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TOWN OF NORTH HEMPSTEAD

Opportunities for Low-Impact Solar Siting

The Town of North Hempstead has the potential to host as much as 1,006 MW of solar capacity, enough to power more than 252,100 New York homes. The town is home to 4.7 square miles of low-impact sites, consisting of parking lots, rooftops, and areas previously altered or impacted by human activities (Table 1).¹ Most of the potential in the Town of North Hempstead is for ground-mounted installations (54% of the town total or 540 MW), with rooftop and parking lot installations relatively evenly distributed (23% or 233 MW each).

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	2.4	540	54%
Parking lot	1.2	233	23%
Rooftop	1.1	233	23%
Total	4.7	1,006	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 North Hempstead, county-described recreational lands, wild and conservation lands, and public parks offer the greatest potential for low-impact solar development (365 MW or 36% of the total), followed by commercial and industrial lands (299 MW or 30%) and lands used for community services and public services (257 MW or 26%) (Figure 1, Table 2). Most of the available potential on recreational lands, wild and conservation lands, and public parks is for ground-mounted installations on areas that have been previously impacted by human activities (324 MW); rooftops and parking lots represent more of the opportunities on commercial and industrial lands (136 MW on rooftops and 133 MW on parking lots).

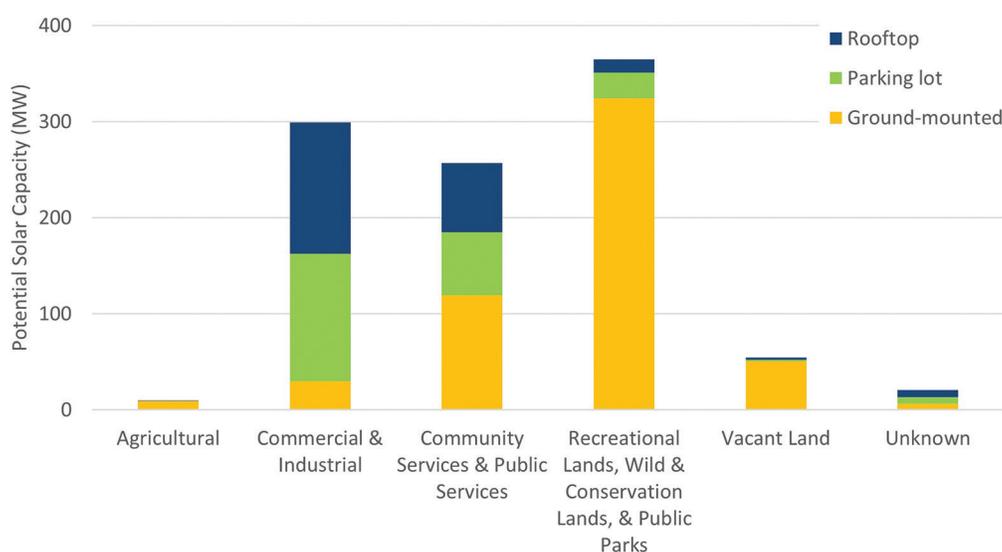


Figure 1. Potential installation capacity of low-impact ground-mounted, parking lot, and rooftop solar across land-use types in the Town of North Hempstead. Parcels in the “Unknown” land-use category did not have an assigned land-use type.

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	9	9	1%
Commercial & Industrial	136	133	30	299	30%
Community Services & Public Services	72	66	119	257	26%
Recreational Lands, Wild & Conservation Lands, & Public Parks	14	27	324	365	36%
Vacant Land	3	1	51	55	5%
Unknown	7	7	7	21	2%

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

² Nassau County parcels 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.



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Zoning of Low-Impact Sites

The Long Island Solar Roadmap overlaid zoning district boundaries provided by the Town of North Hempstead on maps of low-impact sites to estimate the potential low-impact areas available within each zone. Note that zoning categories are different from land-use categories. Zoning data are available for about 35% of low-impact sites in the Town of North Hempstead. These sites are located in one of three district types: residential districts, land zoned for commercial and industrial use, and other districts. These results are provided for reference only and do not exclude locations where solar development might be restricted by land-use policies.

Residential Districts

About 12% (124 MW) of the combined potential installation capacity in North Hempstead is located in residential districts (Table 3), even though residential parcels (as defined by land-use categories) were removed from the mapping analysis. Some examples of non-residential properties located within residential districts include golf courses, multifamily rental complexes, schools, and community services. These results suggest that having solar-friendly land-use policies that address mid- to large-scale installations for residential zoning districts could help unlock significant low-impact siting potential in the Town of North Hempstead.

Land Zoned for Commercial and Industrial Use

A combined 16% of potential low-impact sites are located on land zoned for commercial and industrial uses, areas where solar development is more likely to be allowed by local land-use policies.

Table 3. Potential Low-Impact Solar Installation Capacity in Each Zoning District

Zoning District	Installation Capacity (MW)	Portion of Total*
Residential Districts	124	12%
Industrial Districts	105	10%
Business Districts and Service Commercial Districts	62	6%
Residential Open Space District	48	5%
Hospital District	12	1%
Parking	8	< 1%
Open Space Recreation	2	< 1%
Transportation	1	< 1%
Community Facility	0	0%
Other	0	0%
<i>Zoning data unavailable</i>	644	64%

* Based on a total potential capacity of 1,006 MW for the Town of North Hempstead

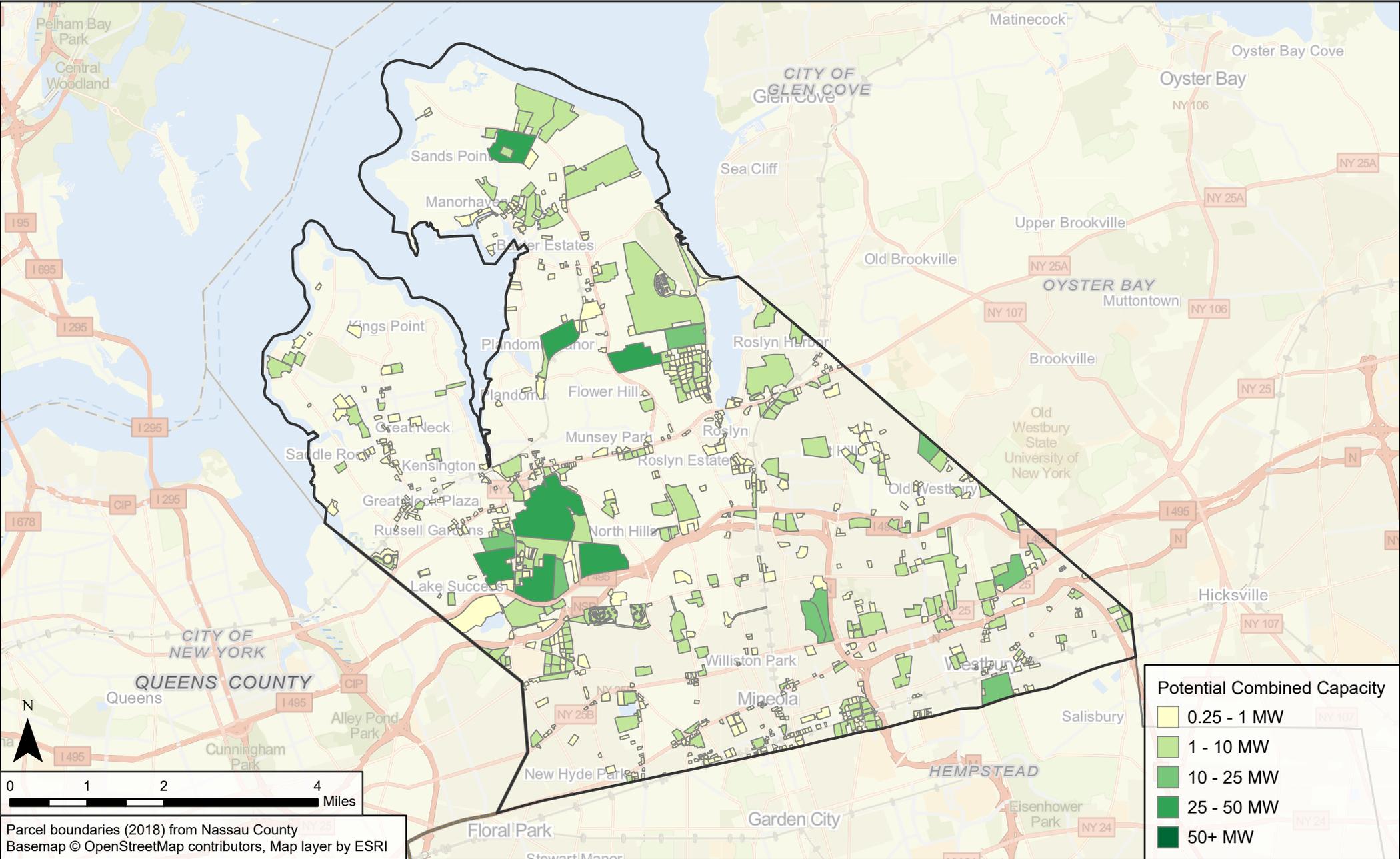
Long Island Solar Roadmap

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.



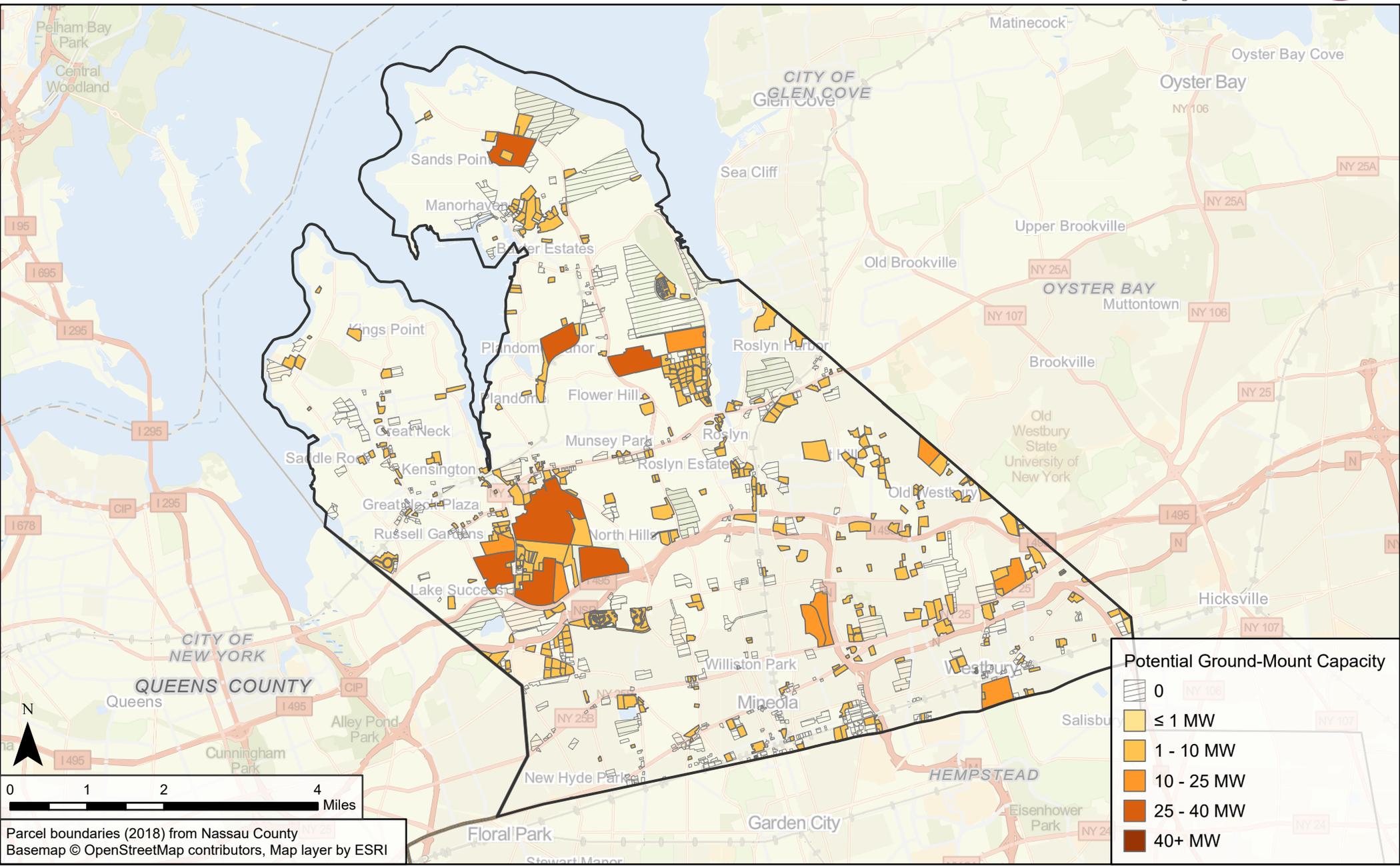
Town of North Hempstead: Potential Combined Capacity



This map shows areas of opportunity for low-impact solar development in the Town of North 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 North Hempstead: Potential Ground-Mount Capacity

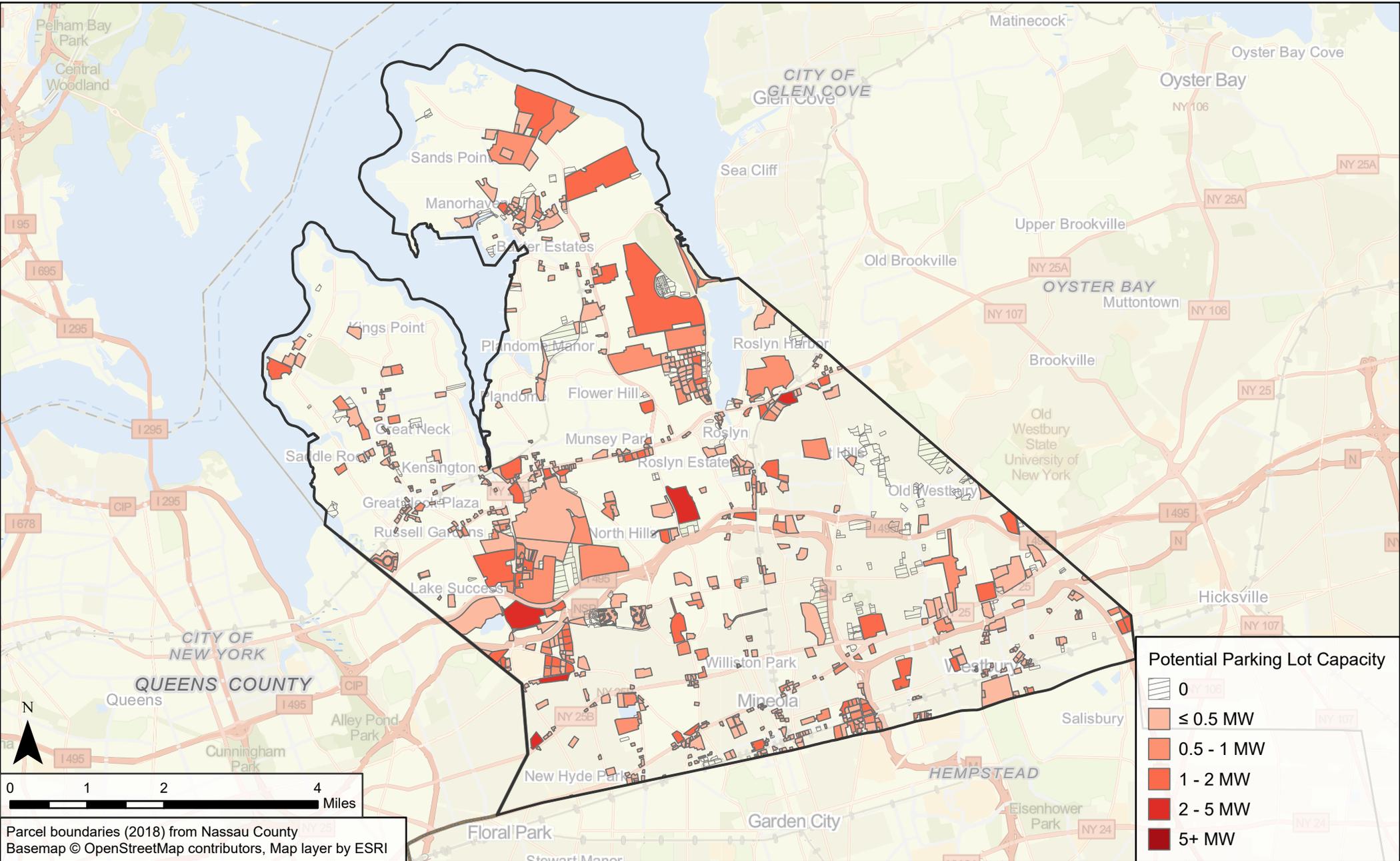


Parcel boundaries (2018) from Nassau County
Basemap © OpenStreetMap contributors, Map layer by ESRI

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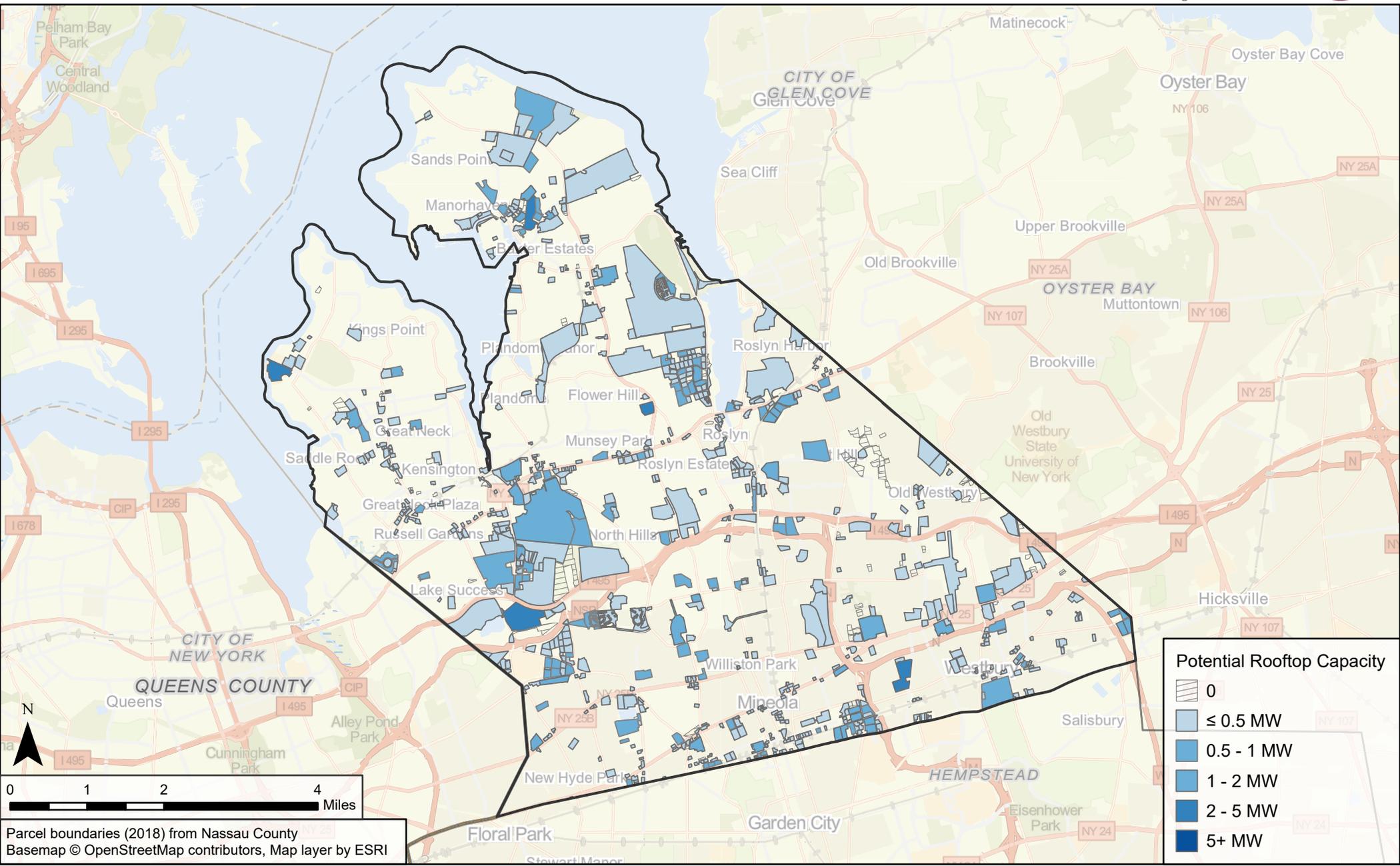
Town of North Hempstead: Potential Parking Lot Capacity



This map shows areas of opportunity for low-impact solar development in the Town of North 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 North Hempstead: Potential Rooftop Capacity

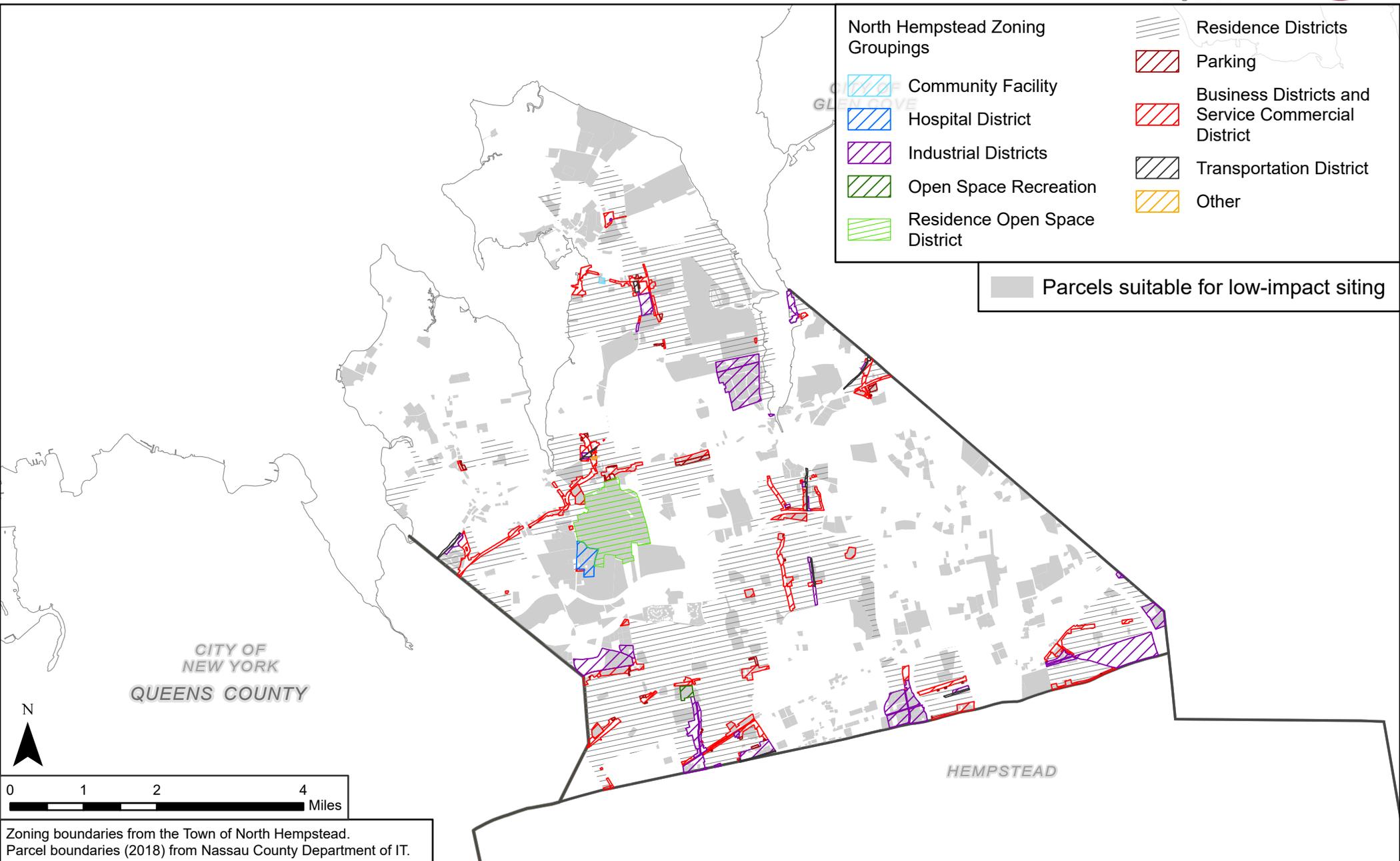


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Town of North Hempstead: Zoning Overlay



This map shows areas of opportunity for low-impact solar development in the Town of North Hempstead identified as part of the Long Island Solar Roadmap. Parcels shown here (in gray) 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. Solar development may not be suitable on all areas within a parcel. Overlaid on the parcels are generalized zoning district boundaries for the town.

This map illustrates where low-impact siting potential is in relation to the town's zoning boundaries. These results are provided for reference only and do not represent where solar development may be restricted by land use policies. For more information about the Long Island Solar Roadmap, visit solarroadmap.org.