By [Penny Stallings](http://www.ecology.com/author/penny-stallings/), February 3, 2012

*The endangered desert tortoise. Photo wikipedia commons*

## Tale of the Tortoise

It’s kind of an eco paper-rock-scissors situation.

Renewable solar energy that could power millions of homes on the one hand.

A pristine Western landscape and fragile ecosystem with rare animals and plants on the other.

And finally, a lumbering prehistoric desert-dweller with an austere lifestyle and strong family values.

The plight of the desert tortoises has come to symbolize the cause of grass-roots groups like [Western Watersheds](http://www.ecology.com/2011/09/07/watershed-more-than-an-event/) and [Defenders of Wildlife](http://www.defenders.org/) that are fighting to stop the construction of a 370-megawatt solar plant on 3,600 acres (1,459 ha) of public land in the Mojave called the Ivanpah Valley. The ongoing protest has managed to scare off several energy companies and to win some major concessions from the one company that has managed to hang in. But the fight is far from over.

### *The fate of the desert tortoise has led to a rift between the Good Guys; advocates of renewable energy versus defenders of wildlife and an iconic desert landscape.*

The drive to secure protected status for the Mojave began around 2002, when a $45 million donation to the non-profit Wildlands Conservancy allowed the group to acquire a thousand square miles (2,590 sq.km) of its desert land. Senator Diane Feinstein pressed for federal matching funds to complete the purchase of the territory, which was then designated as public land and turned over to the government for protection.

*[](http://www.ecology.com/2012/02/03/eco-good-guys-clash-desert-tortoises/www.ecology.com/2012/02/03/eco-good-guys-clash-desert-tortoises/)*

*Brightsource wants to install 66,000 mirrors (heliostats) and a 45 story “boiler tower.” Photo Courtesy Brightsource Energy*

But then came [President George Bush’s 2005 signing of the Energy Policy Act allowing the desert Southwest to be opened to renewable energy development](http://www.gpo.gov/fdsys/pkg/PLAW-109publ58/content-detail.html)with billion dollar federal subsidies as an incentive. Utility companies and developers, like Pacific Gas & Electric, the Florida Light and Power Group (FLP), Spain’s Iberdrola Renewables and Goldman Sachs were quick to propose the construction of two-dozen solar power plants and wind farms on the land. Brightsource (BLM) – the first and thus far, single successful applicant – drew its backing from Google, Morgan Stanley, and several oil companies and Silicone Valley start-ups. It has managed to keep the project going amidst eco-infighting and court orders halting construction, not to mention the potential publicity nightmare of harming – if not destroying – the desert tortoise in the process. Originally BLM estimated the area’s tortoise population at 25 animals. But the Department of the Interior estimated that more than 1100 tortoises could be injured or killed during the plant’s construction.

### Construction Halted

The new numbers caused the Department of Land Management to require BLM to stop construction in two areas until they relocated the tortoises to a safe, temporary home. Well-meaning though it is, there are a couple of problems with this strategy: the pens BLM has constructed are cramped for an animal accustomed to roving up to 12 miles (19.3 km) a day. And even more concerning, the desert tortoise is so delicate that it has long been against the law to touch them. The severe internal defense mechanisms activated when they are disturbed, dictate that they not be moved or picked up unless they are in impending danger. And if they do survive the traumatizing relocation program, who can say what kind of shape their old homes will be in by the time they return?

Even without this latest threat to their survival, the Mojave Desert tortoise population has long been vulnerable to disease and predators that prey on their young. Their populations have declined in some areas by as much as 90 percent since the 1980s. Not surprisingly, tortoise deaths have up-ticked since plant construction began last year and there are bound to be more.

While the debate between the Greens (Sierra Club National vs. Sierra Club Regional Desert Committee among others) rages on, many would-be developers and energy super-powers are quietly retreating to the other side of the Mojave’s California-Nevada border where folks are friendlier to big, rich federally-funded projects. Meanwhile Brightsource, the lone solar-company willing to grapple with the protests, restrictions and lawsuits, continues to build tortoise shelters along with 66,000 mirrors (heliostats), a 45 story “boiler tower” and the natural gas pipeline that cranks up the power for the whole megillah. Yes, even solar plants have to prime the pump with good old-fashioned fossil fuels.

This complicated issue is made a little easier to follow by recent reporting done by Judy Mueller in “The Great Green Rush  Desert Solar Energy Leaving Tortoise in the Dust”  on KCET”s SoCal Connected.