



2022

## Into the Woods: Solar Fields in the Forest

An opening conversation about balancing  
energy needs with forest benefits  
Narragansett Bay Region



**NARRAGANSETT BAY  
ESTUARY PROGRAM**

# Science Update: Into the Woods: Solar Fields in the Forest

Narragansett Bay Estuary Program

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CITATION

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## ACKNOWLEDGEMENTS

This update is the product of questions raised while finishing up the Land Use [update](#). I talked with resource managers, advocates, and researchers to understand how solar fields are permitted in Rhode Island and Massachusetts, and how best to balance energy needs with forest benefits. I thank all those individuals (listed below) for their time and dedication to this topic. The photo on the cover is a screen shot of a solar field in Hopkinton, RI by [Max Enger](#).

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## NARRAGANSETT BAY ESTUARY PROGRAM AND ITS STUDY AREAS

The Narragansett Bay Estuary Program is part of the National Estuary Program, established in 1987 as an amendment to the federal Clean Water Act administered by the U.S. Environmental Protection Agency (EPA). The NBEP uses a voluntary, community-driven approach to enhance the water quality, wildlife, and quality of life in the Narragansett Bay, Little Narragansett Bay, Coastal Ponds, and their watersheds in Rhode Island, Massachusetts, and Connecticut. The landscape unites 2 million people across 113 communities in 3 states. It hosts diverse habitats that sustain wildlife and vital economies.



Map of Narragansett Bay Estuary Program Study Areas

## PURPOSE

As a society, we need to reduce fossil fuel consumption, and curb greenhouse gas emissions. One way to do this is by increasing our reliance on renewable energy sources, such as solar fields. Many of these fields are placed in forested regions. Forests provide water quality, habitat, shade/cooling, recreation, and capture and store carbon dioxide. By placing solar fields in forests, we are creating a competition between the benefits of solar and the benefits of forests.

This two-page factsheet opens a conversation about balancing energy needs with forest benefits for the Narragansett Bay region (including the Coastal Salt Ponds and Little Narragansett Bay). We need to understand what the land was before, and what it could be if it wasn't a solar field. Through conversations with local resource managers and advocates, NBEP also summarized the limited control Rhode Island and Massachusetts have on where solar fields are permitted. We also discuss how towns in both states can be empowered to make changes.

This is the first in a series of posts. We will be pursuing data to show the change in forests due to solar field development and exploring how to incentivize solar fields on developed land and ensure forests are protected.

The audience for this piece is anyone who is interested in balancing the benefit of forests and energy needs particularly environmental managers, members of land-trust committees, and the interested public.

## METHODS

No data were included in this update.