Oil shale is an energy-intensive, environmentally destructive “extreme” oil source. Technically recoverable western U.S. reserves are estimated at 800 billion barrels of oil\(^1\) — however, the economic viability of developing this oil remains unproven.

**ENERGY INTENSIVE**

Mining and processing oil shale to generate crude oil similar to that pumped from conventional wells requires superheating oil-soaked rocks to extract usable petroleum. During this process, rock must either be strip-mined and then baked off-site or cooked in place underground. These methods threaten habitat and water resources in Colorado, Utah, and Wyoming, the states where the world’s largest oil shale deposits are found.

Both strip-mining and in-situ mining (which requires heating the ground to more than 1,000° F to melt out the kerogen\(^2\)) require massive amounts of energy. In fact, more energy may go into the development process than would be produced by the oil. Over the lifecycle of the fuel, oil shale generates from 1.75 to 3 times more greenhouse gas emissions than conventional petroleum fuels\(^3\).

**WATER INTENSIVE**

Turning the solid hydrocarbon that composes oil shale (known as kerogen) into a useable transportation fuel requires massive amounts water. Estimates range from 5 to 25 barrels of water are needed to produce a single barrel of oil\(^4\). Water is already a scare resource in the arid Southwest. Estimates show that a commercial oil shale industry would use as much water annually as the city of Denver\(^5\) — threatening western agriculture and the drinking water supply for much of the Southwestern U.S., including Las Vegas, Phoenix, San Diego and Los Angeles.

**IRRESPONSIBLE OVERSIGHT**

Right now, oil companies are pushing their friends in Congress to open up America’s public lands to this disastrous technology. In fact, under the Bush administration, they were able to secure regulations that would have opened more than 2 million acres of public land to oil shale development, with very few environmental protections and with bargain-basement royalty rates. Although the Obama administration is now revisiting those regulations, some in Congress want to keep these irresponsible, Bush-era regulations.

Too little is known about the effects of oil shale development to give oil companies free rein on our...
public lands via commercial leases. Responsible, measured research must be undertaken about the full impact of oil shale development before allowing any commercial-scale leasing. At each stage, oil companies must be held to stringent environmental standards and reporting requirements. If commercial leases are granted, royalty rates must be set at a level that allows the public to truly benefit from the development of these public resources. This rate should be at least 12.5 percent.

EXPANDING WITH DISASTER

The Energy Policy Act of 2005 established two sets of oil shale permits: research, development, and demonstration (RD&D) leases and commercial oil shale leases. Currently, five companies have received RD&D leases in the United States: four in Colorado (three by Shell, and one by American Shale Oil) and one in Utah (The Oil Shale Exploration Company). These experimental leases allow the companies to test experimental methods to turn shale into oil on 160-acre plots of land for 10 to 15 years. If they succeed, these companies can expand their leases to 4,960 acres for commercial use. In 2012, ExxonMobil submitted proposals for RD&D leases in Rio Blanco County, Colorado. These plans are currently in the public comment period.

The 2005 energy policy Act also stipulated a commercial-leasing process for public lands. This requires the Bureau of Land Management (BLM) to prepare programmatic environmental impact statements (PEIS) for the regions richest in oil shale deposits. In 2008, the BLM released a report that made 1.9 million acres of public land potentially available for commercial oil shale development. In the spring of 2011, the BLM initiated a new planning effort to reassess what public lands should be available for oil shale leasing. The BLM plans to release the final updated PEIS by October 2012.

ENDNOTES


5 Ibid.

