

The wrong sites for solar

May 19 2011, By Erica Rosenberg and Janine Blaeloch

Is it possible that solar energy - clean, renewable, virtually infinite - could have a downside? As it's being pursued on our public lands, yes.

In the name of greening America, the Obama administration is about to open up as much as 21.5 million acres of mostly undisturbed, fragile desert land for potential industrial-scale solar energy development. That means huge swaths of public land in the West could be developed, degraded and effectively privatized.

But such degradation isn't necessary. We can have solar energy while keeping the desert wild and public lands truly public. The government has lower-impact options, such as putting solar developments on already degraded public and private land. It could also pursue the more efficient and far less damaging tactic of deploying [solar panels](#) across vast acreages of rooftops and parking lots.

With [renewables](#) at the forefront of the administration's efforts to address energy dependence and [climate change](#), Interior Secretary Ken Salazar promised in 2008 to "put a bull's-eye on public lands" for solar development, and he's keeping his word.

By the end of 2010, the Bureau of Land Management - the Interior Department agency that manages one-10th of America's land for multiple use - had fast-tracked 14 solar developments across the Southwest, including six in California. As part of streamlining the process, Salazar himself signed off on nine of the projects, thereby foreclosing public appeals.

Given the dizzying pace of permitting, each project was pushed through with little meaningful public review or environmental impact analysis. Each has an average footprint of 4,300 acres; when they're completed, conversion of the sites - from desert habitat and multiple-use land to single-use industrial zones - will be total.

To fend off litigation and controversy that the expedited process spawned, the Department of the Interior in 2008 also initiated a "programmatic" environmental impact statement, which allows it to establish a broader, systematic plan for solar development on public lands. Groups like ours hoped that the process would take a harder look at which, if any, public lands should be opened for potential solar development, with a clear assessment of projects' cumulative impacts. Early on, the administration said the programmatic process would look at 676,000 acres of "solar study areas." The assumption was that acreage would be whittled down as environmental conflicts and other objections were raised.

Instead, the December 2010 draft proposal throws open the gates to an ongoing land rush. The "preferred alternative" keeps 21.5 million acres open for development - 33 times as much acreage as originally advertised.

What's fueling the demand for land? Battling climate change and a dismal economy with green jobs, the Obama administration is offering generous subsidies for Big Solar development. These subsidies include cash grants of up to 30 percent of the cost of a project and loan guarantees in the billions, and they accrue to familiar corporate interests: oil companies, utilities and Wall Street firms. For example, \$1.37 billion is going to Bright Source - whose investors include BP, Chevron and Morgan Stanley - for three proposed plants in the Mojave Desert. BLM tops it off by offering lease rates based on artificially low land values.

Claims of reducing greenhouse gases undergird the project approvals. Yet research shows that carbon storage rates in the Mojave rival or exceed those of some forest and grassland ecosystems, so the harm of carbon released during construction could offset the promised benefits of the utility-scale solar developments.

On top of that, the estimated operational life of each project runs from 30 to 50 years, but environmental impacts to the land will be felt for centuries. Although to some they appear devoid of life, the deserts and their fragile soils are biologically rich, providing habitat for rare and protected plants and animals like the desert tortoise, the fringe-toed lizard and the Joshua tree. Even BLM concedes in its draft analysis that desert ecosystems could take up to 3,000 years to fully recover from the soil and vegetation disturbances associated with the industrial sites.

Furthermore, construction and operation will both require scarce water, and the solar plants will require thousands of miles of new high-voltage transmission lines through public and private property.

When all of the effects are taken into account, it makes no sense to destroy the desert for large solar projects, and even less sense to turn over precious public land to corporate interests. Given the scale and the environmental impact, this use privatizes the land in a way that other sanctioned uses like grazing and pipelines do not. The Environmental Protection Agency, in reviewing the proposal, urged the Interior Department to consider putting projects on "disturbed, degraded and contaminated sites" rather than "large tracts of undisturbed public lands," and helpfully identified millions of acres of degraded lands potentially suitable for solar.

Renewable [energy development](#) is crucial to America's future. But the Obama administration is moving backward by sacrificing public lands for [solar](#) development. With better siting and technological options

available, we can have a renewable energy program that reflects 21st century values by not destroying the very environment we hope to protect.

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