To: Carol Grant, Commissioner Office of Energy Resources

From: Scott Millar, Manager Community Assistance, Grow Smart RI SM

Subject: Renewable Energy Siting

Date: June 19, 2018

GrowSmartRI
Sustainable Economic Growth & Quality of Place

The purpose of this memo is to follow-up on a conversation I had with Governor Raimondo on June 2 regarding the need to improve renewable energy siting in RI. The Governor said she was concerned with the impacts of renewable energy siting to farms, forests and community character. She said it was important for RI to get renewable energy siting right and she invited me to a meeting to discuss better options to achieve RI's renewable energy goals.

Grow Smart RI supports the Governor's goal of achieving 1,000 MV of renewable energy by 2020. Moreover, we are aware of the need for additional renewable energy beyond the 1000 MW goal to comply with the 2014 Resilient RI Act's greenhouse gas reduction targets. But how we achieve this goal is as important as reaching the goal itself. Continuing to clear-cut thousands of trees and threaten our prime farmland in pursuit of this goal is undesirable and unnecessary.

RI should immediately establish economic incentives to encourage the siting of utility scale renewable energy on developed and disturbed locations (such as landfills, brownfields, rooftops, parking lot canopies, and gravel banks) and disincentives to prevent the continued loss of our forests and prime agricultural soils. Massachusetts and Vermont have already established such economic incentives and disincentives, and Connecticut is in the process of developing its own siting reforms. We know there has been discussion of the MA and VT programs at the OER stakeholder group. The CT reforms are due in large part to a 2017 report by the CT Council of Environmental Quality that was very critical of CT's renewable energy siting process and recommended it be changed.

In 2017, the Connecticut General Assembly passed Public Act 17-218. This Act impacts the siting for solar facilities of greater than 2 megawatts. Pursuant to this c Act, facilities must meet the following requirements:

- The Siting Council must not find a "substantial adverse environmental effect"
- The Department of Agriculture must write to the Council that projects "will not affect prime farmland" and the DEEP must write to the Council that projects will not affect core forest.
- Regulations to implement this statute are pending, but the CT legislature made their intentions to avoid impacts to the environment, farms and forests clear.

New Jersey and Vermont identified and mapped areas where renewable energy development is encouraged and areas where it will either be discouraged or prohibited. New Jersey will only provide economic support for solar development within developed and disturbed areas. NJ is currently 5th in the country in producing electricity by solar. In a meeting with Speaker Mattiello in April, he indicated his support for limiting State economic support to renewable energy development in developed and disturbed locations. He also indicated that forests should not be developed.

Protecting Rhode Island's forests is important both economically and environmentally. Rhode Island grown wood products contribute over $700 million annually to the State's economy and support over 3,000 jobs. The forest also provides clean air, drinking water, and valuable wildlife habitat.

In addition, our forests play a critical role in mitigating climate change. The 2014 Resilient RI Act's required greenhouse gas reduction levels can only be reached by no further net loss of forest, according to the *Rhode Island Greenhouse Reduction Plan.* This plan also determined that electricity consumption contributed only 20% of RI's greenhouse gas (GHG) emissions. So when RI is able to

generate all of its electricity from renewable energy there will still be a need to reduce 80% of our annual GHG emissions to comply with the Resilient RI Act. Neither solar nor wind facilities can absorb or store carbon so these mandatory annual GHG reductions must come from other sources. The forest has been recently documented by the Nature Conservancy as the most economical means to absorb and store carbon. RI forests can absorb and store 30% of RI's annual GHG emissions as determined by using a number of sources in consultation with DEM. Therefore the RI forest is currently mitigating 50% more of the annual GHG emissions than what can be expected when RI gets all of its electricity from renewable energy.
The subsequent clearing of forests for renewable energy development is actually making it more difficult and expensive to comply with the GHG reduction targets in the Resilient RI Act. For every acre of forestland lost, RI is losing the opportunity to absorb the annual emissions from two cars. DEM estimated the carbon storage value of RI forests to be $39 million annually.

Moving forward we strongly believe **RI can accelerate renewable energy development and comply with the Resilient RI Act by revising the existing renewable energy siting process as follows**:

1. Use statewide mapping to site utility scale renewable energy

This is the process successfully used by VT and NJ. The broader concept is described in *Energy Sprawl Solutions*, Nature Conservancy 2017 and *Clean Energy Green Communities: A Guide to Siting Renewable Energy in the Hudson Valley,* Scenic Hudson 2018. It would involve examining all of RI to determine those areas that are acceptable for development (such as brownfields, landfills and parking lots) and those areas where development should be discouraged (such as prime agricultural soils, large un-fragmented forests, and critical habitat). The basic principles involve reaching a consensus on what needs to be protected in RI and guiding subsequent development away from these locations.
Once the areas to be protected are identified and mapped it will be easier to remove any obstacles that would impede development in the preferred locations. The RIGIS already has the ability to develop maps for natural and cultural resources once a consensus is reached on which resources need to be protected. This will provide a more predicable pathway for developers to plan and implement projects and avoid the contentious process that is currently slowing down development. It will also provide the necessary guidance for municipalities to revise their comprehensive community plans and zoning to accommodate renewable energy development in an environmentally sustainable way.

2. Provide economic incentives to encourage development in preferred locations

As you know, several states currently use this approach and it should be determined what would work best for RI. One option we believe will build strong community support is providing economic incentives to develop solar on schools roofs, parking canopies, and other municipal buildings. MA has established a program that helps schools save money with solar and RI should be encouraged to do the same. A recent article in the Providence Journal indicated the Dighton/ Rehoboth School District was able to make an estimated $19 million over the term of their solar lease and save an additional $6 million in electricity costs. . The State's proposed $250 million bond to help fund the needed repairs to RI schools can be used as a vehicle to encourage solar development at the same time to help generate more money to facilitate the improvement of education in RI. The Washington DC-based organization, the Solar Foundation ranked Rhode Island as one of the top 3 states with potential for schools to go solar. This is a good way of achieving the Governor's solar development goals and building community support for renewable energy.

3. Provide disincentives to discourage development in areas that need to be protected

There are also several different State approaches for providing disincentives including the MA subtractor formula to discourage greenfield development and NJ that doesn't provide any funding to support renewable energy development in non- preferred areas. RI must assess which approach will work best.

4. Develop guidance and training for municipal officials

We do not support the development of a State model ordinance for renewable energy siting. A model ordinance prepared by renewable energy developers, lobbyists and renewable energy advocates will not have any credibility with municipal officials. Instead we support guidance similar to what was prepared by Scenic Hudson. This guidance does a good job of explaining why renewable energy is important and how to accelerate development while simultaneously avoiding conflicts and identifying community priorities early in the process. This guidance can be supplemented with a more detailed and annotated siting standards that can be used by municipalities to develop a more comprehensive renewable energy siting ordinance. A training program is needed to explain to local officials the applicable options for creating an ordinance. This training would be best for it to be delivered by a non-governmental entity.

5. Use developed and disturbed locations before greenfield development

We believe RI's policy should be to use developed and disturbed locations before encouraging renewable energy development on greenfields. In the event developed and disturbed locations do not provide an adequate land area to meet RI's renewable energy needs then it must be determined where large utility scale development will have the least impacts to natural, cultural resources, and community character.

6. No net forest loss

Since the *Greenhouse Gas Emissions Reduction Plan* determined that RI can't lose forest and be able to achieve the ambitious GHG reduction targets established in the 2014 Resilient RI Act, there needs to be a greater emphasis on preventing the further fragmentation of RI forests. Millions of dollars are being spent to build renewable energy facilities, which is good, but there should be a commensurate effort to maintain RI forests that currently attenuate 30% of the RI annual GHG emissions. We recommended a stakeholder group be established, as part of the Forest Conservation Act, to assess all the options for preserving RI forests from subsequent fragmentation and loss. Some options to consider include but are not limited to providing more funds for buying the development rights to forests and establishing disincentives for all development to limit future forest loss.

By implementing these reforms, Rhode Island can achieve our greenhouse gas reduction and renewable energy development goals while avoiding damage to our natural resources and community character. This is the kind of achievable "Win/Win" scenario for our environment and quality of place that must become a state priority.