

HEADWATERS ECONOMICS RESEARCH UPDATE

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HEADWATERS
ECONOMICS

ENERGY DEVELOPMENT AND THE WEST *The Costs and Benefits to Communities in a Changing Economy*

Recent fossil fuel development in the West is very different from the 1970s. The regional economy has grown and diversified, moving away from a heavy reliance on resource extraction. The principle sources of prosperity in the region today are related to a modern service and knowledge-based economy along with retirement and investment income. As the table below shows, energy plays a small revenue role in most western states.

The role of public lands also has changed. Rather than serving solely as repositories of raw materials, today public lands play an important role in attracting and retaining a growing population along with businesses and capital that are increasingly free to choose their location.

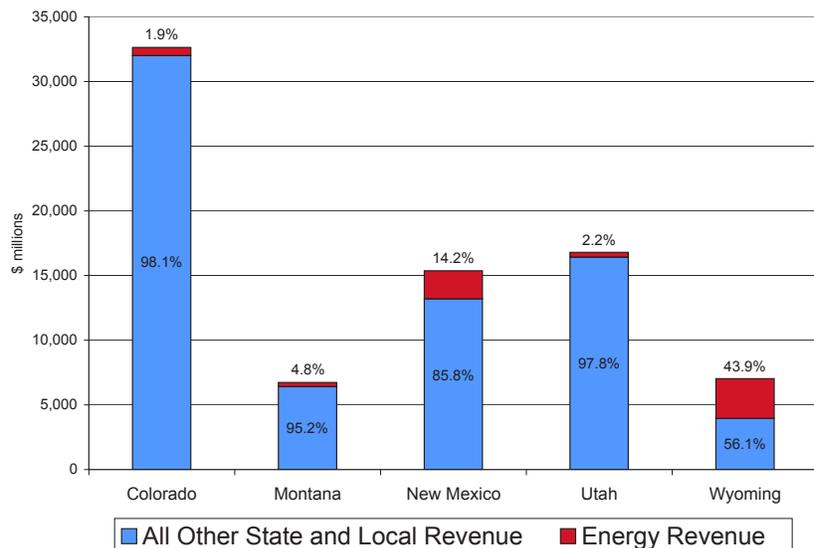
Recent energy development is focused in a small portion of western counties—bringing jobs, income, and revenue but also negative economic, social, and fiscal impacts.

To better understand energy's west-wide impacts, Headwaters Economics completed a series of reports, *Energy and the West*, which focus on larger questions concerning today's western economy. Headwaters also is pursuing more detailed state and county-level case studies for four states: Colorado, Montana, New Mexico, and Wyoming.



www.headwaterseconomics.org/energy

Energy Tax Revenue in 2006 as Portion of Total Local and State Government Revenue



States vary widely in production and effective taxation rates. In some, such as Wyoming, energy plays a larger role. In others, like Colorado, energy is a small portion of the state's tax base.

Western Public Lands: Can They Create Energy Independence and Reduce Consumer Prices?

In the past eight years, fossil fuel extraction on public lands, primarily in the West, has increased dramatically. Yet the resulting increase in production has not significantly improved national energy independence and security, or lowered prices for consumers. The supply and price of each commodity is influenced by a different set of factors:

Natural Gas: The U.S. is largely self-sufficient in natural gas. Some hope that aggressive development of public land resources will meet domestic needs and lower consumer prices. Lately, production has been advancing faster than demand, and many companies are cutting production to keep prices up. While the Intermountain West has enjoyed low natural gas prices (by national standards), in part due to local production, new pipelines to higher priced markets means consumers in the Rockies will pay higher prices.

Oil: It is highly unlikely that the U.S. will ever be self sufficient with respect to oil—national reserves are simply too small and consumption too large. The U.S. contains only 2.4 percent of the world's proved reserves, and western public lands contain an even smaller portion—approximately 0.2 percent. Oil is a globally traded commodity, its price set by world supply, demand, and government policies. Because of the modest scale of U.S. reserves, increasing domestic supply will have little bearing on world supply and price.

Coal: The U.S. has large reserves and is a net exporter of coal. Production continues to increase, though more slowly than demand, and coal—per Btu—is still a cheaper energy source than natural gas or oil. The question is whether the U.S. will choose to shift electricity generation from coal to other sources because of climate change concerns. The viability of clean coal technologies, carbon tax proposals, and the price of alternative energy sources will play a large role in determining coal's future as an energy source.

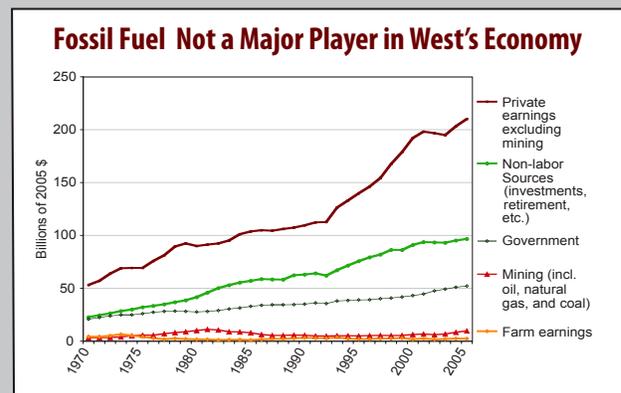
The Economy of the West Today Relies Primarily on a Mix of Service Industries, and Retirement and Investment Income

THE WESTERN ECONOMY is growing and diversifying in a wide variety of service and knowledge-based occupations. Almost 90 percent of economic growth in the West for the last three decades—1970 to 2000—came from service related occupations (doctors, lawyers, engineers, schoolteachers, etc.), retirement, and investment income. This means the West is less dependent on resource extraction than in the past.

By 2005, 45 percent of personal income in the West derived from people employed in service and professional occupations; and another 40 percent was from non-labor sources such as retirement and investments.

The public lands of the West now play an important role by helping provide a high quality of life that makes nearby communities attractive

places to live and do business. The challenge is to ensure that public lands are managed so that energy development does not compromise the values and qualities that support prosperity for most residents and businesses in the West.



Colorado, Montana, New Mexico, Utah, and Wyoming (collectively)

Fossil Fuel Extraction as an Economic Development Strategy

In today's more diverse western economy, relying on fossil fuel extraction may not be an effective economic development strategy. Headwaters Economics found that only 26 of 414 western counties today are energy focused, with a relatively high proportion of total jobs (7% or more) involved in oil, natural gas, or coal. These counties underperform economically compared to peer counties with little or no energy extraction. The economies of



"We do not want one economic activity—in this case natural gas extraction—to adversely impact our county's long-term economic interests and quality of life. A key issue is maintaining a balance so we can have a diverse, healthy economy."

— Tresni Houpt, Garfield County Commissioner, and Colorado Oil and Gas Conservation Commissioner

energy-focused counties, compared to their peers, are characterized by:

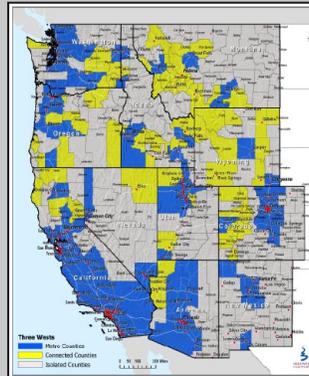
- Slower long-term growth in jobs and real personal income;
- Less economic diversity and resilience;
- Lower levels of education in the workforce;
- Higher rates of net out migration;
- Greater household income disparity.

Today, it is less certain that energy development will bring the prosperity it once did, and a concentration on fossil fuel extraction may impair a local economy's ability to grow and compete successfully. For full details, go to:

www.headwaterseconomics.org/energy.

ALSO AT HEADWATERS ECONOMICS

www.headwaterseconomics.org



www.headwaterseconomics.org/3wests.php

The Three Wests

Our research shows three distinct types of counties across the West. This web-based tool helps community leaders learn more about the economic potential of their counties.



Atlas of Bison Conservation

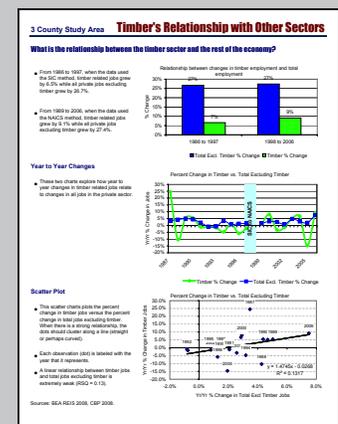
The Atlas helps users prioritize where bison restoration may occur and improves their understanding of the economic and demographic conditions of these areas.

www.headwaterseconomics.org/bison.php

Economic Profile System

Headwaters is updating the popular (and free) EPS system for producing custom regional socioeconomic profiles to include specific economic sectors such as timber, energy, agriculture, environmental justice, travel/tourism, and migration.

www.headwaterseconomics.org/eps





We're Growing!

Headwaters Economics welcomes Chris Mehl to our team where he will be working on communications and public policy. Chris has extensive experience across the West and previously worked for many years as a press secretary for several members of Congress and the House Foreign Affairs Committee.

Chris can be reached by phone at 406.570.8937 or by email at chris@headwaterseconomics.org.



MISSION STATEMENT

Headwaters Economics is an independent, non-profit research group. Our mission is to improve community development and land management decisions in the West.

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