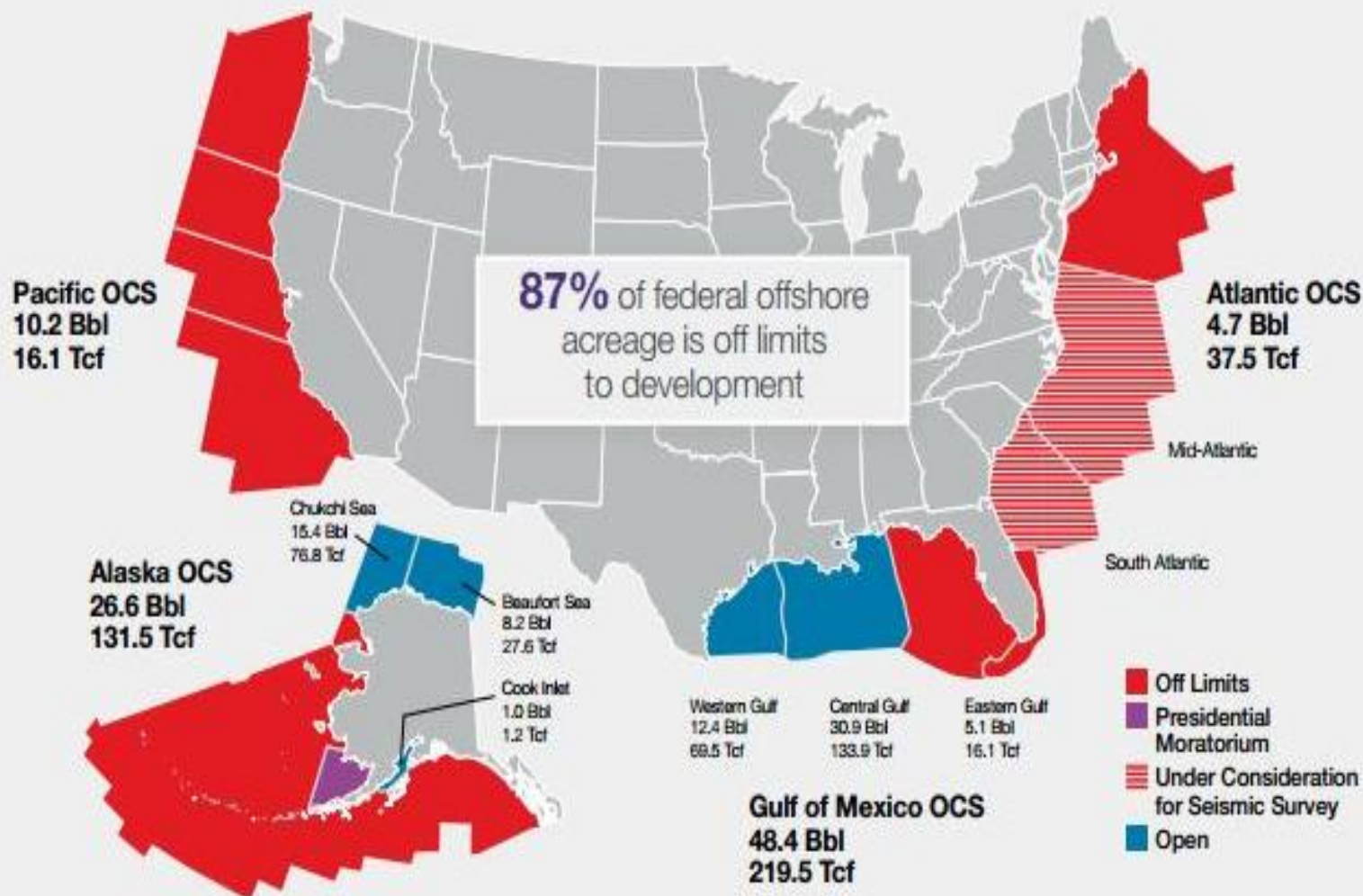


Percent Change Onshore Oil and Gas Production on Federal vs Non-Federal Lands during 2009-2013 —Unrealistic !

Source: API



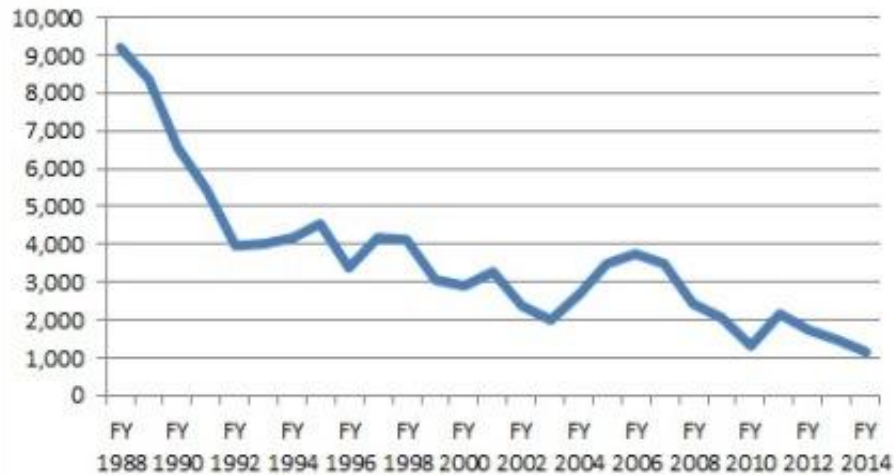
Offshore Undiscovered Technically Recoverable Federal Oil and Gas Lease Areas —Inaccessible !



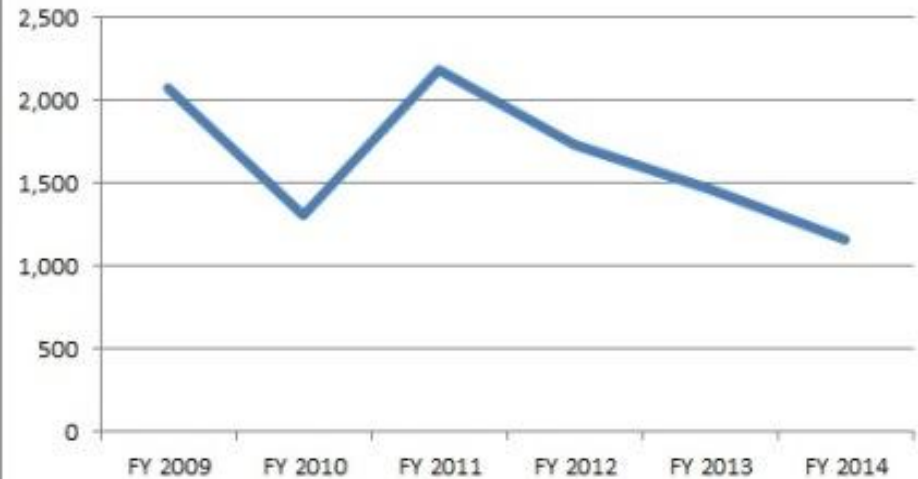
Source: The Bureau of Ocean Energy Management (BOEM).

Trends in Oil and Gas Leases on All Federal Lands —Unsustainable !

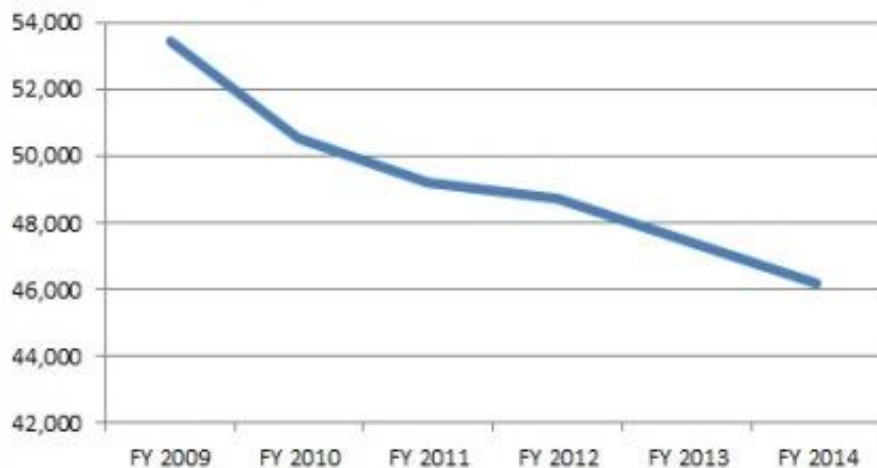
New Leases on Federal Lands FY1988-2014



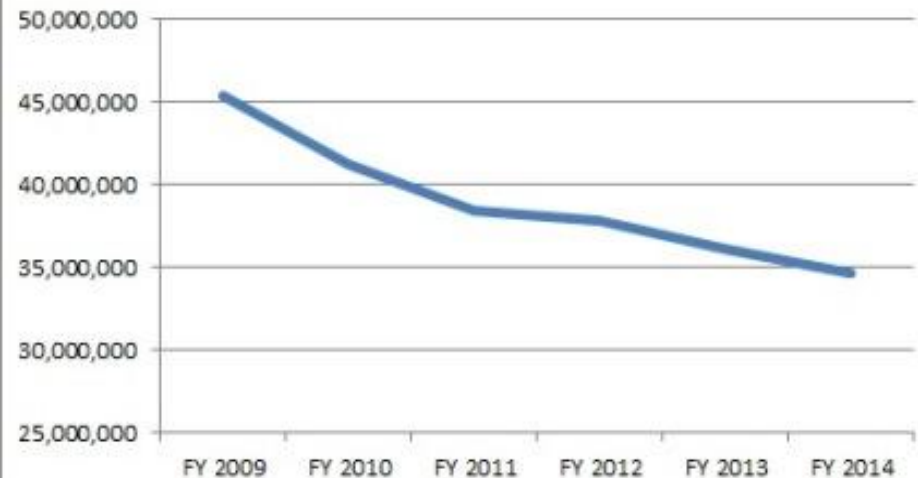
Total New Leases Issued During the Year



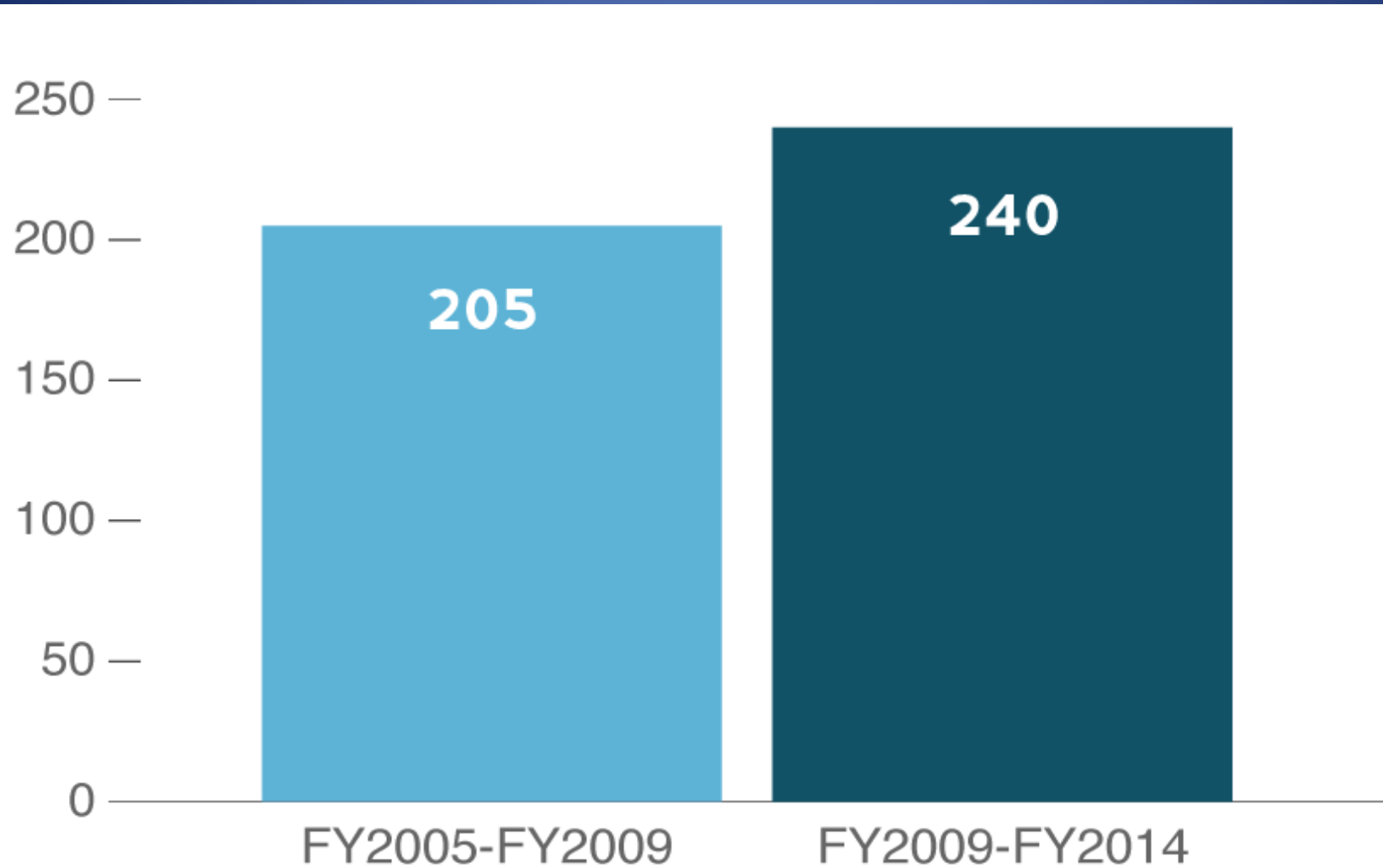
Total Number Leases in Effect



Total Acres Leased

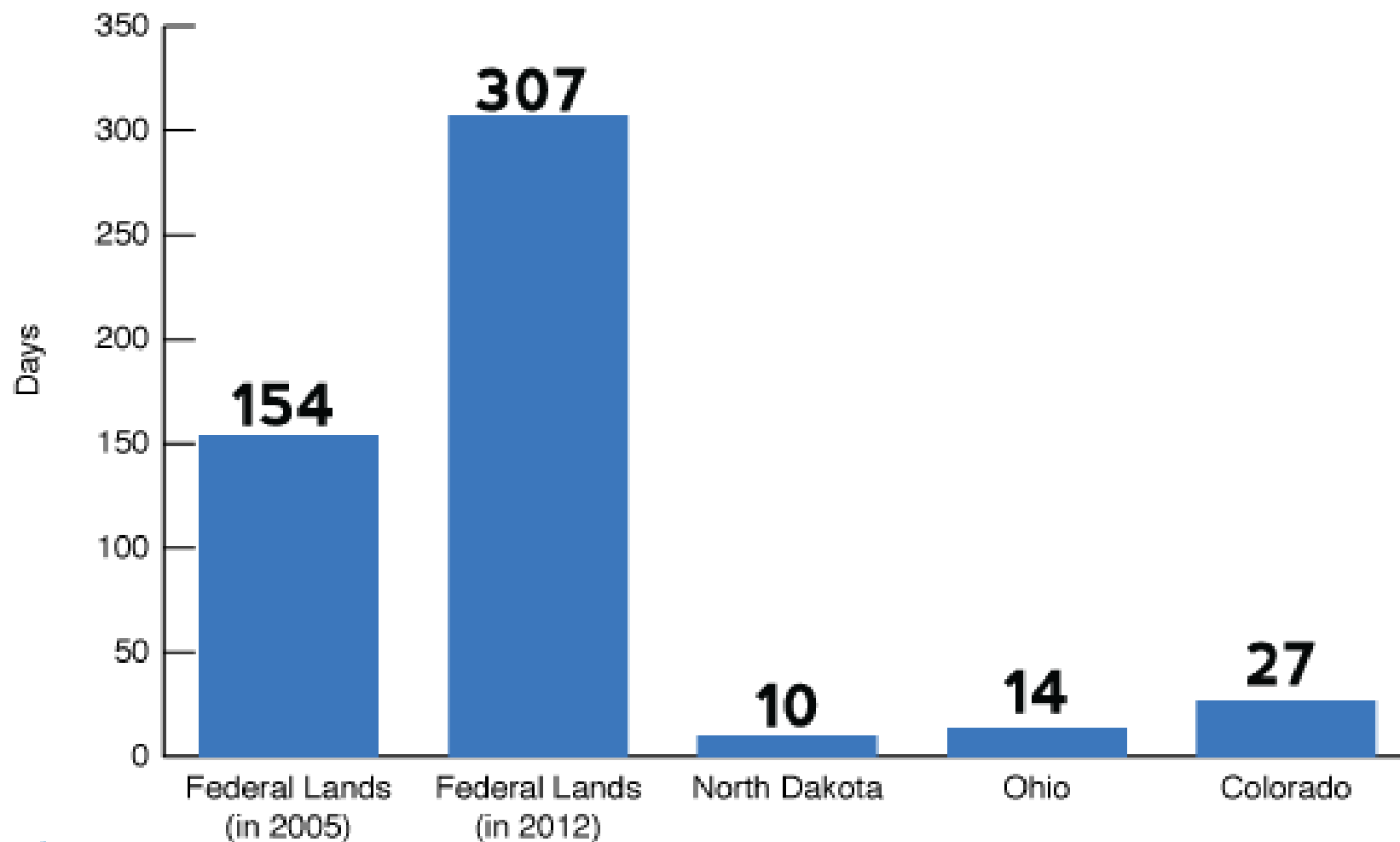


Average Number Days Needed for a BLM Exploration Permit —Inexcusable !

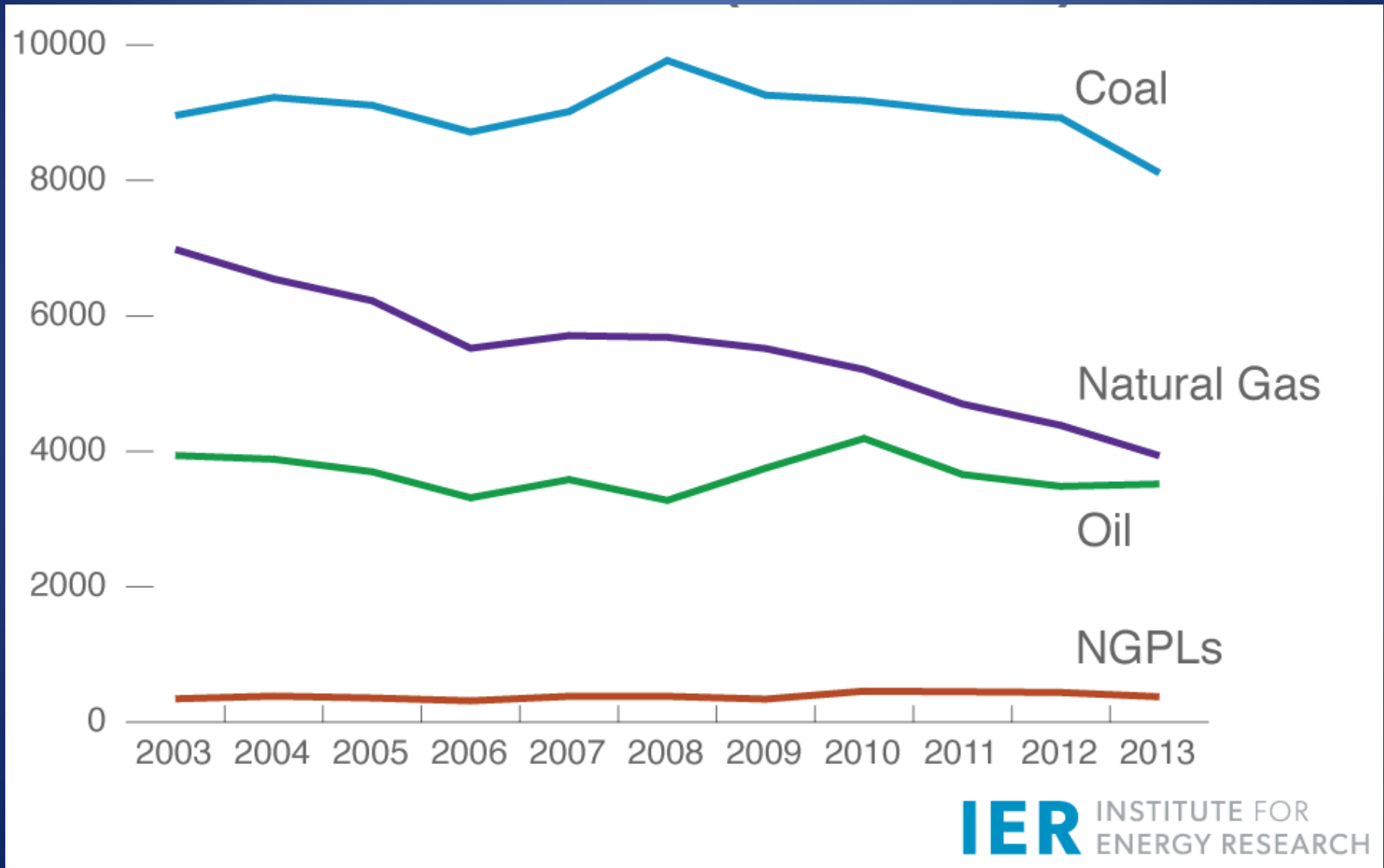


Time Needed to Process a Permit to Drill—Federal vs States

—This....is poor federal stewardship!



Net Negative Effect of Stewardship on Fossil Fuel Production on Federal Lands FY2003-2013 (trillion BTU)

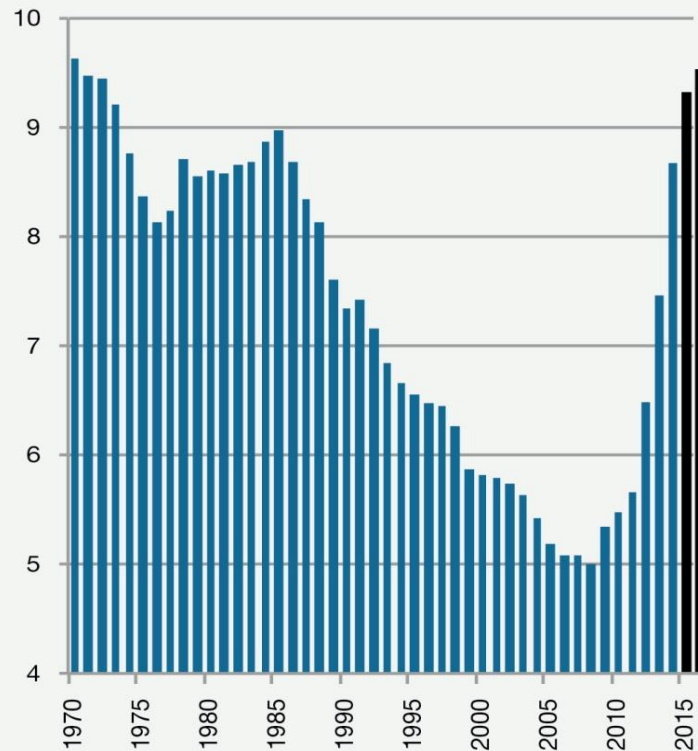


Crude Oil and Gas Production At Historic Record Levels Only Because of State and Private Land Production!

U.S. oil and natural gas production is increasing as a result of technological innovation

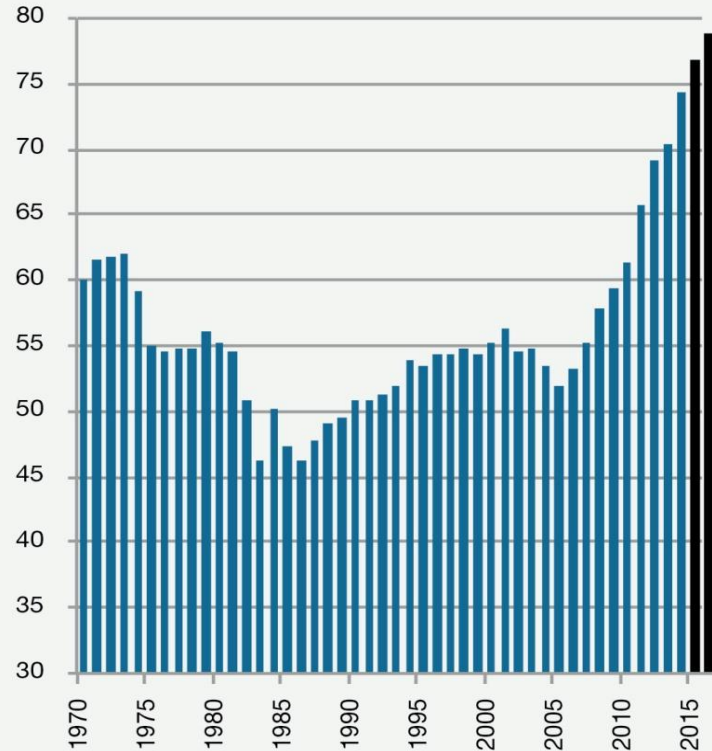
U.S. Crude Oil Production

(millions of barrels per day 1970-2015)



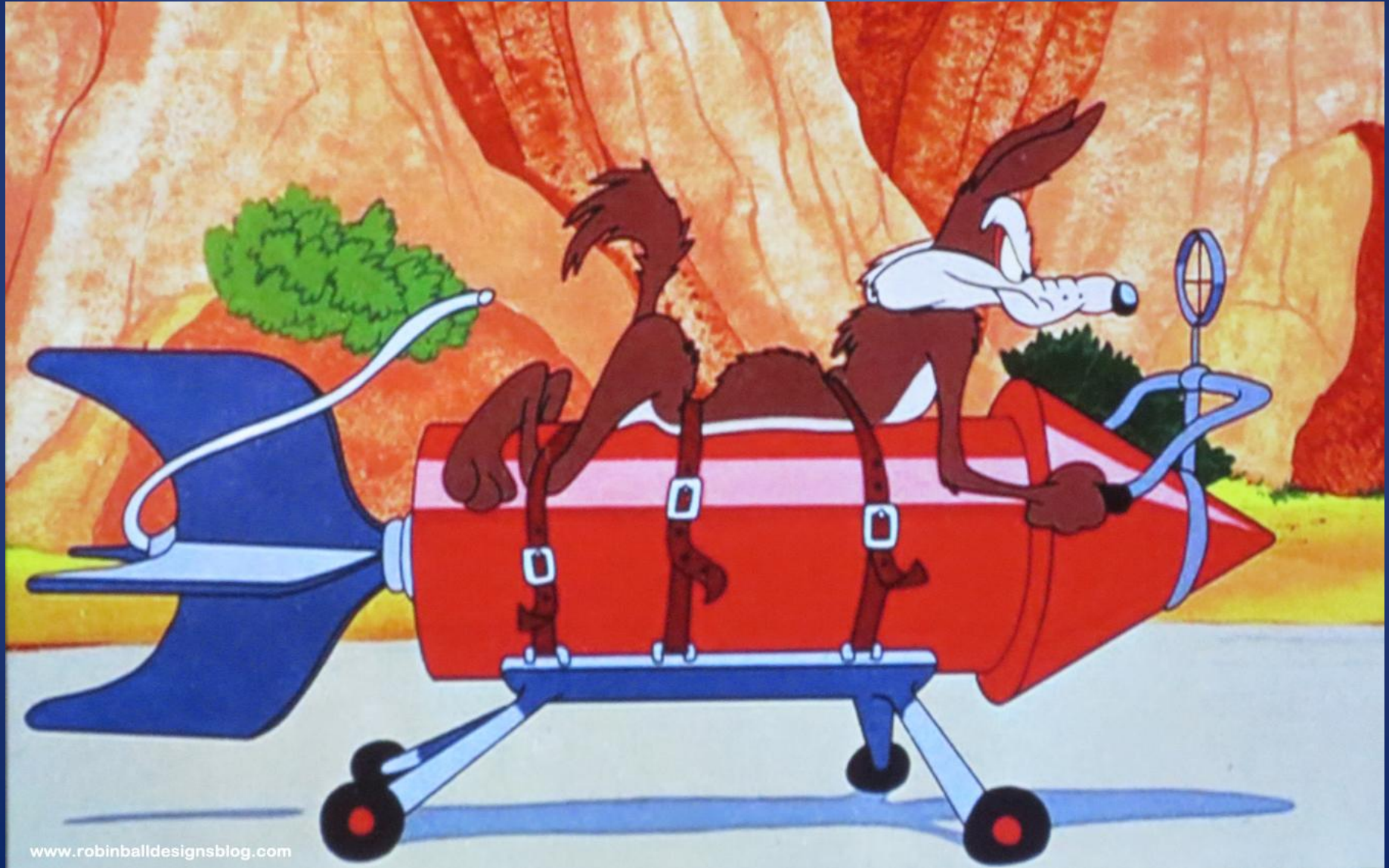
U.S. Natural Gas Marketed

(billions cubic feet per day 1970-2015)



Note: Bars in black show EIA's Short-term Energy Outlook forecast.
Source: EIA.

Poor and Misguided Stewardship Does Threaten Energy Renaissance—and is Taking Aim at the Public Trust!



Implications of Current Federal Stewardship on an Expanding Energy Renaissance.....What Must Change?

- Declining trend in federal leasing by successive administrations must be reversed !
- Percentage of onshore oil and gas production on federal (versus non-federal) lands must be increased !
- Access to offshore undiscovered technically recoverable federal oil and gas must be increased for exploration and leasing !
- Negative trends in oil and gas leases on all federal lands over the past 30 years is unsustainable and must be reversed !
- Progress toward “energy independence” in the next decade or sooner is not a federal priority—this mindset must change !
- Americans are being cheated out of revenue from non-leasing!

Summary of Poor Federal Stewardship That Will NOT Sustain the American Energy Renaissance

- Restrictions of permitting, leasing, and access to onshore and offshore federal lands
- Hidden “secret” of continuing federal land withdrawals
- “Blizzard” of federal regulations (over-regulation) pending for 2015, 2016, and beyond...including recent EPA Clean Power Plan

Federal Hydraulic Fracking Regulations—As An Example

Regulation/oversight of fracking needs to remain at the state level—should NOT be “one size fits all” because:

- Geology of oil and gas varies locally or regionally within specific geological basins within a state or multi-state area
- Regulators with local geological expertise are best qualified to oversee unique requirements for local hydraulic fracturing
- Hydraulic fracking is constantly evolving based on scientific and technical advances—often faster than regulators can respond
- For example, “waterless” fracturing fluids and wastewater reuse that reduce local water consumption are already in use in many areas

Federal Land Withdrawals—As Another Example

- Hidden “Secret” of Federal Land Withdrawals
 - Continuation of unwarranted withdrawals of large, sometimes enormous acreages containing unknown quantities of important energy and mineral resources...the worst example of federal “stewardship”
 - Executive has taken over Congressional responsibility and involvement, sometimes withdrawals enacted by only a very few high-level individuals
 - 40th anniversary of landmark reporting by BLM insiders on stunning amounts of federal land withdrawals without public comment, consent, or resource evaluation !

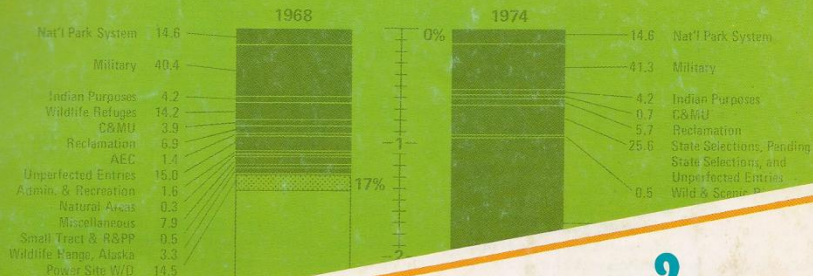
Federal Land Withdrawals

September 1975

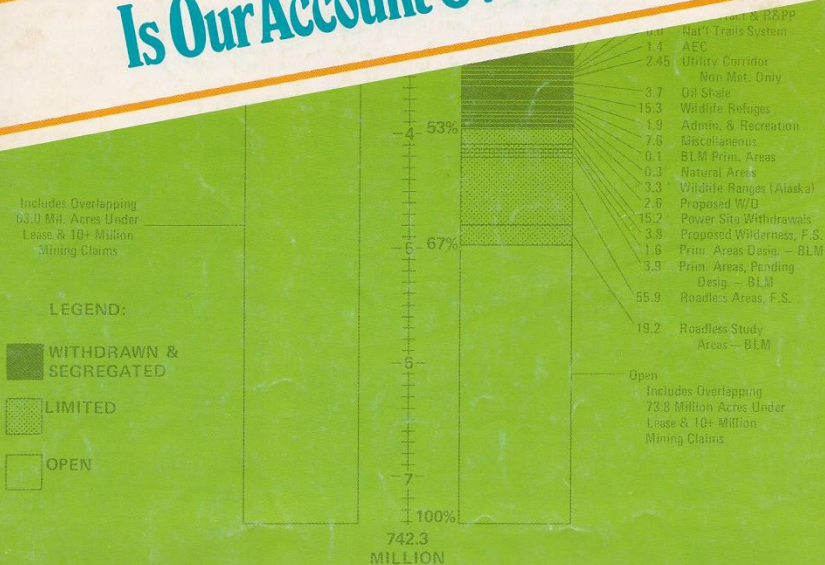
MINING CONGRESS JOURNAL PUBLISHED BY THE AMERICAN MINING CONGRESS

Sept. 1975

PUBLIC LANDS EXCLUDED FROM MINERAL EXPLORATION AND DEVELOPMENT UNDER THE MINING LAW



Is Our Account Overdrawn?



Mining Engineering May 1977

FEDERAL LEASING: THE NEED FOR A PERSPECTIVE

Courtland Lee and David Russell

FOREWORD—Americans have been able to create wealth from the nation's natural resources to an extent unprecedented in recorded history, thanks largely to the existence of a free market and of a rational body of laws. The General Mining Law of 1872, for instance, by establishing the rules of the game, was quite effective in channelling the ability of Americans to discover and develop new mineral deposits. Another example was the Mineral Leasing Act of 1920 which made available the more easily discovered mineral deposits by spelling out the conditions and rules under which miners could obtain leases on federal lands.

In recent years, particularly during the last decade, the entire federal leasing mechanism has virtually ceased to function. From the sharp and unplanned annual fluctuations of the late 1960's and early 1970's, federal leasing has now reached a near-total breakdown. Today, for all intents and purposes, mineral deposits on federal land are no longer accessible. This has occurred because of many political and bureaucratic problems compounded by the present mind-boggling confusion over what constitutes "reserves" already under lease.

The situation has reached the crisis stage in the minerals-rich Western States, where the federal government is by far the biggest land owner.

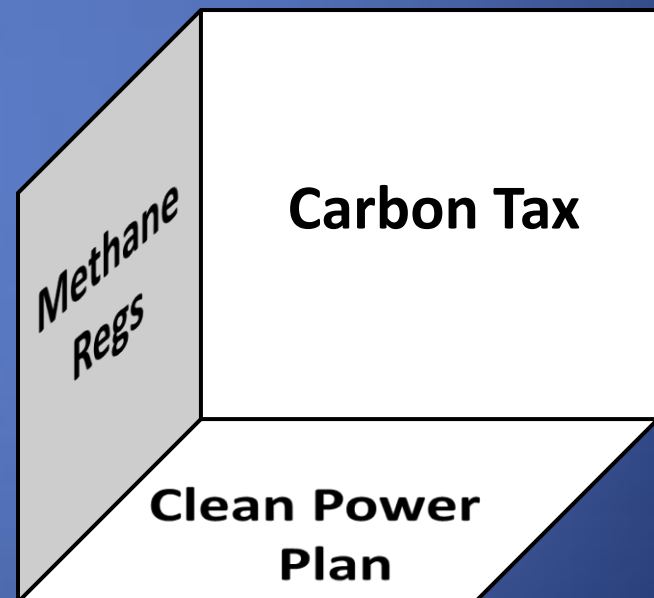
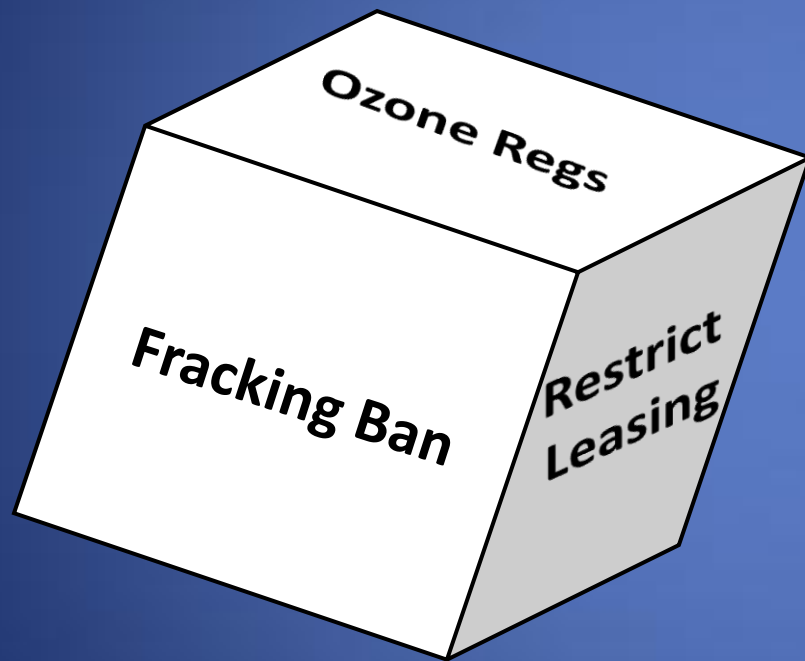
As the United States became populated, the government retained known mineral deposits, usually to provide future revenues. But for easily found leasable minerals in the Western States, which were settled late in our history, this has resulted in a near-monopolistic ownership of mineral resources by the federal government.

Leasable federal minerals have immensely contributed to the nation's welfare.

But now, the American mining industry is, in effect, being denied access to a large portion of the existing resources because of nonissuance of federal competitive leases and/or preference-right leases. If the situation is not corrected, it's anybody's guess how long industry will be able to continue to provide coal, potash, phosphate, sodium, and other raw materials at competitive world prices.

In this article, the authors will put into a new perspective the entire situation by examining the current status in federal leasing; then tracing its history; and finally presenting a new tool—based on what's known of a mineral resource, compared to what is available for lease and what has already been leased—so as to achieve what they hope will be a rational long-term management of leasable mineral resources under federal control.—Ed.

Sustained American Energy Renaissance means
more responsible federal stewardship
or, eventual state control of federal lands....



...rather than gambling with our energy independence !

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