

# CAPE COD CANAL SOLAR PROJECT



Public Meeting  
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Oak Ridge School  
East Sandwich, MA

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- **PPA:** A **power purchase agreement** is a contract between two parties, one which generates electricity (the seller) and one which is looking to purchase electricity (the buyer).
- **OEI:** Army Office of Energy Initiatives
- **PV Plant:** A **photovoltaic plant** is a power station that generates electrical power by using photovoltaic cells
- **Net Meter:** Allows most efficient use of solar energy where generators are connected to a public-utility power grid and surplus power is transferred onto the grid, allowing customers to offset the cost of power drawn from the utility

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New England District will execute the **FIRST** USACE Civil Works renewable energy Power Purchase Agreement (PPA) in order to fully power the Cape Cod Canal and New Bedford Hurricane Barrier with solar energy.



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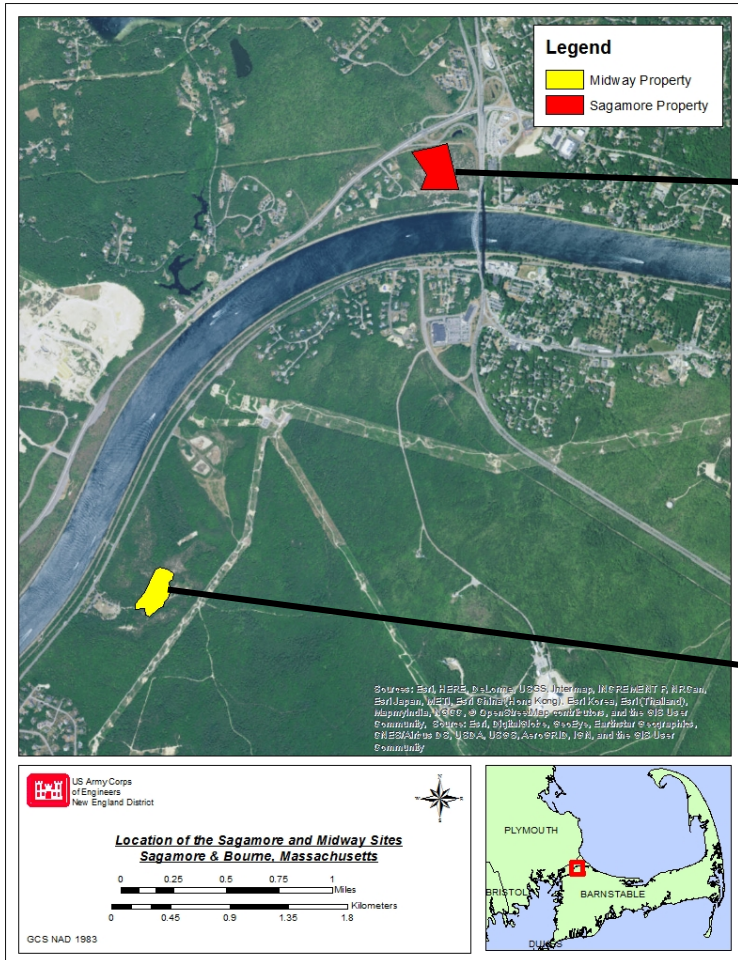
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## Environmental Assessment

- Impacts of the Proposed Action at the Sagamore and Midway sites were evaluated against the No Action alternative.
  - ▶ Effects on land use, water and air quality, vegetation, wildlife, T&E species, historic resources, noise, recreation, viewshed, etc. were considered.
- An acoustic bat survey was conducted at each site for the Federally Threatened northern long-eared bat (NLEB), *Myotis septentrionalis*.



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## Bat Survey Results

- No roosting or hibernacula at either site.
- No *Myotis* spp. activity at Midway site.
- Limited *Myotis* spp. activity at Sagamore site.
  - ▶ 1.5% of total bat activity.
    - 0.7% little brown *Myotis*
    - **0.6% NLEB**
    - 0.1% small footed *Myotis*



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## Site Selection Criteria and Ratings

	Sagamore	Midway
Vegetation	Medium	Low
Mammals	Low-Medium	Low
Birds	Low-Medium	Low
Federal T&E Species	Medium	Low
State T&E Species	Low	Low-Medium
Noise	Medium	Low
Viewshed	Medium-High	Low



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YEAR FOR ANALYSIS	
2013 Usage	1,138,780 (kWh)
2013 Electric Bill	\$216,920
2015 Usage	957,639 (kWh)
2015 Electric Bill	\$157,546
2016 Usage	895,294 (kWh)
2016 Electric Bill	\$154,926

WITH PROJECT	
Project Operating Life	24 years
Production	787,152 (kWh)
Projected Savings in 2019 (*install 2018)	\$69,000



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## PROJECT PHASES

- Lease of Corps land to a solar developer for solar PV plant, planning and design.
- Construction of the Solar PV plant.
- Solar PV plant operations and maintenance.
- Project decommissioning.



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## SUMMARY

- First renewable energy PPA for USACE Civil Works
- Will promote energy security by enhancing surety, supply and sustainability
- Will help contribute to the 2025 goal of 25% renewable energy
- Will establish a process for future renewable energy projects for USACE across the country



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## QUESTIONS?



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