

Renewable Energy: Potential Woody Biomass Resource Siting Areas - Waltham

(Forested Areas Excluded)

Dept of Public Service Methodology

This map shows areas of resource potential for renewable energy generation from woody biomass, i.e. locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. This map also considers various other conditions, such as natural resource areas, that may impact the feasibility of renewable energy development. These conditions are referred to as constraints. Areas of prime woody biomass potential exist where the natural conditions make development feasible and no constraints exist.

Known Constraints

Known Constraints signal likely, though not absolute, unsuitability for development based on statewide or local regulations or designated critical resources.

Known Constraints include: Vernal pools, FEMA floodways, river corridors, Federal wilderness areas, Natural Communities and Rare, Threatened and Endangered Species, and wetlands (class 1 and 2) and wetland advisory layers.

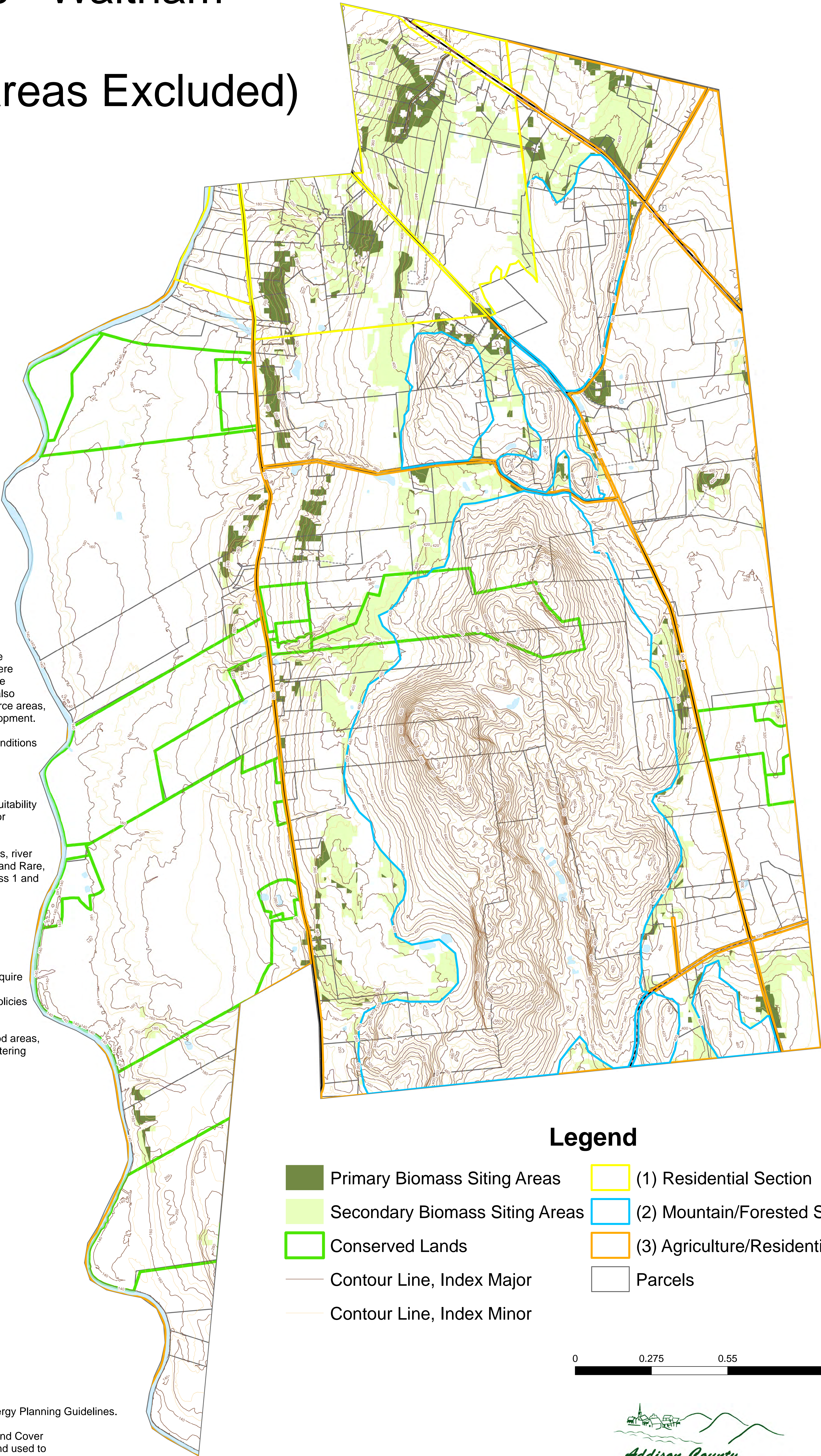
These areas have been removed and are not shown on this map.

Possible Constraints

Possible Constraints signal conditions that would likely require mitigation, and which may prove a site unsuitable after site-specific study, based on statewide or regional/local policies that are currently adopted or in effect.

Possible Constraints include: Agricultural soils, FEMA flood areas, Protected Lands, ACT 250 soil mitigation areas, Deer wintering areas, Highest Priority Forest Blocks, and Hydric soils.

These areas are shown on the map where they coincide with areas of renewable woody biomass potential.



Legend

- | | |
|--|---|
|  Primary Biomass Siting Areas |  (1) Residential Section |
|  Secondary Biomass Siting Areas |  (2) Mountain/Forested Section |
|  Conserved Lands |  (3) Agriculture/Residential Section |
|  Contour Line, Index Major |  Parcels |
|  Contour Line, Index Minor | |



Woody Biomass Potential Analysis under the State Energy Planning Guidelines.

Statewide forest cover types from the 2006 National Land Cover Dataset (NLCD, 2006) were merged into a single file and used to calculate low-grade green tons per acre by VCGI. The forest cover areal extent was used in this analysis.



This map was created as part of a Regional Energy Planning Initiative with funding from the Vermont Public Service Department.

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Renewable Energy: Potential Solar Resource Siting Areas - Waltham



Dept of Public Service Methodology

This map shows areas of resource potential for renewable energy generation from solar, i.e. locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. This map also considers various other conditions, such as natural resource areas, that may impact the feasibility of renewable energy development. These conditions are referred to as constraints. Areas of prime solar potential exist where the natural conditions make development feasible and no constraints exist.

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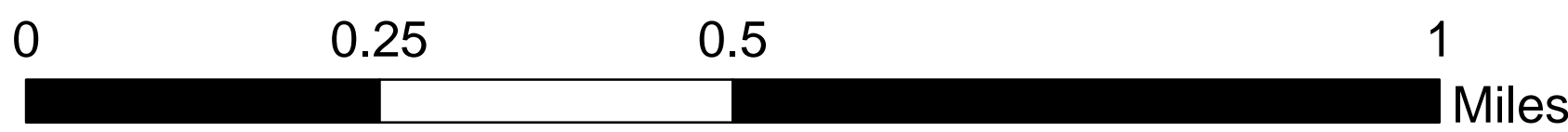
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These areas are shown on the map where they coincide with areas of renewable solar potential identified in the solar analysis.

Legend

- | | | | |
|--|---------------------------------------|--|-------------------------------------|
| | Primary Solar Resource Siting Areas | | (1) Residential Section |
| | Secondary Solar Resource Siting Areas | | (2) Mountain/Forested Section |
| | Conserved Lands | | (3) Agriculture/Residential Section |
| | Parcels | | |
| | Contour Line, Index Major | | |
| | Contour Line, Index Minor | | |

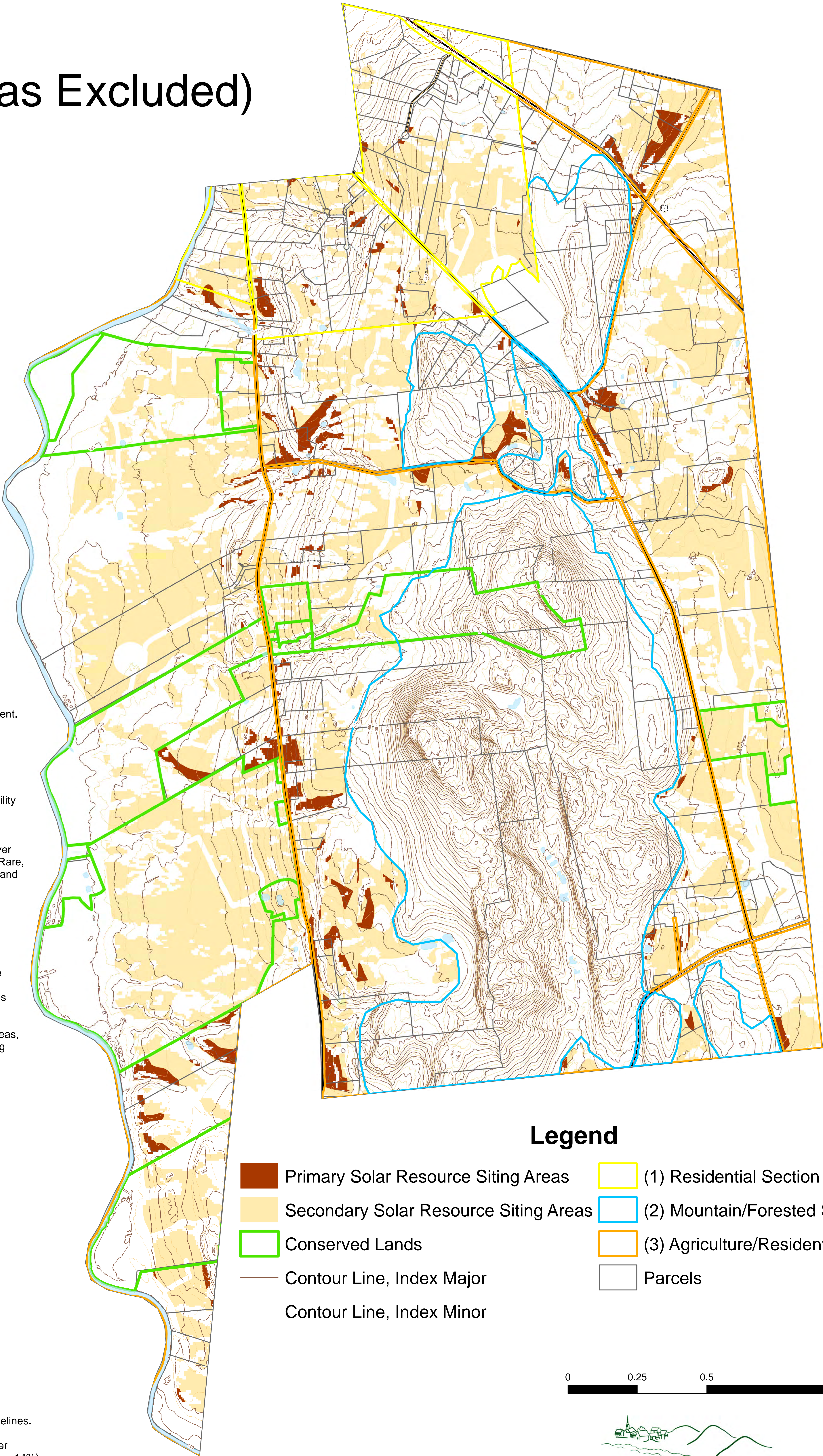


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Renewable Energy: Potential Solar Resource Siting Areas

- Waltham

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Dept of Public Service Methodology

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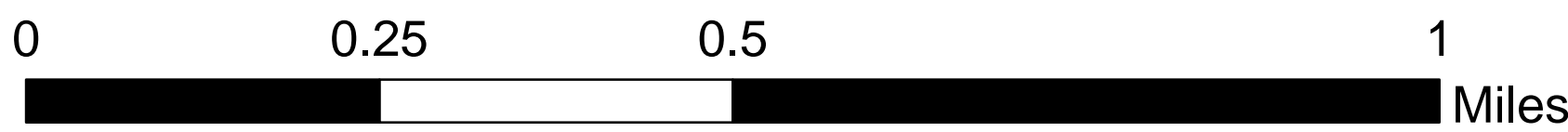
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Solar Potential Analysis under the State Energy Planning Guidelines.

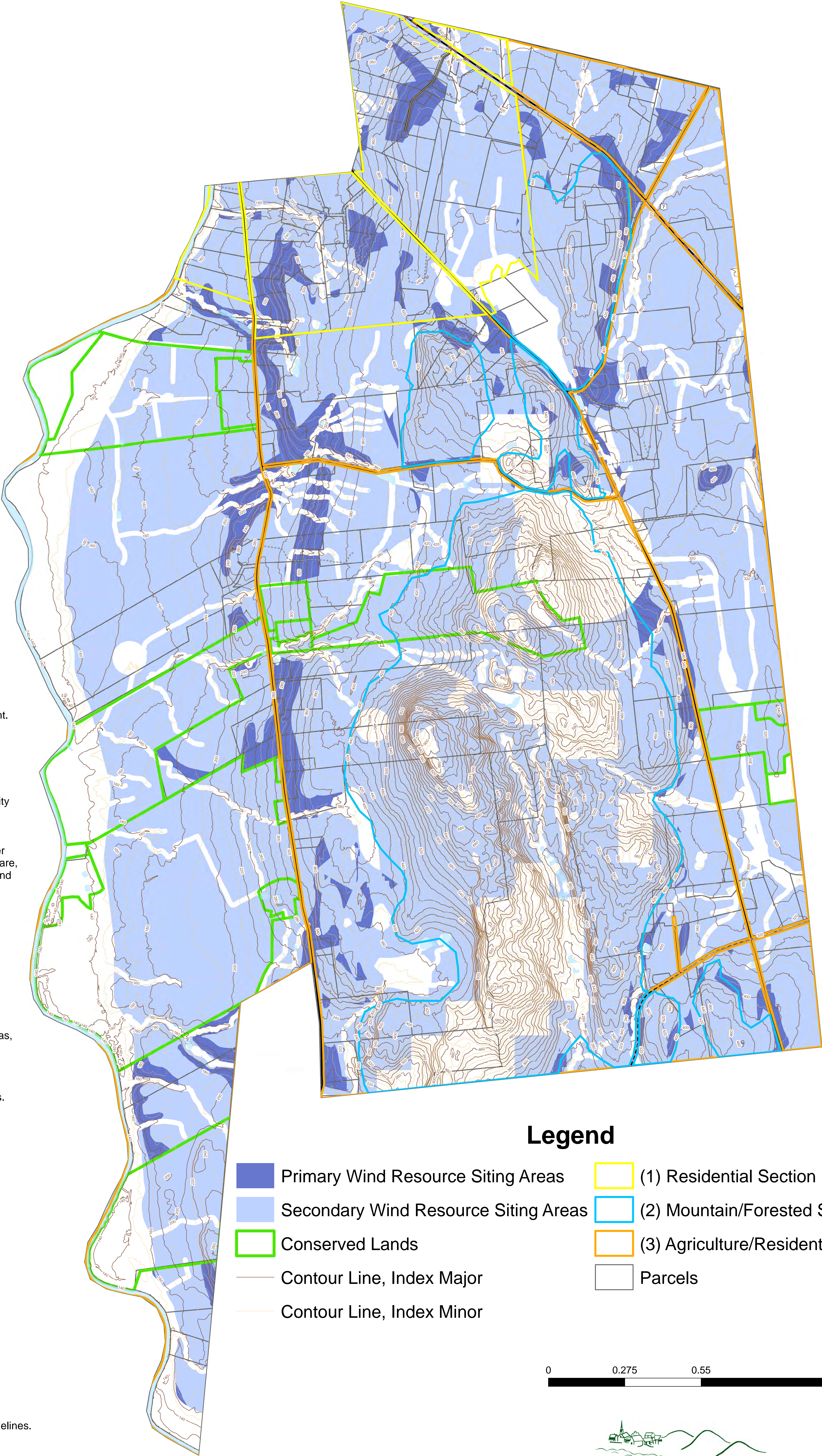
Statewide ground based (30m USGS DEM) solar potential layer created with ESRI solar analyst by VCGI. Filtered by SLOPE (<= 14%), ASPECT (90-270 degrees) and values >= 1,000 kWh/sq meter.



Addison County
REGIONAL PLANNING COMMISSION

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Renewable Energy: Potential Wind Resource Siting Areas - Waltham



Dept of Public Service Methodology

This map shows areas of resource potential for renewable energy generation from wind, i.e. locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. This map also considers various other conditions, such as natural resource areas, that may impact the feasibility of renewable energy development. These conditions are referred to as constraints. Areas of prime wind potential exist where the natural conditions make development feasible and no constraints exist.

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These areas are shown on the map where they coincide with areas of renewable wind potential identified in the wind analysis.

Legend

- | | | | |
|--|--------------------------------------|---|-------------------------------------|
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|  | Secondary Wind Resource Siting Areas |  | (2) Mountain/Forested Section |
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|  | Contour Line, Index Major |  | Parcels |
|  | Contour Line, Index Minor | | |

0 0.275 0.55 1.1 Miles

Wind Potential Analysis under the State Energy Planning Guidelines.

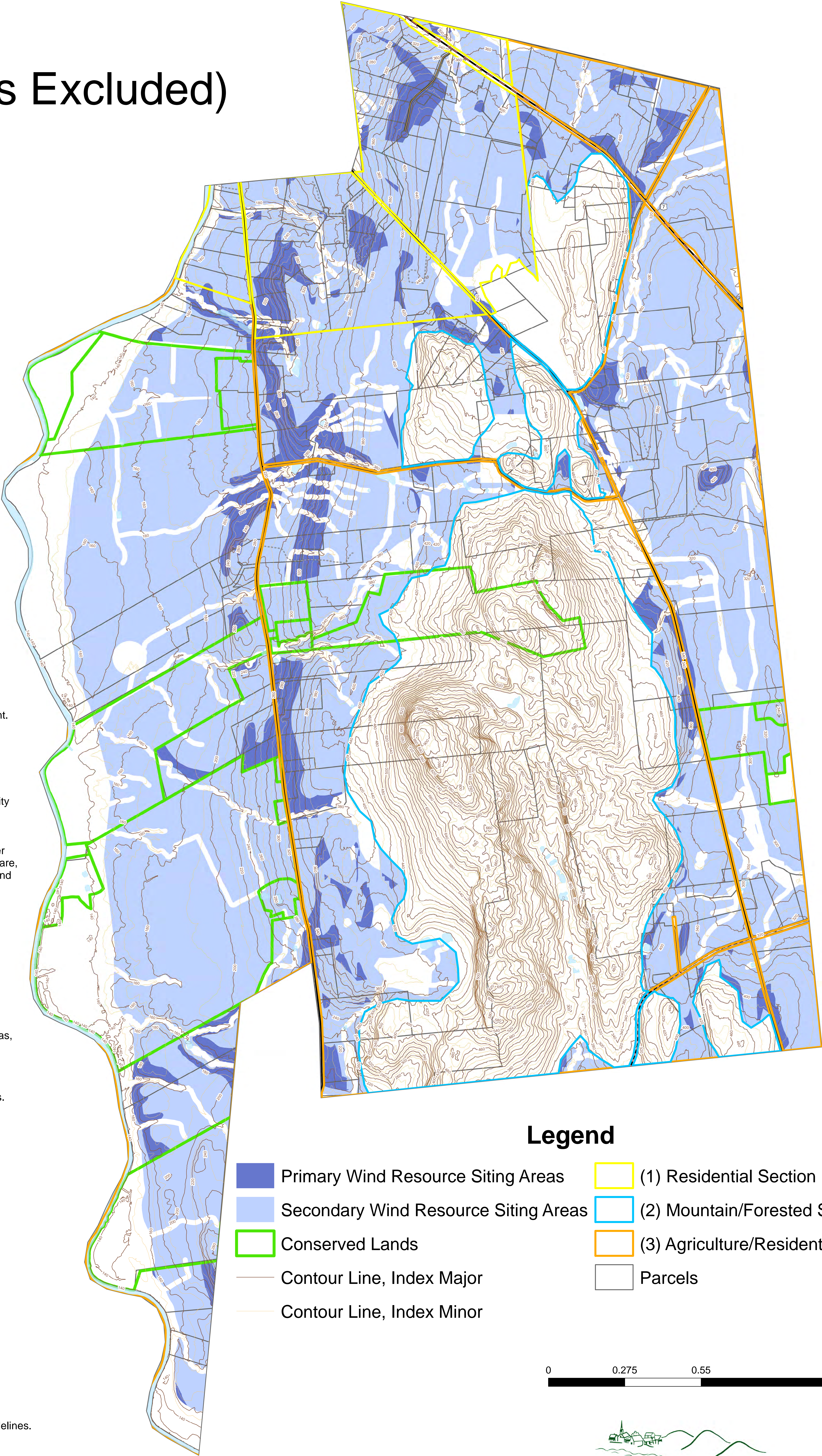
Statewide 30m, 50m, and 70m wind speed layers from Mass.Tech Collaborative were filtered for minimum wind speed, then merged into a single file by VCGI.



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Renewable Energy: Potential Wind Resource Siting Areas - Waltham

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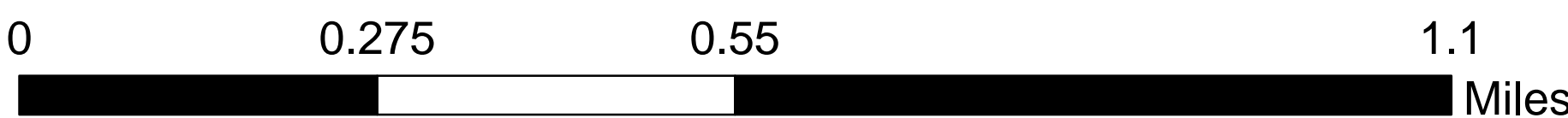
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Habitat Blocks and Potential Wildlife Crossing Zones in Waltham, Vermont



Habitat Blocks and Wildlife Corridors

Habitat blocks are areas of contiguous forest and other natural habitats that are unfragmented by roads, development, or agriculture. Vermonts habitat blocks are primarily forests, but also include wetlands, rivers and streams, lakes and ponds, cliffs, and rock outcrops. These blocks represent 'proxies' for likely wildlife corridors.

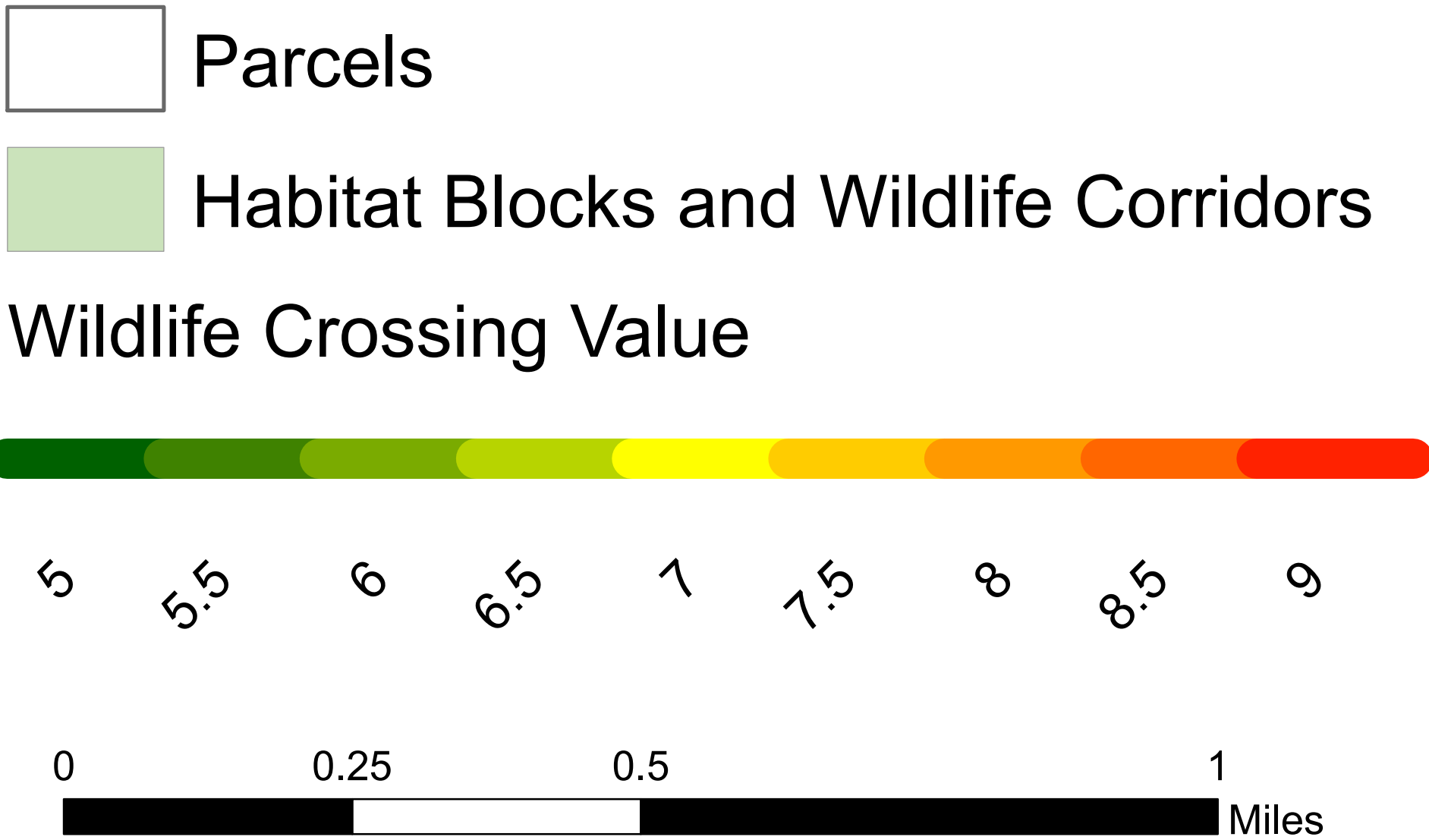
Wildlife Crossing Value (WCV)

These data were classified according to their relative significance with respect to wildlife movement and habitat areas. A second analysis was completed to relate WLH to associated roads. The resulting spatial layer (WCV) is a polyline assigned a value between 1 and 10, where one has the lowest significance and ten has the highest significance.

Sources

Habitat Blocks and Wildlife Corridors (VCGI)
https://geodata.vermont.gov/datasets/fe24a98a5e06463cb4841d5f60f21858_169/about
Vermont Wildlife Crossing Value (VCGI)
<https://geodata.vermont.gov/datasets/VCGI::vt-wildlife-crossing-value/about>

Legend



WEYBRIDGE

