



Environment & Climate

From Serene Shaftsbury to Industrial Solar?

Neighbors Document the Extraordinary Environment and Landscape and Explain Why the 20 MW Solar Project is Wrong



A Connecticut commodities broker wants to put solar panels on 85 acres of forest and fields

April 3, 2024

Read the [Brief, Legal Argument and Findings of Fact](#) filed to the Vermont Public Utility Commission by the Neighbor Intervenors on August 23, 2024.



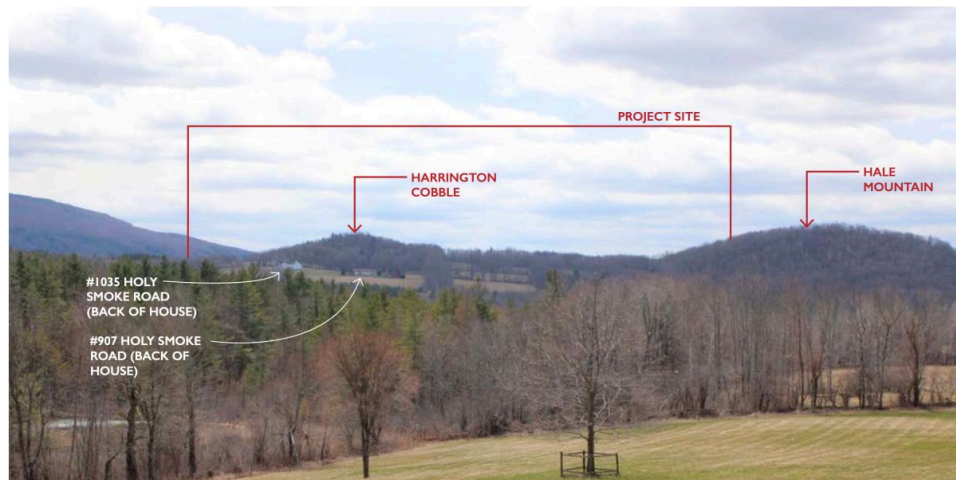
*Solar Panels Would Cover Field: All Tree Coverage
Shown In This Image Would Be Removed*

**Watch one-minute aerial [video](#) showing the Project site. Map
of [Drone Flight Path](#).**

The Shaftsbury Solar Project is in Shaftsbury, Vermont, saddled between Hale Mountain and Harrington Cobble, on a property with 182 acres of mostly gently rolling fields and forests. Approximately 104 acres have been proposed for development into a solar electric generation facility. Solar panels for 20 MW electric generation will be placed on 80 acres. Further clearings of forests, fields, and soils are called for to remove shade-casting trees, create temporary laydown yards, onsite graveled access roads, temporary new access for heavy-duty vehicles, and a stormwater management system that includes scraping soil to build berms and installation of five gravel wetlands.

Rich Northern Hardwood Forest is the predominant forest on the site. Dry Oak Maple Limestone Forest stands along the western side of the property

and on the side of Hale Mountain. Plans are to cut, stump, and scrap soil for 41.8 acres of Rich Northern Hardwood Forest trees. Many of the forest trees are in stands that separate the fields.



Looking South at Project Site South of Holy Smoke Road Between Harrington Cobble and Hale Mountain

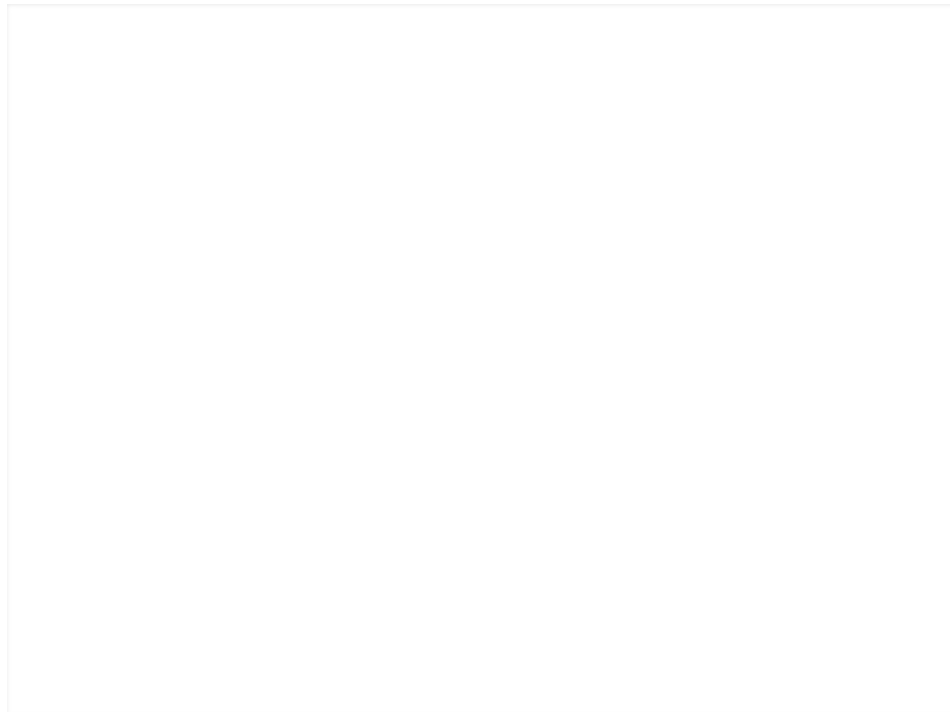
Read [Rob Moir's Testimony](#) and [Report on the Project's impacts to the natural environment](#).

The construction of this solar facility in the location chosen would require the destruction of healthy fields and forest ecosystems—severely degrading the natural resources of the state and the natural services they provide—when already severely-degraded land exists in our state (dead farmland, gravel sites, etc.). If sited appropriately, on degraded or non-functional land, a field of solar panels would provide shade to dry ground, not impede existing photosynthesis, absorb the impact of rainfall on open land, and speed recovery of dead soils and enhance ecological function.

Clear cutting a forest will do irreversible damage to the ecological function of the landscape—destroying the water cycle, mineral cycle, and biodiversity of the land on the proposed solar site and for miles around the site. The destruction of these cycles

will result in unmanaged water polluting waterways, exacerbating flooding, and degrading the plant and animal populations of surrounding areas. No amount of infrastructural water containment systems can hold back the silt and soil that will run off this mountain. Similarly, no amount of trenching or flow management will put the stormwater into the Earth, where it should be.

Cutting trees, removing root balls, blasting, trenching, bulldozing, and general use of heavy machinery will compact and expose the soil, destroying the soil ecosystem and rendering it unable to manage water, store carbon, or support life.



Prime Agricultural Soils, Mature Forests, Wildlife and Botanical Diversity all to be replaced with solar panels

Read [Jesse McDougall's Testimony](#) and [Exhibits 1, 2, 3, 4, 5, 6, 7](#) about the Project's impact on the local environment, economy, soils, and more.

The agricultural soils that are presently growing forage, pollinator habitat, managing water, and cycling minerals will be scraped

clean in places, and ruined in the rest by heavy machinery and compaction.

Compared to what is on the site presently, with its diverse forest types, mature hedgerows, fields, wetlands and landscape features, the proposed Pollinator Habitat Enhancement/Management Plan will essentially create approximately 80 acres of homogeneous herbaceous vegetation, of which 80% will be grasses that provide little to nothing for the majority of pollinator species. Calling this project “pollinator habitat” is a far cry from what the site will be. A highly diverse, rich landscape of mixed vegetation and natural communities containing at least 133 unique plant species will be converted into predominantly four plant species, two of which are non-native. While two species in the mix will bloom, they only comprise 20% of the mix, and being that they both bloom at the same time, will only provide pollen or nectar two to three months of the year.

Read [Evan Abramson's Testimony](#) and [Pollinator Report](#) about the Project's plans.

The old-growth northern hardwoods slated to be cut and stumped are swathes of forests separating fields or surviving as beauty strips. Beauty strips are a forestry term for swathes of forest that are left in a natural state to hide the scars of clear-cutting. With much light from the fields and nutrients from the ground, sugar maple, white ash, red oak, black cherry, ironwood, and others are thriving. The narrow forests provide roosts for birds that hunt the fields. This ecotone has greater wildlife value than a forest block.



41.8 acres of forest are proposed to be cut for the solar array

Every inch of the proposed solar facility will require heavy equipment to cross it. Soil compaction will therefore be a factor across the entire construction area. With soil compaction comes runoff, nutrient pollution, carbon dioxide emissions from

microbiological death, biodiversity loss, and germination suppression.



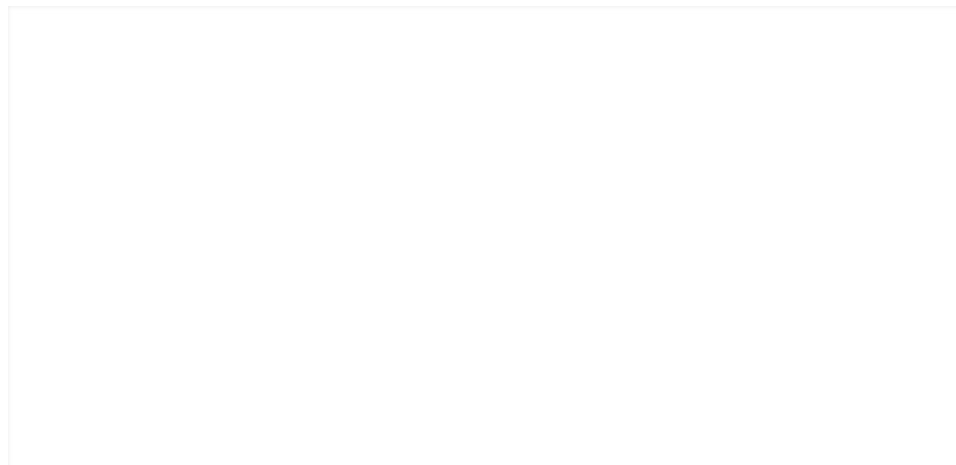
Aqua color is Prime Agricultural Soils

The 104 acres cleared and soil scraped for a solar industrial park will result in bare ground compacted and rutted by heavy machinery that must be driven to all corners of the property to install gravel wetlands, build berms, and construct facilities. Absent from the stormwater management plan is a program to keep the gravel wetlands from clogging with leaves and detritus. Shaftsbury Solar will not manage the receiving

watersheds to repair or remove sediment outside their disturbance areas. Engineered to provide water treatment for the 1-inch storm event, there is a high potential for sediment deposition in wetlands and streams.

Deforestation, shifting stone walls, scraping soil, compacting the ground with heavy construction equipment, installing paved roads, and mounting solar panels on the north-facing slope will exacerbate stormwater issues by removing the existing impediments to water flow and decreasing ground permeability. This poses a major flood and road/driveway washout risk to neighbors who live downstream to the north.

Soil runoff from the project, construction debris from the work site, heavy metals from broken solar panels, PFOAs from the wiring harnesses, fuel from the construction equipment, litter from the work crews, and everything else brought to the site will, eventually, be found in the soil and waterways.



The Project site slopes to the North and funnels water to the properties downhill. Image is facing east. North is to the left.

View the above [image in 3-D](#) and rotate it to better understand the topography.

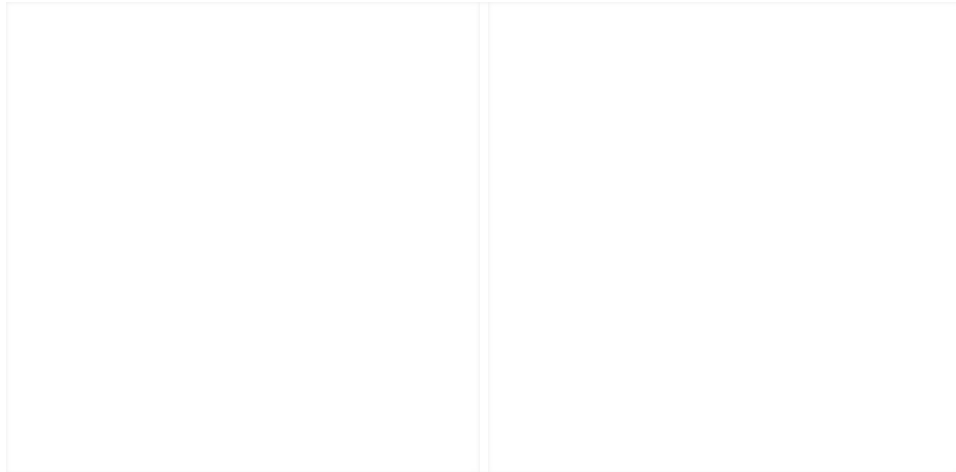
The solar project site and its adjacent surroundings provide diverse habitats essential for supporting high biodiversity, encompassing streams, brooks, wetlands (marshes, swamps,

vernal pools), grasslands, forests (deciduous and coniferous), scrublands, ponds, valleys, and hills. This extensive array of habitats results in a rich variety of wildlife. Furthermore, this area serves as a sanctuary for species migrating from the green mountains into a more human dominated environment. Situated amidst the Taconic Mountain and Green Mountains, this region provides a diverse array of ecological conditions, promoting biodiversity, connectivity, and ecological resilience. I have observed upwards of 90 species of bird, more than 20 species of mammals, as well as over a dozen species of reptile and amphibian.



Birds identified in the surrounding area

Read [Keegan Delurey's Testimony](#) about the Project's impact on wildlife



*Current View of Site and Neighbor Expert's
Simulation of Solar Project, Looking South*

The Project alters a visually prominent ridgeline, and does not fully mitigate impacted views of the Project from surrounding locations. The Project as currently proposed does not protect important scenic values, not in the least as indicated through the damaged visual continuity Harrington Cobble and the associated ridgeline.

Read [Samantha Anderson's Testimony](#) and [Aesthetics Report](#) and [Appendices A, B, C](#) about the Project's Aesthetic impacts.

The consequence on our landscape of the proposed solar display is devastating. It is exactly as if someone might take a black magic marker and slash it across a canvas of one of the great masters of the Hudson River School painters. It completely ruins the scene. The straight geometric unmodulated lines of the solar site tear the fabric of our landscape views. They sour its gentle sweetness. They speak of human disregard for the beauty and bounty of our land and turn it into a factory. Instead of spewing smoke, they spew ugly.

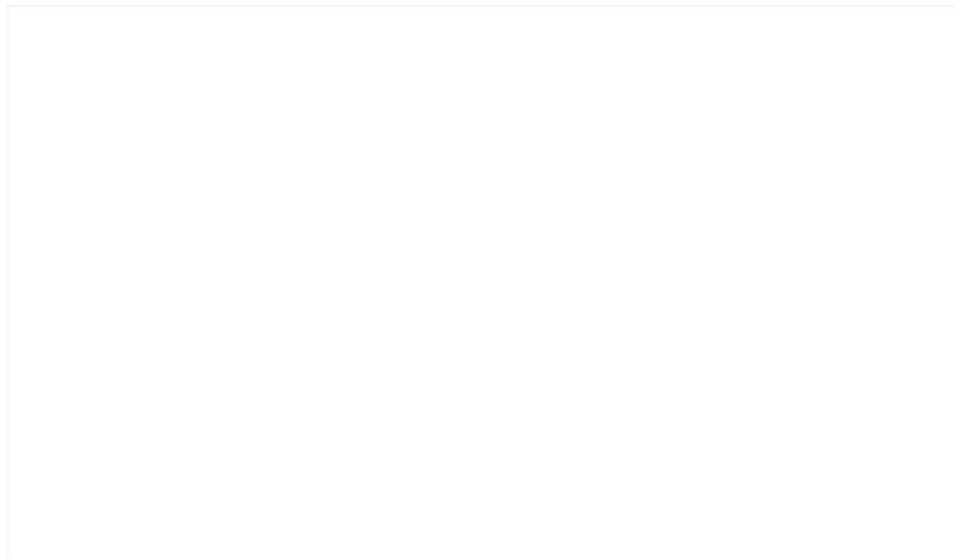
Read [Stella Ehrich's](#) [Testimony](#) on the Aesthetic Impact of the Project from an artist's perspective.



Landscape painting of typical area scenery by [Stella Ehrich](#)

See [Stella Ehrich's](#) [landscape paintings](#) of local areas.

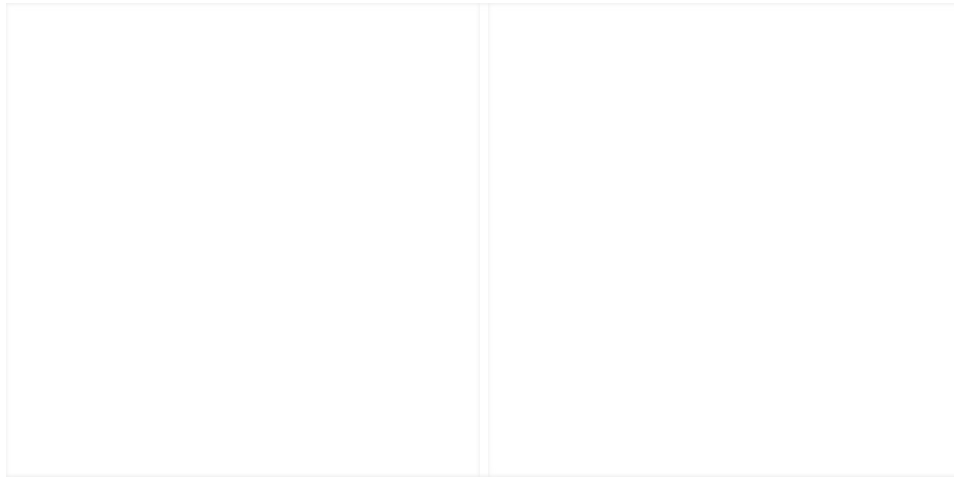
Vermont is at a saturation point in which additional Solar Generation will provide very little or no grid benefits while requiring increasingly higher costly grid infrastructure upgrades. Vermont has the highest amount of Solar Generation capacity in New England based upon such capacity relative to load. If more Solar Generation is to be added in New England, it is more efficient in terms of electric grid operation and lower grid losses, to install it in other New England states, which have less solar capacity relative to load.



Expect that the Shaftsbury Solar project will increase costs to Vermonters without providing any economic benefits. Expect that SS project will result in more curtailments of existing renewable energy generation in Vermont. It is likely that the SS project will assign its renewable energy generation to another state, which would mean that SS would only add costs to Vermonters and make it more difficult to meet our own state renewable energy standards. Even if SS assigns its renewable energy to Vermont, its installation would decrease existing renewable generation due to more curtailments. Considering those curtailments and the unreasonably high energy generation forecast of SS, it is likely that SS will not generate significant amounts of renewable energy to meet Vermont's goals.

Read Robert Amelang's [Testimony](#) and Exhibits [1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#) on power supply and grid issues associated with Shaftsbury Solar.

In the context of climate change mitigation, the SS approach is self-defeating. The Project would perpetuate destructive development practices that cause biodiversity loss and climate instability. Deforestation and scraping of topsoil would release sequestered carbon, likely more than ten kilotons, and would reduce the annual carbon absorption capacity of the region going forward by many tens of tons per year. This carbon emissions increase would add to the many thousands of tons of GHG emissions incurred by the Project, which includes materials extraction, equipment fabrication, transport, site preparation, equipment installation, fencing, road building including the construction/deconstruction of an access road to Route 7 and the creation of two large substations.



Current View from Route 7 and Developer's Simulation
of New Substation and Tree Screening after 5 Years

Read [Christopher Ausschnitt's Testimony](#) about the Project's impacts to the local environment, economics, and greenhouse gas emissions.

The proposed industrial solar facility would be a tool employed for the sake of the use of the tool alone—lacking all consideration of structural, ecological, and cultural contexts. Solar power is not a “solution” to the climate problems we’re experiencing in itself. It is a tool we have at our disposal, and it can be used within appropriate contexts to produce great benefit. Or, it can be used in the wrong context to produce incredible destruction. If we consider the context in which this solar plant is to be utilized, it becomes clear that this is a destructive implementation of what could otherwise be a productive tool.

This project is a good example of humans trying to fix one half of a problem, but only worsening the other half. The net effect, due to all the collateral ecological damage beyond the carbon cycle, makes this project a net loss in our campaign against climate change.

All Documents in the case can be found [here](#). Update August 25, 2024: The above testimony of Jesse McDougal was withdrawn and will not be considered. Some testimony of Robert Amelang, Christopher Ausschnitt and

Samantha Anderson was struck upon the Motion of the Applicant and as approved by the PUC. The current versions of the accepted testimony are [here](#).

[Join VCE](#) and Support Those Working to Protect Vermont

About the author

Vermonters for a Clean Environment

Vermonters for a Clean Environment is a statewide non-profit corporation. We believe that Vermont's economic growth depends on its environmental health. VCE was founded in 1999.