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TOWN OF HEMPSTEAD

Opportunities for Low-Impact Solar Siting

The Town of Hempstead has the potential to host as much as 1,769 MW of solar capacity, enough to power more than 443,300 New York homes. The town is home to 8.4 square miles of low-impact sites, consisting of parking lots, rooftops, and areas previously altered or impacted by human activities (Table 1).¹ Hempstead has the second highest potential for low-impact solar in Nassau County, with 36% of the countywide total. Most of the potential in Hempstead is for parking lot installations (37% of the total or 656 MW), with rooftop and ground-mounted installations relatively equally distributed (31% or 539 MW, and 32% or 574 MW, respectively). Of all Nassau County towns, Hempstead has the greatest potential capacity for rooftop and parking lot installations.

Table 1. Low-Impact Siting Potential for Each Solar Installation Type

Solar Type	Low-Impact Area (mi ²)	Potential Installation Capacity (MW)	Portion of Total Capacity
Ground-mounted	2.6	574	32%
Parking lot	3.4	656	37%
Rooftop	2.4	539	31%
Total	8.4	1,769	100%

¹ These results are meant to illustrate low-impact siting potential only. Technical, policy, economic, and social constraints may limit the feasibility of solar development on these sites. Therefore, these results likely overestimate the total area available for low-impact solar siting. Capacity of solar installations is reported in MW of direct current (DC), and all reports of estimated capacity have been rounded to the nearest whole number, except when the estimate is less than one. Due to rounding, numbers presented in tables and figures may not add up to the totals listed.

Land-Use Characteristics of Low-Impact Sites

The Long Island Solar Roadmap overlaid land-use data² on low-impact sites to examine the amount of potential installation capacity within each land-use class.³ In the Town of Hempstead, lands used for community services and public services offer the greatest potential for low-impact solar development (638 MW or 36% of the total), followed by commercial and industrial lands (574 MW or 32%) and county-described recreational lands, wild and conservation lands, and public parks (427 MW or 24%) (Figure 1, Table 2). Parking lots represent most of the opportunity on lands used for community services and public services and commercial and industrial lands (561 MW), while ground-mounted installations on areas that have been previously impacted by human activities are most common on open-space lands (333 MW).



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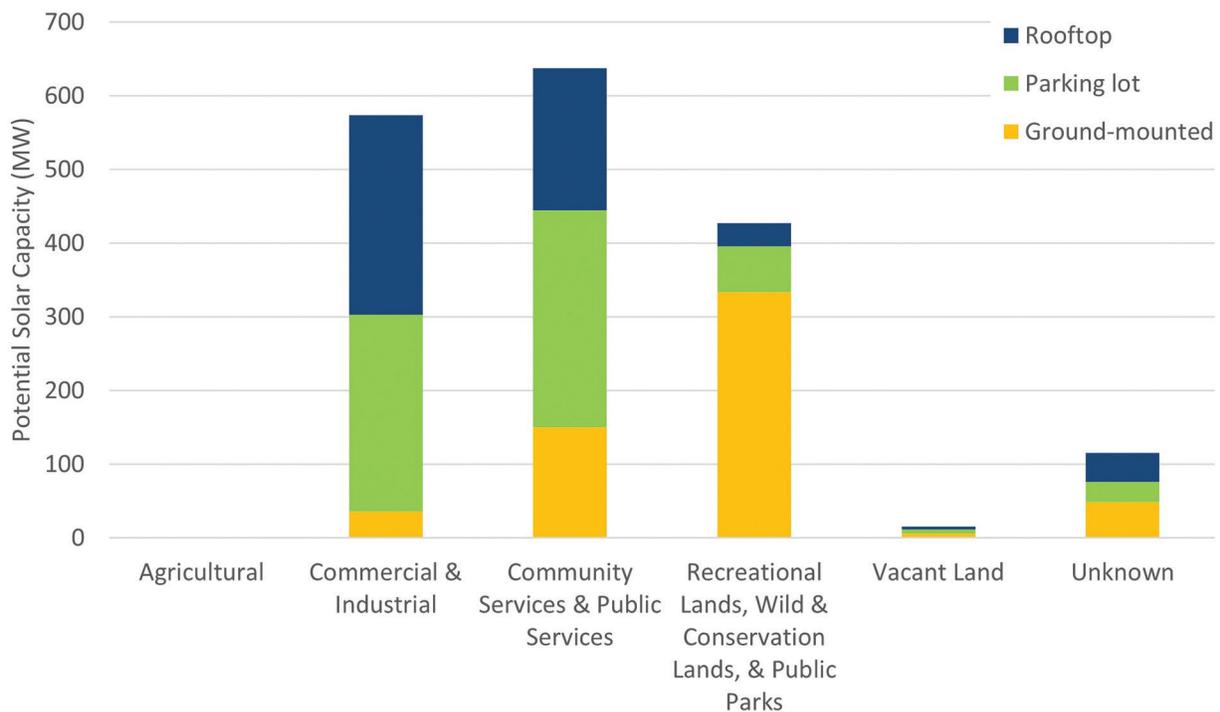


Figure 1. Potential installation capacity of low-impact ground-mounted, parking lot, and rooftop solar across land-use types in the Town of Hempstead. Parcels in the “Unknown” land-use category did not have an assigned land-use type.

² Nassau County parcel data (2018) from the Nassau County Department of Information Technology included land-use classifications. Each parcel is assigned one land-use designation, regardless of mixed or multiple uses.

³ The Roadmap condensed county-defined land-use designations into broader categories to make it easier to interpret results. Residential parcels were removed from the Roadmap analysis and thus excluded from this land-use overlay. For more information on how land-use categories were condensed, and for full spatial analysis methodology, visit solarroadmap.org/research.

Table 2. Distribution of Low-Impact Sites Across Land-Use Types

Land Use	Rooftop Capacity (MW)	Parking Lot Capacity (MW)	Ground-Mounted Capacity (MW)	Total Capacity (MW)	Portion of Total
Agricultural	0	0	0	0	0%
Commercial & Industrial	271	267	36	574	32%
Community Services & Public Services	194	294	150	638	36%
Recreational Lands, Wild & Conservation Lands, & Public Parks	31	63	333	427	24%
Vacant Land	4	5	6	15	1%
Unknown	40	27	48	115	7%

Parcels in the “Unknown” land-use category did not have an assigned land-use type.

Long Island Solar Roadmap

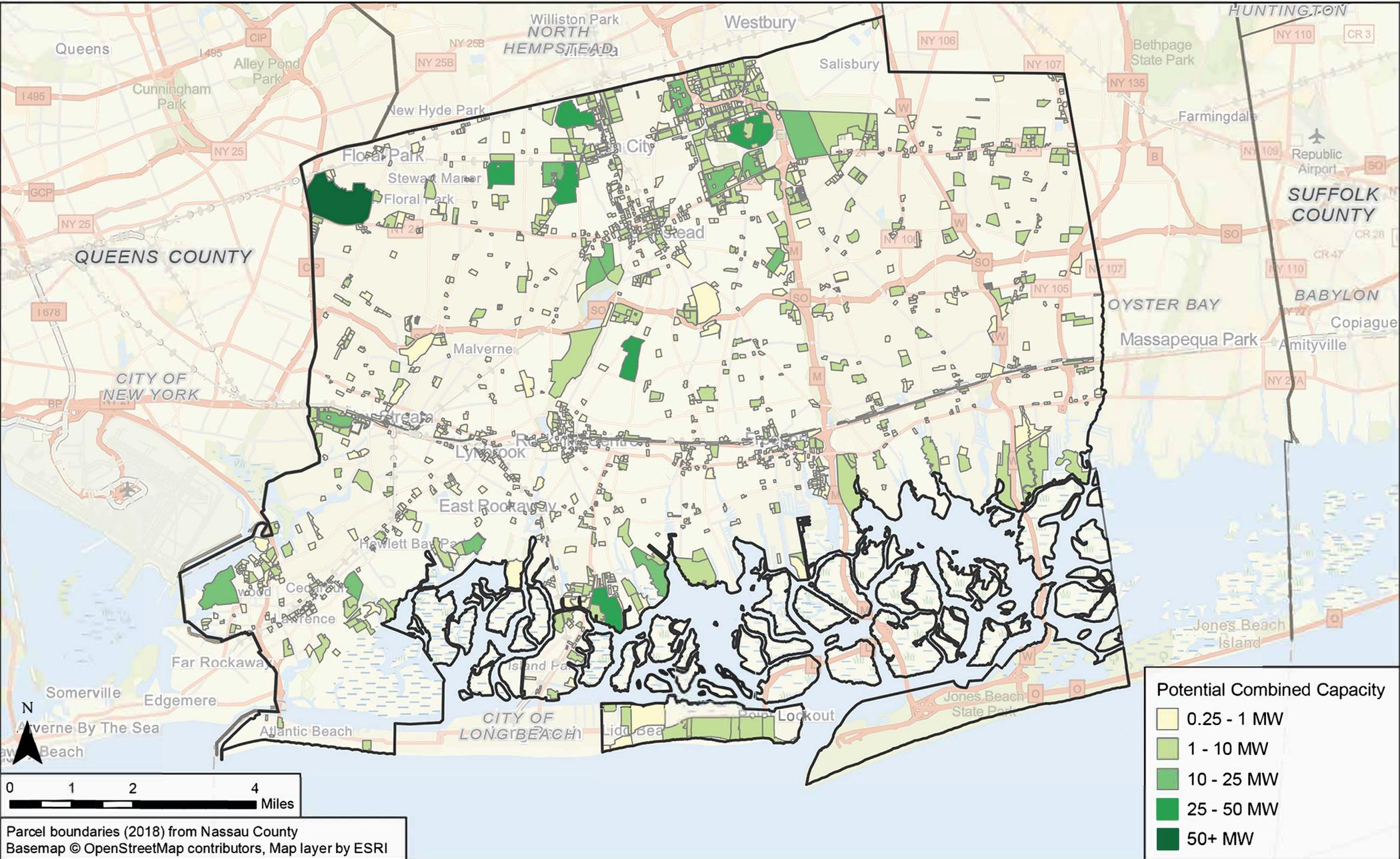


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The Long Island Solar Roadmap, a partnership between The Nature Conservancy and Defenders of Wildlife, aims to advance deployment of mid- to large-scale solar power on Long Island that minimizes environmental impacts, maximizes benefits to the region, and expands access to solar energy, including access by traditionally underserved communities. The Roadmap identified and mapped low-impact areas of opportunity for siting mid- to large-scale solar installations (250 kW DC and larger) on rooftops, parking lots, and other land already impacted by development. The analysis indicates that there is potential on Long Island to host enough solar capacity to power more than 4.8 million homes. The Roadmap includes strategies and actions for accelerating low-impact solar development.

To access the full report and interactive web map, visit solarroadmap.org.

Town of Hempstead: Potential Combined Capacity

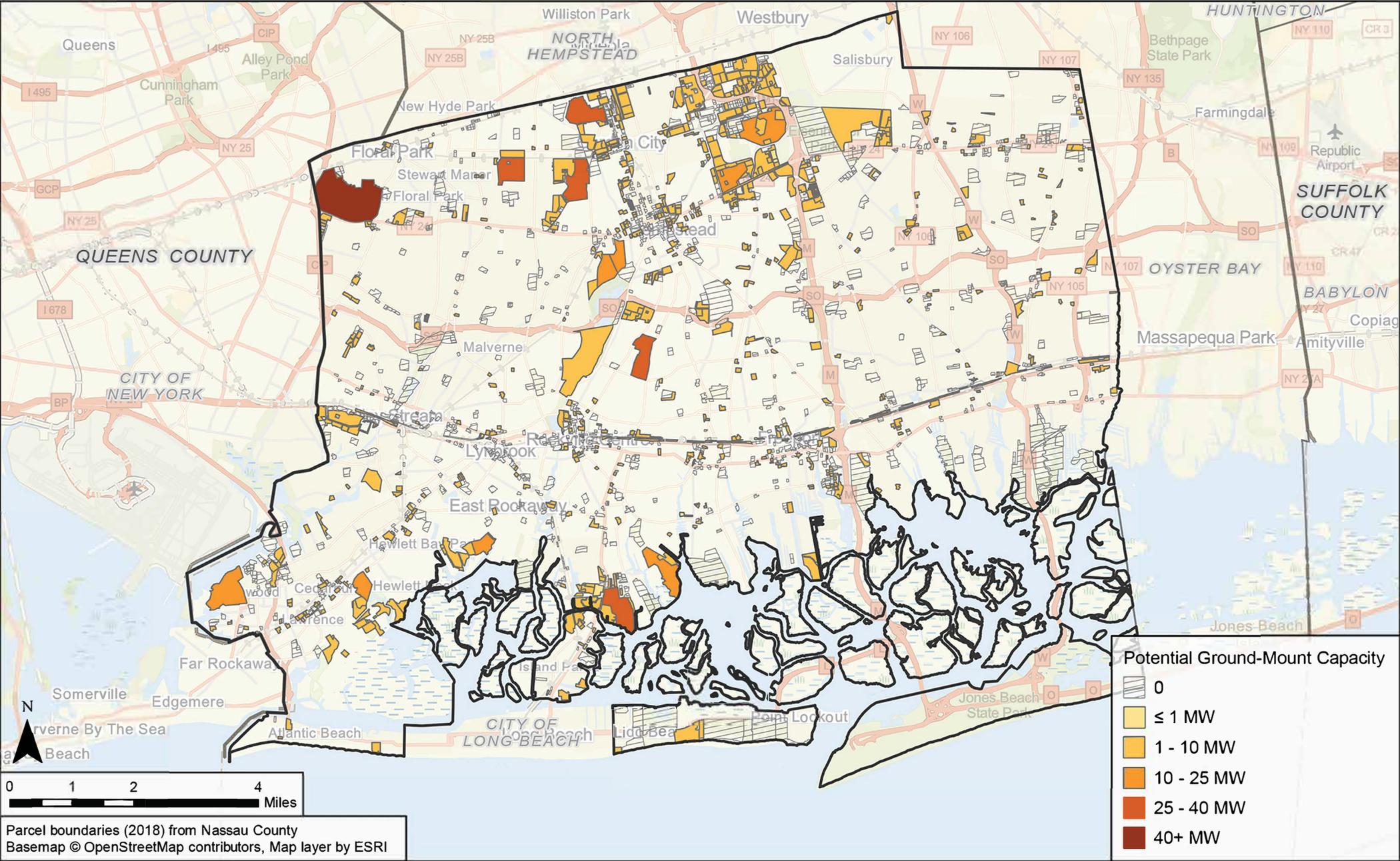


Potential Combined Capacity	
[Lightest Green Box]	0.25 - 1 MW
[Light Green Box]	1 - 10 MW
[Medium Green Box]	10 - 25 MW
[Dark Green Box]	25 - 50 MW
[Darkest Green Box]	50+ MW

This map shows areas of opportunity for low-impact solar development in the Town of Hempstead identified as part of the Long Island Solar Roadmap. Parcels shown here could each host a total solar installation capacity of 250 kW or larger on rooftops, parking lots, and land areas previously impacted by human activities. Parcels are symbolized based on estimated installation capacity as shown in the legend. Some capacity ranges in the legend may not appear in this town. Solar development may not be suitable on all areas within a parcel.

This map illustrates low-impact siting potential only and do not take into account technical or policy constraints. These results are not intended to express where solar development should occur or to replace site-level evaluations. For more information about the Long Island Solar Roadmap, visit solarroadmap.org.

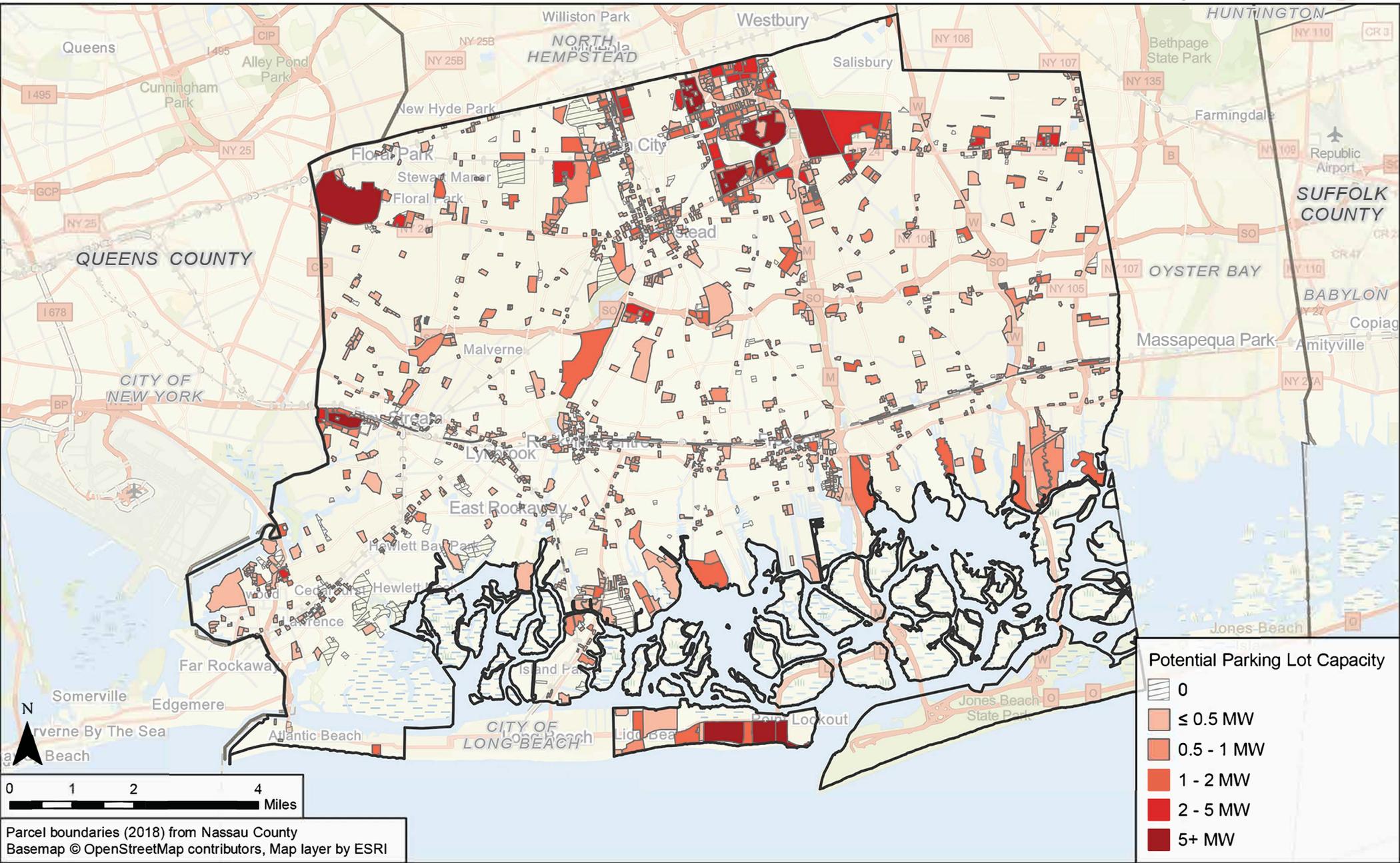
Town of Hempstead: Potential Ground-Mount Capacity



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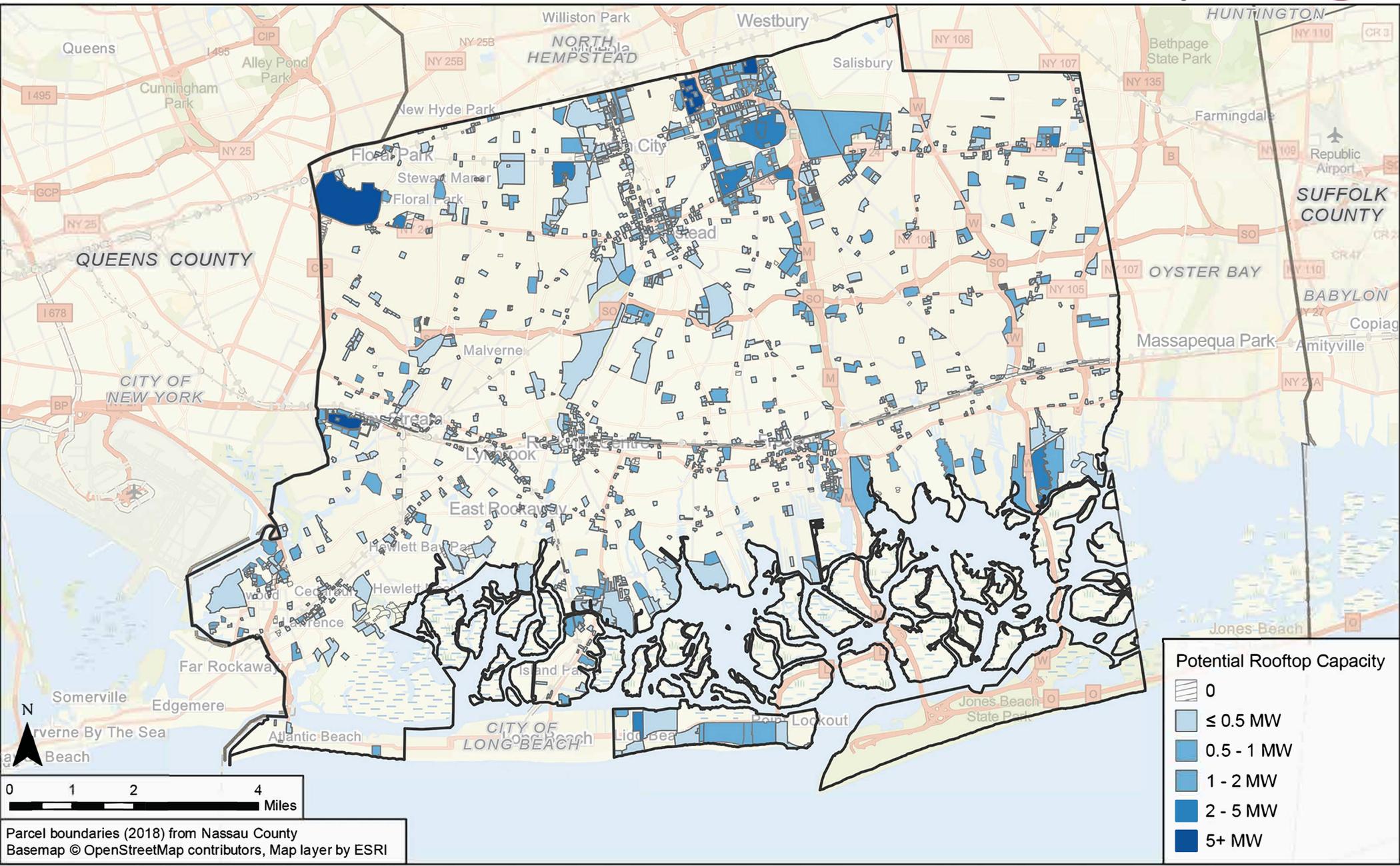
Town of Hempstead: Potential Parking Lot Capacity



This map shows areas of opportunity for low-impact solar development in the Town of Hempstead identified as part of the Long Island Solar Roadmap. Parcels shown here could each host a total solar installation capacity of 250 kW or larger on rooftops, parking lots, and land areas previously impacted by human activities. Parcels are symbolized based on estimated installation capacity as shown in the legend. Some capacity ranges in the legend may not appear in this town. Solar development may not be suitable on all areas within a parcel.

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Town of Hempstead: Potential Rooftop Capacity



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