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CITY OF LONG BEACH

Opportunities for Low-Impact Solar Siting

The City of Long Beach has the potential to host as much as 15 MW of solar capacity, enough to power more than 3,700 New York homes. The city is home to 0.1 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 Long Beach is for rooftop installations (67% or 10 MW).

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	< 0.1	1	6%
Parking lot	< 0.1	4	27%
Rooftop	< 0.1	10	67%
Total	**0.1**	**15**	**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 data[2] on low-impact sites to examine the amount of potential installation capacity within each land-use class.[3] In the City of Long Beach, commercial and industrial lands offer the greatest potential for low-impact solar development (9 MW or 59% of the total), followed by lands used for community services and public services (4 MW or 27%) (Figure 1, Table 2). Potential installations for rooftop arrays are most common on these land-use types (9 MW).

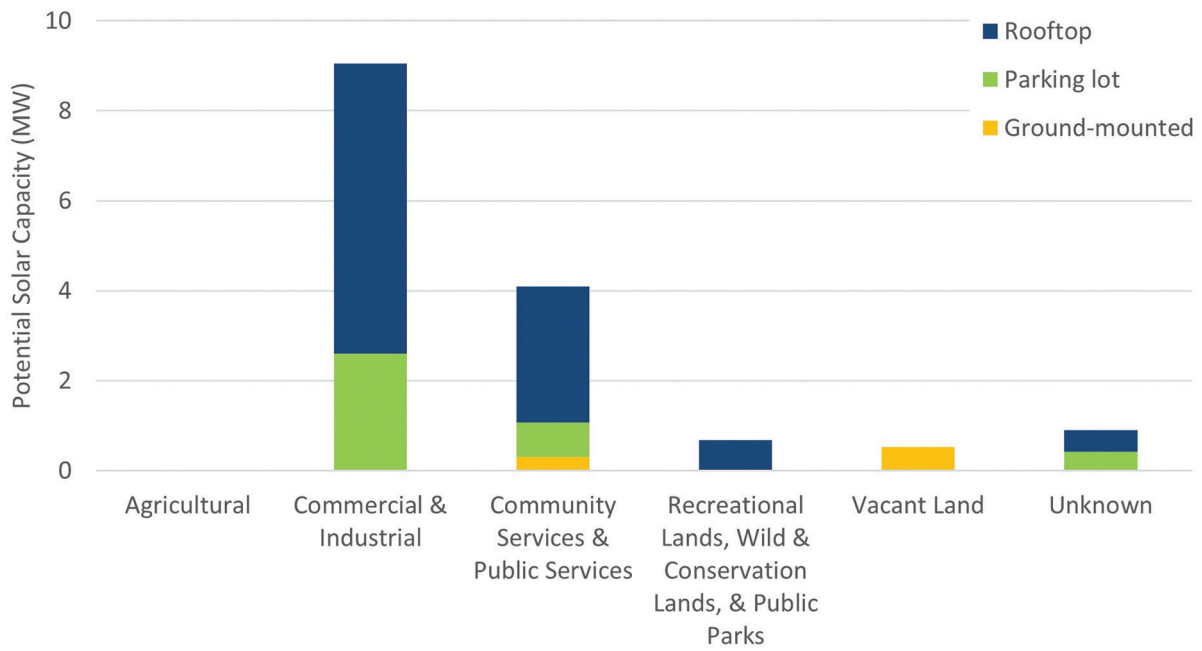

Figure 1. Potential installation capacity of low-impact ground-mounted, parking lot, and rooftop solar across land-use types in the City of Long Beach. Parcels in the "Unknown" land-use category did not have an assigned land-use type.

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	0	**0**	0%
Commercial & Industrial	6	3	0	**9**	59%
Community Services & Public Services	3	1	< 1	**4**	27%
Recreational Lands, Wild & Conservation Lands, & Public Parks	1	0	0	**1**	5%
Vacant Land	0	0	< 1	**< 1**	3%
Unknown	< 1	< 1	0	**1**	6%

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[2] Nassau County parcel data (2018) from the Nassau County Department of Information Technology included land-use classifications. Each parcel has been 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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Long Island Solar Roadmap

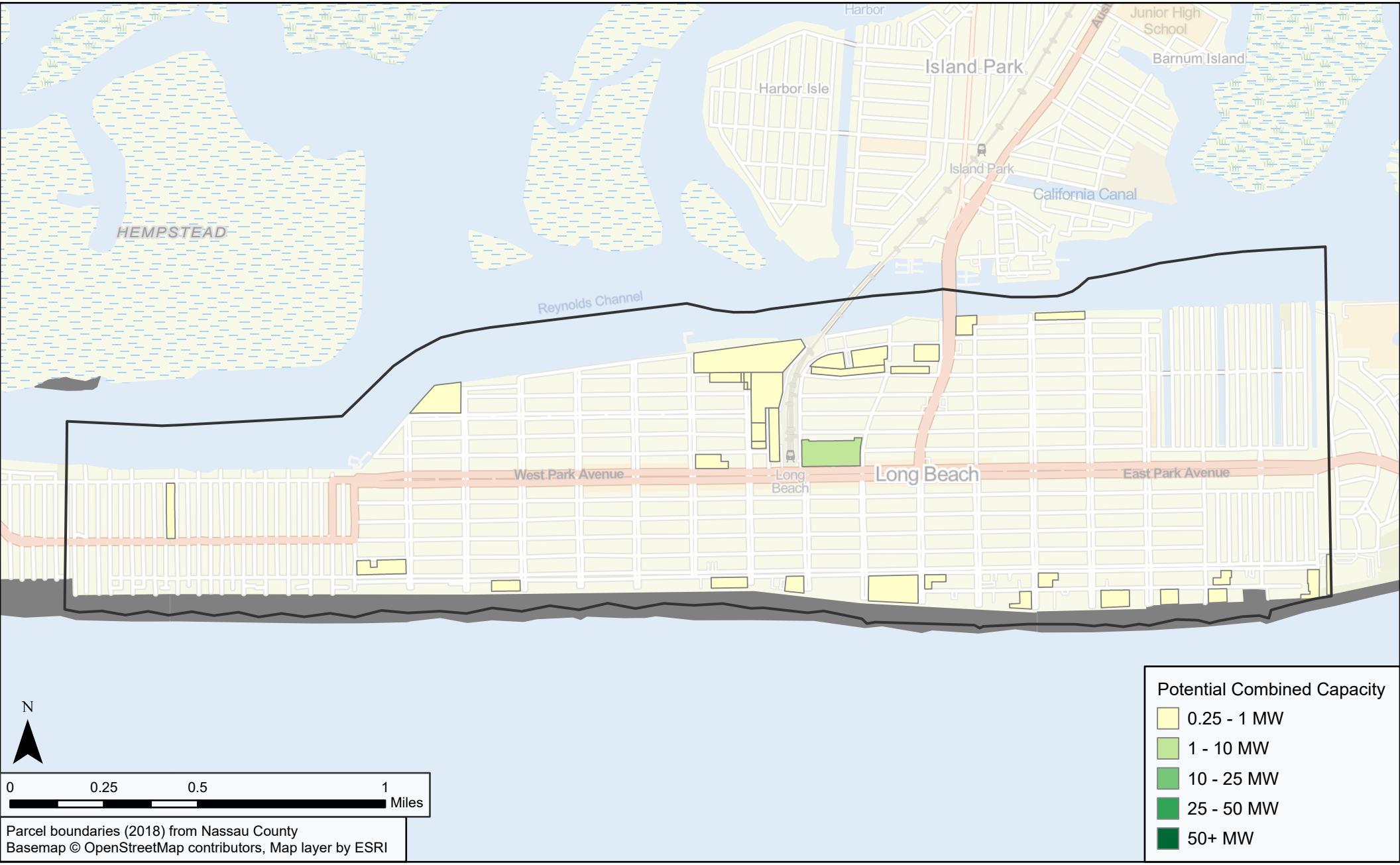
The Long Island Solar Roadmap, a partnership between The Nature Conservancy and Defenders of Wildlife, aims to advance deployment of mid- to large-scale solar power on Long Island that minimizes environmental impacts, maximizes benefits to the region, and expands access to solar energy, including access 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.

The Nature Conservancy
Protecting nature. Preserving life.

Defenders of Wildlife

City of Long Beach: Potential Combined Capacity

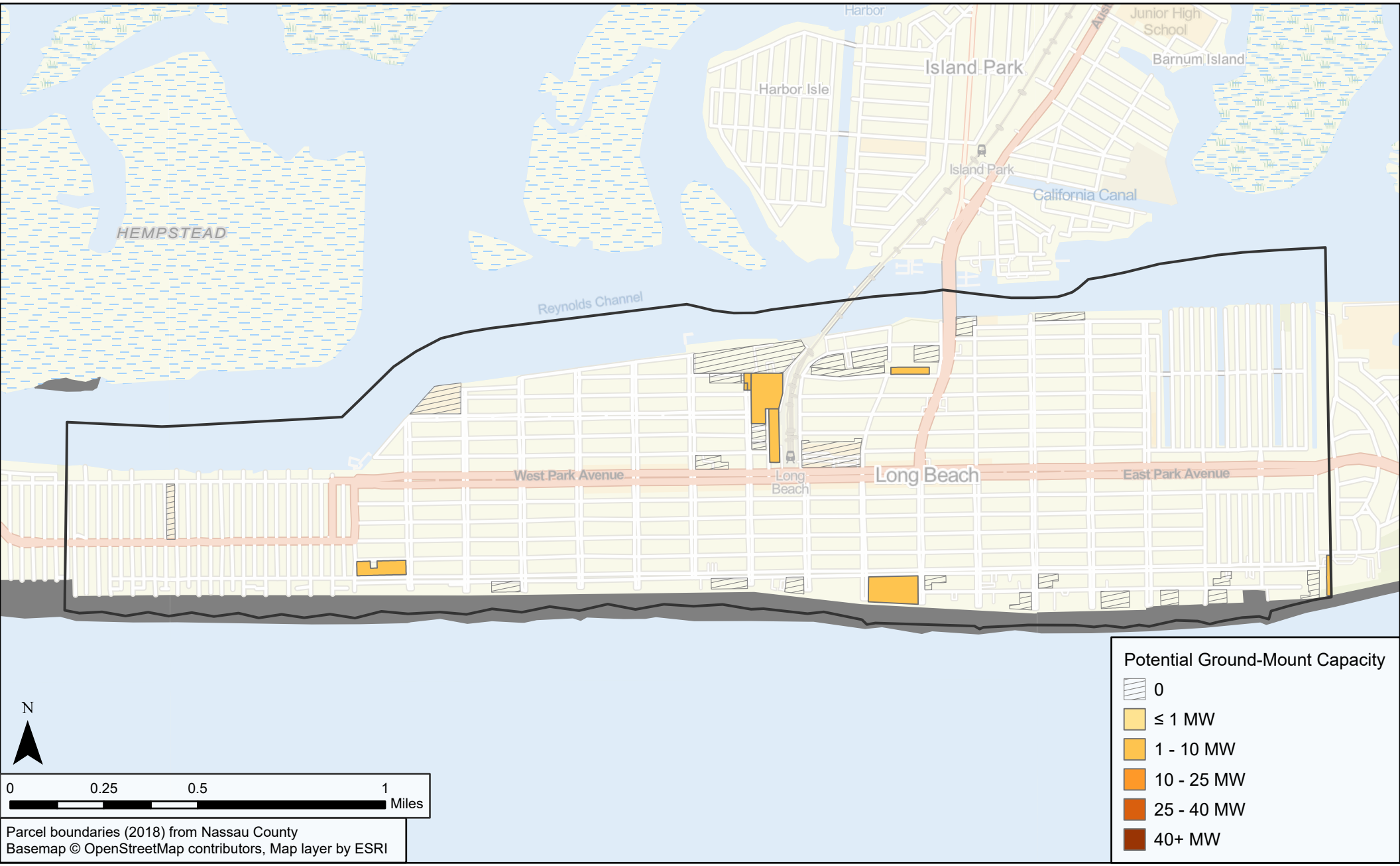


Parcel boundaries (2018) from Nassau County
Basemap © OpenStreetMap contributors, Map layer by ESRI

This map shows areas of opportunity for low-impact solar development in the City of Long Beach 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.

These results are meant to illustrate 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.

City of Long Beach: Potential Ground-Mount Capacity



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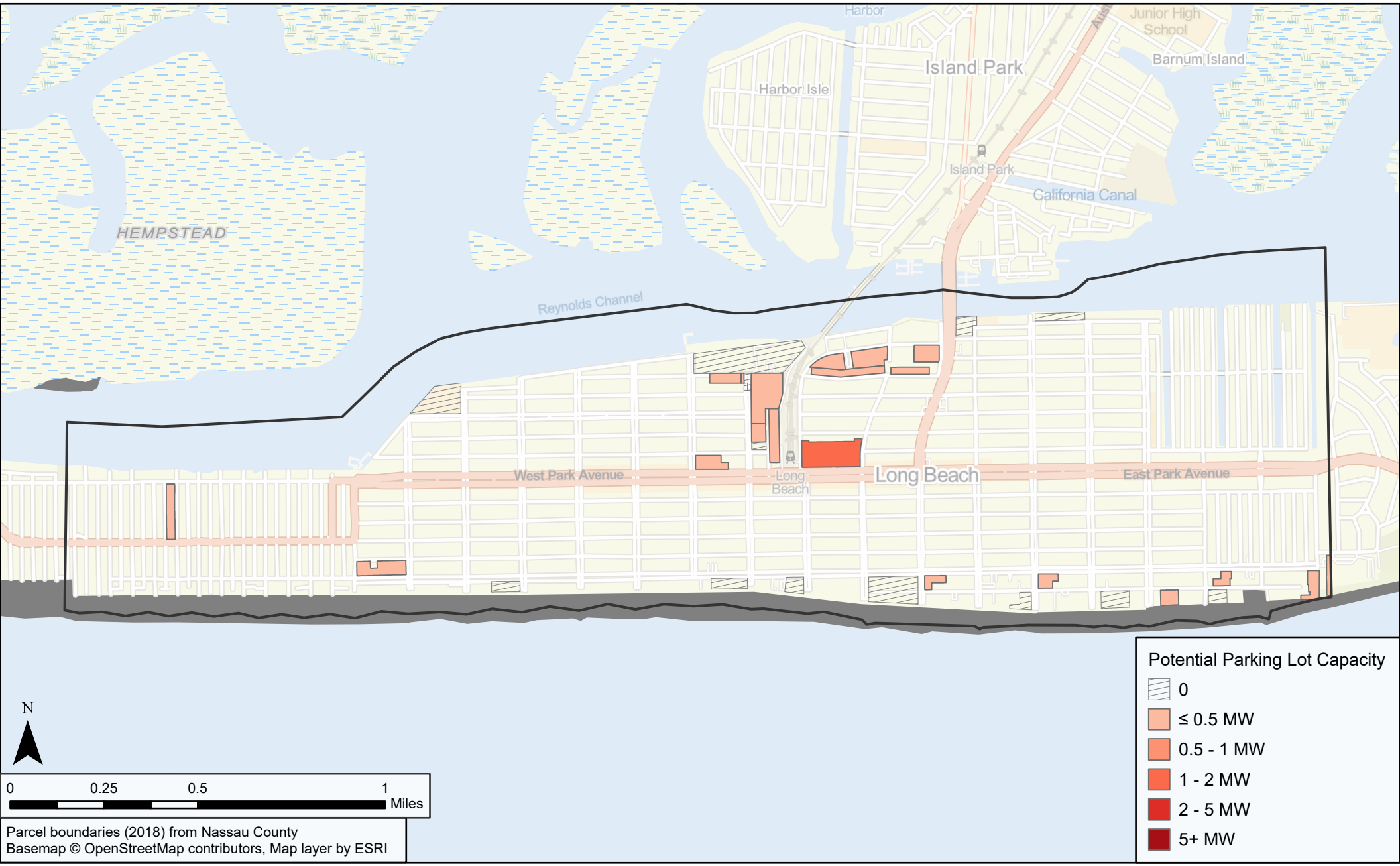
City of Long Beach: Potential Parking Lot Capacity



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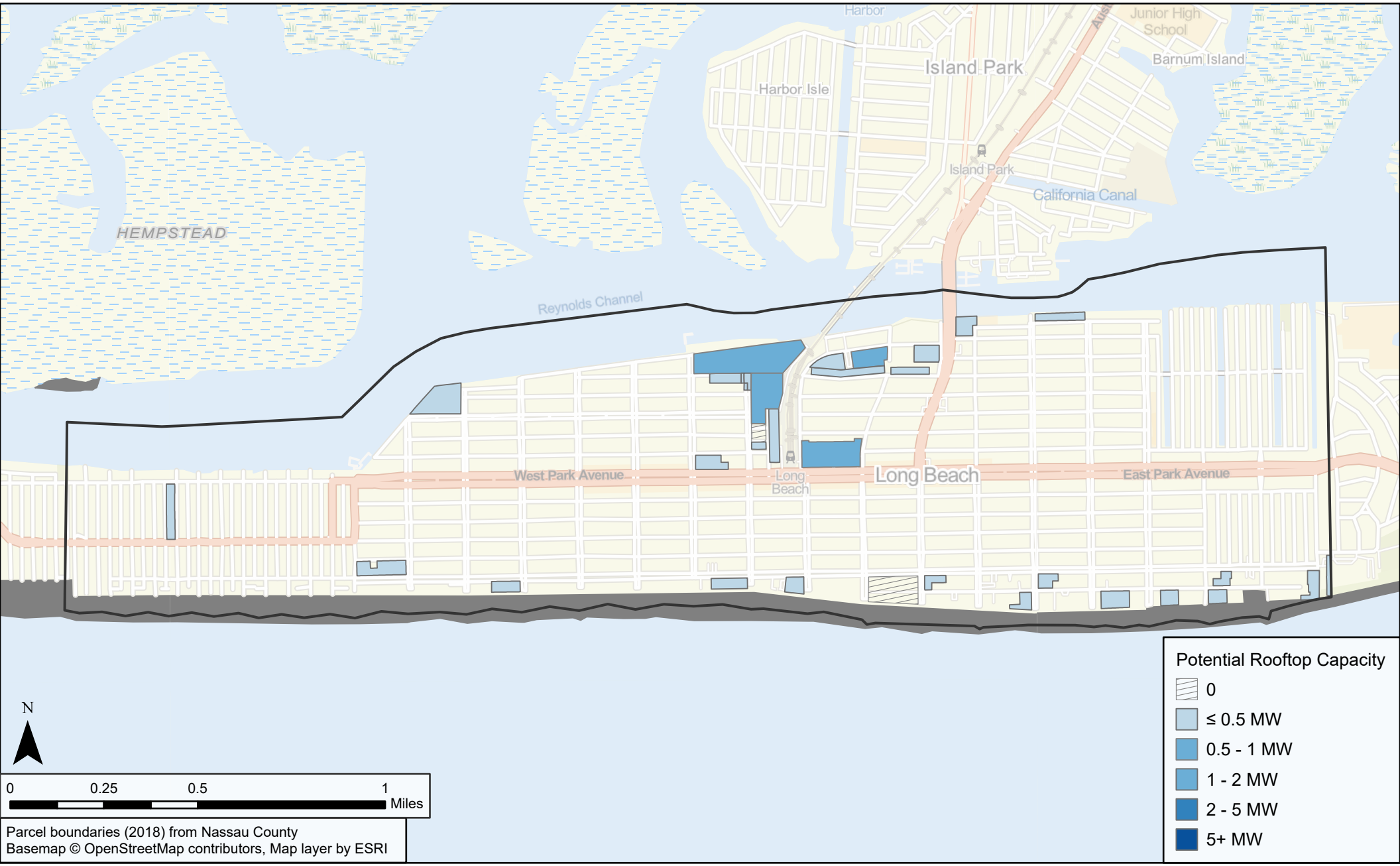
City of Long Beach: Potential Rooftop Capacity



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