

Red Light, Green Light: A Traffic Light Approach to Solar Development and Land Conservation

Developed by Conservation Solar Parties (CSP) in response to MA SMART Program 400MW Review Straw Proposal

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Solar siting is not black or white



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Solar Energy, Farming, and the Future in NY Forum

It is a continuum...

0% solar
100% ag

Status quo

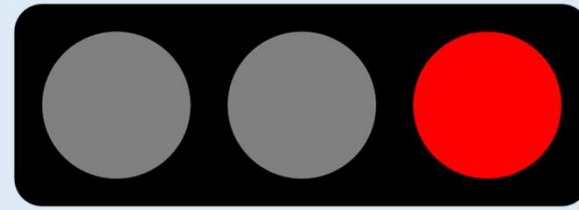
Support solar growth
& protect natural and
working lands

Farmland loss

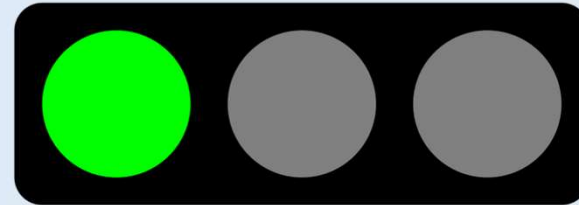
100% solar
0% ag

Shifting to a Traffic Light Approach

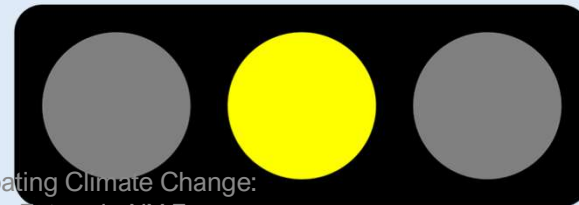
Lands we stop and conserve



Lands that are go for solar



Lands open to compromise,
with caution



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Identifying the Middle Ground...

CSP are supportive of the intent to:

- ensure continued solar growth;
- protect critical forest, agricultural and other environmentally significant lands; and
- encourage accelerated development of solar on developed land or through dual-use with agriculture.

CSP also support a thorough data collection exercise to learn:

- exactly where solar projects have been built and are being proposed;
- the characteristics of the lands being developed;
- the project economics of solar sited on different types of land and with different characteristics, such as dual-use with agriculture; and
- the local review processes utilized by municipalities.

Data should be made public and then lead to a thorough stakeholder engagement process to co-design solar siting policies that are nuanced to deal with the realities of solar development, land conservation and agriculture in Massachusetts.

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GREEN LIGHT (Category 1 & Location-Adders):

Categories based upon Massachusetts Data sets and priorities can be modified to state specific data

- **Low-value land.** Eligible for SMART without additional qualifications:
 - Any areas not identified as “RED” or “YELLOW.”
 - Disturbed land - land on which waste materials have been deposited or from which significant materials have been removed for commercial or industrial purposes.
- **Adder Projects.** Eligible for SMART incentives regardless of location:
 - Building mounted
 - Carports
 - Brownfields
 - Landfills
 - Agricultural Dual Use Canopies – would not pay conservation fees if located on Category 2 or 3 lands.

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RED LIGHT (Category 4):

- **Core forests and other areas with high ecological value.** Projects sited on land in any of the following layers:
 - All components of BioMap2 Core Habitat, specifically: Forest Core, BioMap2 Wetlands, Vernal Pool Core, Priority Natural Communities, and Aquatic Core.
 - BioMap3, this should trigger a full NHESP Priority Habitats of Rare Species review. If project is found to have an impact on ANY Species of Conservation Concern, it would not qualify for SMART.
- **Actively farmed prime farmland.** Project sites on land that meets **both** of the following criteria:
 - Prime Agricultural Soils, and
 - Classified as “pasture/hay” or “cultivated crops” in the NLCD 2016 CONUS Land Cover GIS layer.

RED LIGHT (Category 4):

- **Projects within protected open space and prohibited areas, including:**
 - On protected open space, that do not meet the specific qualifying criteria of Category 1 Land Use;
 - In a wetland Resource Area, not including Buffer Zones, except as authorized by all necessary regulatory bodies; and
 - On properties included the State Register, except as authorized by regulatory bodies.
 - Within the “Openspace by Level of Protection” GIS layer, unless the solar would comply with the allowable use on the property.

Waiver Process: A waiver process will be available for sites with Active Forest Management Plans, compelling rationale for incorrect inclusion within a mapped layer, or compelling case for “Ecological equivalency” to the project site and ecosystem.

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YELLOW LIGHT (Category 3):

Establish a Solar Conservation Fund as a means of mitigating any potentially deleterious impacts on the lands of the Commonwealth.

- In lieu of a subtractor, solar projects on YELLOW land or locations would be required to make a substantial payment to the Solar Conservation Fund to mitigate their land use.
- The Solar Conservation Fund could be used to permanently conserve lands, as opposed to the more temporary impact of solar development.
- This could include purchase of lands by public entities or trusteeships for permanent conservation or support of broader policies to incentivize or otherwise support local agriculture or land conservation.

YELLOW LIGHT (Category 3):

Developers with a project that impacts these lands would be required to make a \$10,000 per acre Solar Conservation Fund contribution.

- Project sites on areas designated “Farmland of Statewide Importance” that have recently been farmed (i.e, located in “pasture/hay” or “cultivated crops” in the NLCD 2016 CONUS Land Cover GIS layer).
- Projects located in areas identified as “Prime Forest 1” other than those identified as RED (above).
- The following components of BioMap2 Critical Natural Landscape (Landscape Blocks, Wetland buffers, Aquatic Buffers, and Coastal Adaptation Areas).

YELLOW LIGHT (Category 2):

Developers with a project that impacts these lands would be required to make a \$5,000 per acre Solar Conservation Fund contribution.

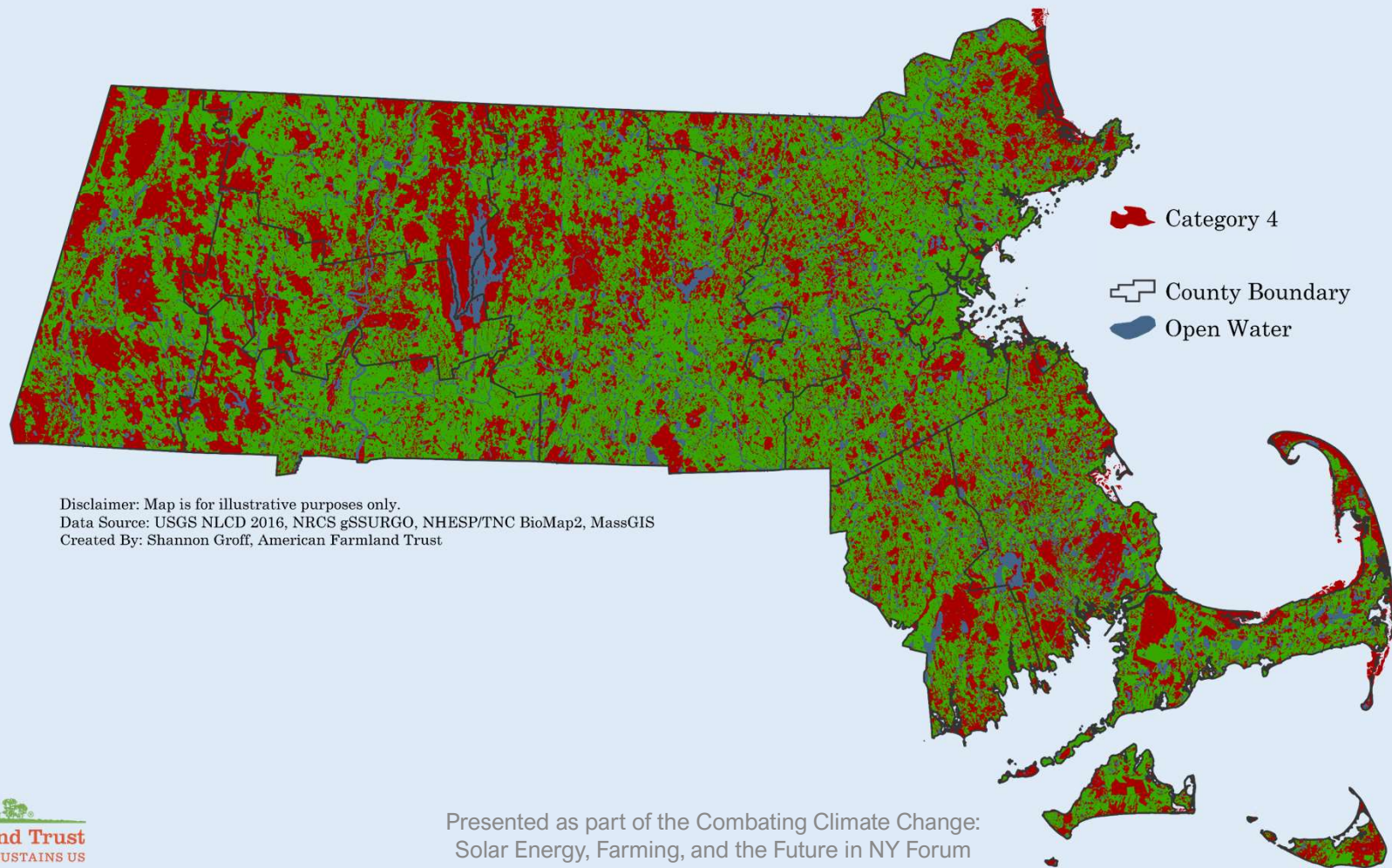
- Project sites on Prime Agricultural Soils that have not been recently farmed.
- Projects sited in Prime Forest layers other than “Prime Forest 1.”
- Farmland of Unique Importance that has recently been farmed.
- Project sites according to solar zoning ordinance: Projects that would otherwise be Category 3 that are sited within a solar overlay district or power generation as an as-of-right use, or a use approved through site plan review and special permits.
- Forest projects with minimal tree-clearing: Projects located in Prime Forest 1 that would otherwise be designated Category 3 requiring the clearing of less than 5 acres of forest.

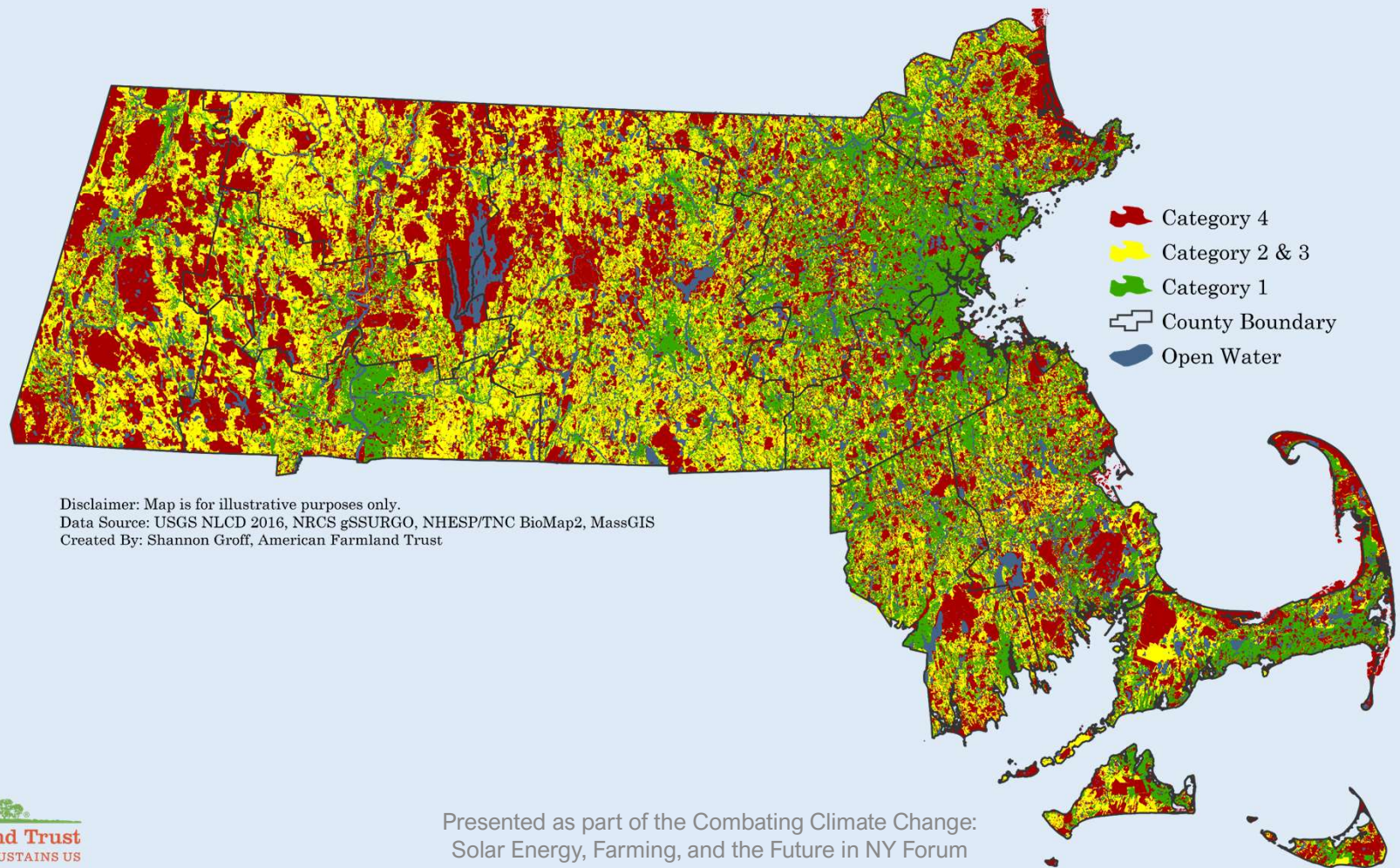
OTHER SPECIFICATIONS

De minimis exceptions: For projects that include YELLOW land types of an area no greater than 2 acres or 10% of the total project area (whichever is the lesser area), all YELLOW land types would be treated the same as GREEN. No such exception will be made for RED land types.

Pro-rated conservation payments: Payments to the Solar Conservation Fund would be pro-rated based on the proportion of each project site that is located in each YELLOW subcategory.

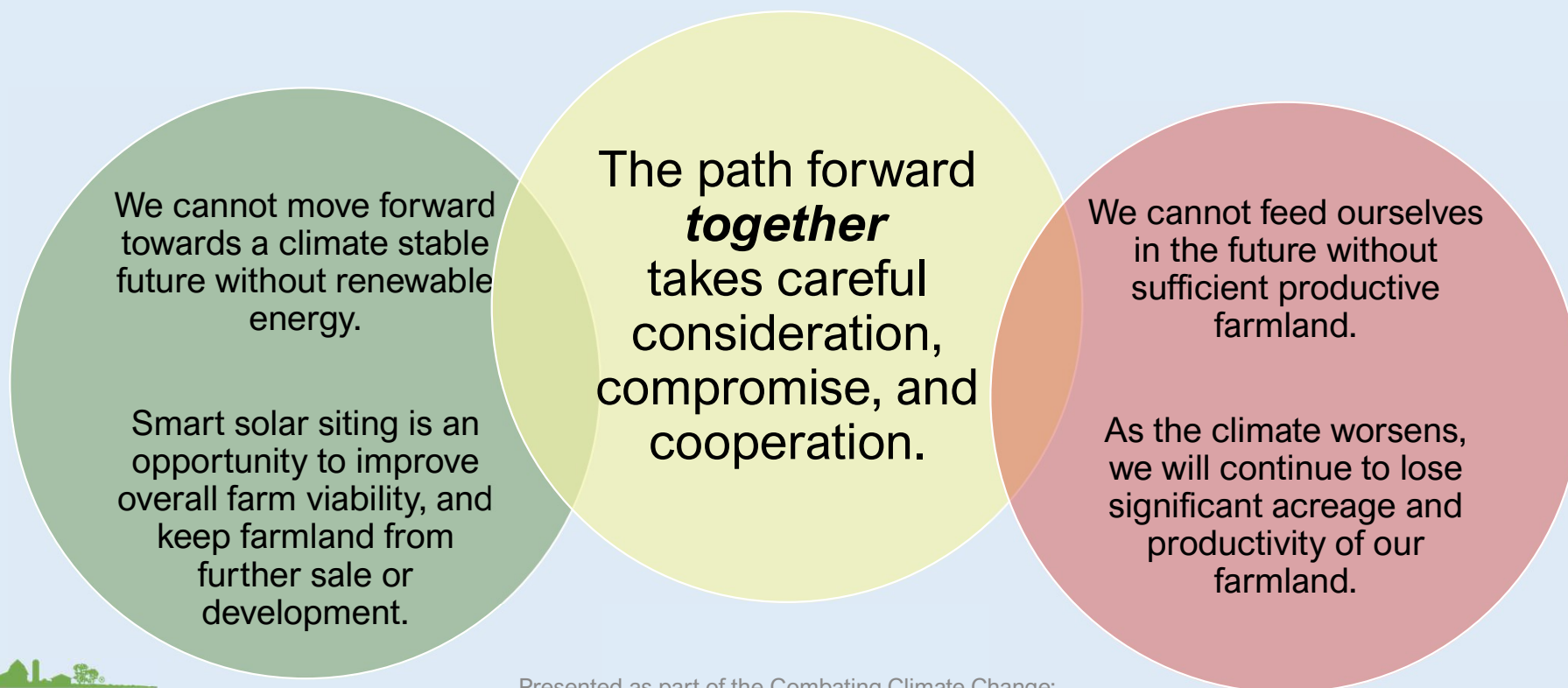
Projects spanning multiple categories: Projects spanning multiple categories would make Solar Conservation Fund payments pro rata based on the number of acres located in each category.





Disclaimer: Map is for illustrative purposes only.
Data Source: USGS NLCD 2016, NRCS gSSURGO, NHESP/TNC BioMap2, MassGIS
Created By: Shannon Groff, American Farmland Trust

Developing the Middle Ground



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Thank You!

Questions?

