

Judith Mann

104 North Street Belchertown
Prof Emeritus and Dean of Humanities Hampshire College

DOER bears responsibility for ongoing, catastrophic environmental damage throughout the State, brought about by incentivizing massive solar installations, while exerting minimal controls on design, siting, scale or deforestation. The

current and proposed SMART policies are not consistent with environmental stewardship, which must be central to green/clean/renewable energy initiatives.

Encouraging utility scale solar growth, failing to establish parameters for siting - which in turns fails to protect wetlands or contain runoff - and the extended de facto policy of inviting deforestation on a massive scale, is irresponsible. And the scale of deforestation is massive – to date, 77% of the approved large arrays have displaced forested land.

Throughout the State, damage continues to accrue to these sites, due to the absence of high standards and diligent oversight.

Although a DOER representative admitted publicly in 2019 that the SMART language (discouraging rather than prohibiting tree cutting, and stating that solar development must be permitted unless there was a threat to health and safety), was **intended primarily for residential application**, and was later recognized as problematic, it seems that not much has changed. I am writing nearly the same letter today as I did back then.

The primary assumption: That building solar arrays is more beneficial than leaving trees in situ. Developers make the false claim that solar panels are more efficient at reducing carbon pollution than trees are at offsetting it, and that “the land quickly reverts to its original state when the panels are removed”. The fact that trees not only sequester carbon, but produce oxygen, provide habitat, and control temperature, flooding, and erosion, is conveniently overlooked.

As for recovery, the fact is that each and every **array calls for cutting, stumping, and grading the land, thus eliminating the canopy and root system, as well as the native ground cover – all of which hold soil in place.** Erosion can be seen at nearly every array site – which must be viewed via Google Earth, since public access and inspection is prohibited during and after construction. The consistent results of this destruction more than illustrate that any claims for quick recovery (or promises to repair damage) are false.

Failures to link deforestation to catastrophic storm water runoff. Designers typically assert that plantings of meadow mix will control erosion. When designers are forced to provide better safeguards, the results resemble a patchwork quilt. Step by step, designs reflect demands made, rather than a unified approach. In Belchertown, Blue Wave Solar presented thirteen plan revisions for a single project over the course of two years, finally proposing a ‘retention/detention’ pond (a nonsensical mixture of two contrasting methods of dealing with run-off). The pond abutted a boundary and was situated at the lowest point of the array, underneath slopes of up to 65 degrees. Millions of gallons of run-off were to be held back by an earthen structure. The pond and dam were located on a steep, eroding cliff, five hundred feet above a home. (Asked if there was a plan to limit run-off from the site, the response was: “Plant shrubs and such”.) When the project was denied a permit, a legal complaint was immediately filed with Superior Court. This one project could serve as an example of the malfeasance of dozens of developers, over the course of many years, who have not been constrained to adhere to better standards. We cannot leave matters under the control of an industry which exhibits little regard for design standards and diligent oversight.

Research reveals the central role of forest maintenance in the service of global and State-wide protection of a healthy, clean environment.

The use of **wasteland is no guarantee:** the re-contouring of a former gravel pit in **Willamsburg**, MA resulted in documented flooding, run-off, and sedimentation, resulting in what the AG described as “irrevocable damage” to wetlands and streams.

We can see similar damage in Warren (the developer was sued by EPA for stormwater runoff and erosion in 2015) and more recently, in Ware/West Brookfield, in Orange, and in Williamsburg. Erosion can be seen at nearly every array site – but often it must be viewed via Google Earth, since public access and inspection is prohibited during and after construction. **Will the decision by the AG to sue the developer in Williamsburg prompt a tightening of the SMART program, or more tinkering?**

As town planners have stated, the vague language of the SMART program has left towns burdened with the review process, which derails their ongoing workload, as well as hefty legal expenses. Under wetlands protection, for example, towns can rely on a minimum set of protections under the law, which they may reinforce with additional legislation. For solar legislation, however, we suffer from the failure to meaningfully define parameters. “Recommending” that solar arrays not replace trees, demanding that permits be approved with exception for health and safety, or authorizing partial use of protected forests serves only to introduce the hen to the fox. Is flooding and erosion likely to result in contaminated water? Of course. But how to prove it in advance, without limits placed on slopes? What developer will readily admit faulty design, or be guided by altruism or even common sense when cramming panels onto acres? **And what form does redress take when land and waters are inundated?**

Adding to the burden of town-by-town review is that **each site presents complex issues** of hydrology, geology, soil characteristics, threats to wildlife and habitat, and incursions into wetlands and watersheds. It takes expertise beyond the usual capacities of residents or board members to assess designs and verify figures and calculations.

Once built, in addition to the dangers delineated above, are added unwelcome noise, visibility, and contamination, the irony is that there is a great chance that the excess energy output will be relegated to massive banks of batteries and air conditioners, due to **connectivity issues**. Some approved and even completed projects are still on hold; others are operational, but causing local surges and brown outs. Developers readily admit that the completed projects are **investments** which will be sold upon completion,

effectively undercutting promises to oversee and rectify problems. **Vulnerable landscape is treated as wasteland, and the invaluable resource of forested land is squandered.** We mischaracterize factories as farms, with dire consequences.

The residents of the State deserve and expect better. In Belchertown active opposition to the Blue Wave project garnered attendance at meetings. 300 signatures on a petition to deny a permit, and an overwhelming vote to enact strict **new solar bylaws**. These bylaws have subsequently been approved by the AG, and are now used as a **model by the Pioneer Valley Planners**. They are relevant throughout the State, as many communities grapple with poor siting and worse design, pushed by aggressive developers, landowners and legal teams. **Why must citizens, courts and town boards be forced into these machinations, on an ad hoc basis, without real guidance or protections from the Doer and SMART program?**

. The growth of smaller scale community and residential solar projects more meaningfully serves our common goals, as opposed to the industrial scale arrays, which rarely demonstrate best management practices with regard to land use and environmental impacts. Yet **potential profits are so great that the current weak disincentives, concerted conservation grant efforts, and even the few lawsuits brought by the government, have had a negligible impact.**

Belchertown is one of many Green Communities in our Commonwealth, and accordingly, we have embraced smaller scale solar and the goal of clean energy. The State must support our efforts in safeguarding the health, safety, and well-being of residents, and the environment, by better SMART regulation. Truly clean and renewable energy sources must outweigh the monetary concerns and short sighted demands of (non-resident) landowners and developers. As one member of the Friends of the Pelham Hills, I know that **we would be happy to discuss our concerns further with you.**

Sincerely,

Judith Mann