

Socio-Scientific Issues Case Background

Plaintiff: Mr. A's Solar Panels **Defendant:** Ms. B's Trees



In the case of Solar Panels v. Trees, you will use solar engineering to collect evidence for a mock trial to determine if any tree reduces solar output by 10% and whether each tree in the defendant's backyard is "guilty" or not.

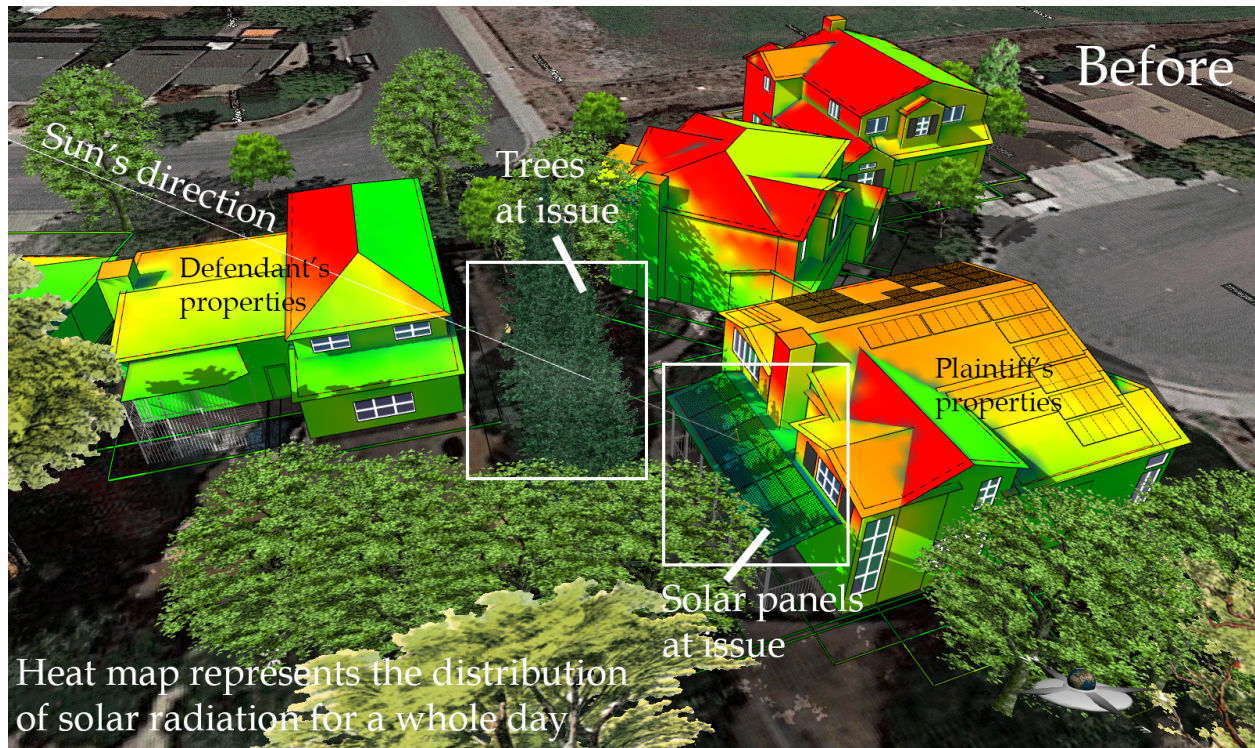
See case history and facts below:

- In **1998**, the defendant **planted eight redwood trees** without a permit on their property located next to the plaintiff's property. When the trees were planted, they were approximately five feet in height.
- In **2001**, at a cost of \$70,000, the plaintiff **installed solar panels** on his porch roof with a permit. The panels face south to receive maximum solar exposure and face the defendant's redwood trees. When the panels were installed, the redwood trees did not yet impact the panels' access to sunlight.
- Around the time when the solar panels were installed, the plaintiff had a meeting with the defendant to discuss the trees, which, due to their rate of growth, would eventually affect his solar panels' access to sunlight. The plaintiff had been advised by the seller of the panels that state law would protect their access to sunlight from trees. Based on this understanding, the plaintiff requested the defendant remove the trees and **offered to pay for the removal and replanting**. The defendant declined this offer but said she would reconsider the issue if and when the trees grew to the point of shading the panels.
- In **2008**, the plaintiff filed a complaint that the defendant's trees violated the Solar Shade Control Act (AB 2321), which stated that, **"No person...shall allow a tree...to**



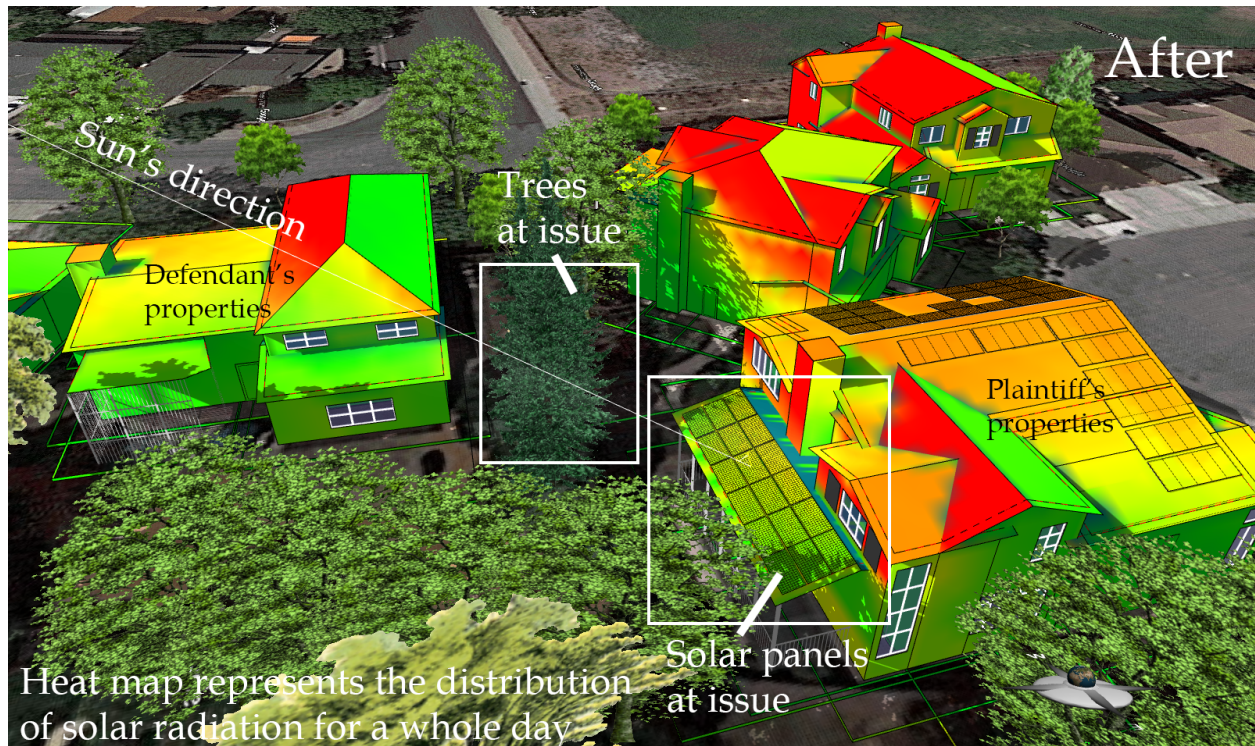
grow...after the installation of a solar (panels)...on the property of another so as to cast a shadow greater than 10 percent" during the day.

- The plaintiff claimed damages in the form of higher energy costs and loss of his \$70,000 investment in the solar panels and requested that the defendant **either remove all of the trees or prune the trees** on an ongoing basis so they don't cast a shadow over the panels.



Notice the shadow cast on the solar panels by the trees at issue.





Significant reduction of shadow cast on the solar panels after the most problematic trees were removed.

