



Long Island Solar Roadmap

MARCH 2019

Signs of Spring

'Phenology' is the study of seasonal natural phenomena, the subtle or not-so-subtle shifts that mark the passage of time and cycles of life in our natural landscapes. Aldo Leopold famously recorded the birds, plants, and blooms that heralded the onset of Spring and transitions to other seasons. Trees begin to develop buds that burst into a flourish of tiny green leaves. Purple crocuses dot the landscape, and spring peepers chirp their excitement. At the Nature Conservancy and Defenders of Wildlife, the arrival of graduate interns and seasonal staff marks the beginning of warmer weather and a flurry of work. This is also a great time for the first of our monthly updates on progress since the January Consortium meeting and to introduce you to our new collaborators.

Spatial Analysis

Thanks to the hard work of Karen Leu and the Spatial Analysis Working Group, the first step for suitable parcel selection has been completed for towns in Suffolk County. This analysis step removes parcels from consideration based on unsuitable property types, protection status, presence of environmentally and ecologically-sensitive areas, and parcel size. These criteria have significantly narrowed the number of areas where we will focus to identify low-impact, low-conflict sites for mid- to large-scale solar.

Next steps will be to apply this analysis to Nassau County and to incorporate additional suitability factors (hydrology, flood zones, additional protected areas, etc.) to the full study area.

One of the biggest challenges to any spatial analysis is lack of data or inaccessibility to existing datasets. Special thanks go to Julie Hargrave of the Pine Barrens Commission, Laretta Fischer of Suffolk County Dept of Planning and Environment, and Erick Bautista of Nassau County who provided GIS data for the spatial analysis.

A big thanks also to our advisors, Dave Genaway from Town of Huntington and Ross Baldwin from Town of Southampton, for piloting the spatial analysis study, developing the methodology that the work plan was largely based on, and creating parking lot datasets for their towns, which is of vital importance to the parking lot analysis.

Economic Research

In late January, we began collaborating with Dr. Latika Gupta, an energy economist and Assistant Professor at Michigan Technological University, to address the economic research questions. She is leading a team of nine graduate students

to perform research and analysis to quantify the direct costs of developing a range of solar installations types (parking lots, rooftops, and previously-disturbed sites, etc.) and characterize the opportunities and barriers for solar installations in commercial, municipal, non-profit, and other settings. This team completed draft reports in late February and is working on revisions based on feedback from the Leadership Team.

In addition, the Leadership Team has been working to gather the appropriate data, reports, and other information for characterizing the *indirect* costs and benefits of mid-to-large scale solar installations and to prepare a full outline for the economic research report. In April, the Economic Research Working Group will begin regular meetings to tackle this portion of the economic research.

Social Science Research

The survey instrument is complete and with PSEG for final formatting and implementation. The Leadership Team has asked for a Spanish language version to increase the survey's reach to potential respondents. The goal is to distribute the survey to 50,000 randomly selected PSEG customer emails and receive their responses by the end of March or in early April. Once the survey is closed, all de-identified response data will be passed to Dr. Schelly for analysis.

Thanks to everyone who provided feedback on the survey and helped test early drafts, and a special thanks to our partners at PSEG-Long Island who have been instrumental in making sure the survey reaches electric utility customers across the region.

Meet the Newest Team Member

August Schultz joins us from the University of Wisconsin-Madison, where he is completing a Master's in Environmental Observation and Informatics. August's interests span remote sensing, landscape ecology, environmental chemistry, and environmental policy. "As someone interested in integrating such diverse fields into my postgraduate work, I'm excited to be working on a project concerned with sustainable energy development," says August. "The Solar Roadmap's focus on low-impact solar where the most progress can be made as easily as possible is a rewarding problem space for a new geospatial professional." August will be working with us as a full-time intern on the spatial analysis and as part of his master's program's final capstone project.



Reminders

The next full consortium meeting will be **Wednesday, September 11**. Please save the date on your calendars.

Working Groups will continue to meet through September. If you would like to join a Working Group, please reach out to Jessica.

If you have news, information, or project spotlights that you would like to share with this group, please send them along for inclusion in our next monthly update.

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