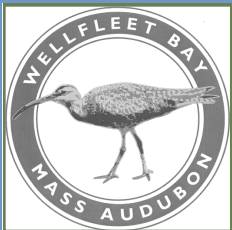




WELLFLEET BAY WILDLIFE SANCTUARY PROPOSED GAIA WIND TURBINE Questions and Answers



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Why is Mass Audubon proposing a wind turbine at Wellfleet Bay Wildlife Sanctuary?

Across Mass Audubon, the organization has made a commitment to reducing its carbon footprint through the installation of renewable energy and energy conservation. It is a long-standing goal to make Wellfleet Bay Wildlife Sanctuary “net zero” for electricity usage. Over the past several years, we have constructed a LEED Platinum-certified nature center at Wellfleet Bay as well as installed photovoltaic panels and solar-thermal systems to generate our own electricity and produce hot water in order to reduce our demand for electricity from the power grid. The final step is the construction of a small wind turbine, which has been carefully sized to meet the remaining electricity needs of the sanctuary. Once the turbine is constructed, it is projected that the sanctuary will produce for the power grid as much electricity as it uses – thus achieving “net zero” status. In addition, the turbine will serve as a demonstration project for the use of small-scale wind power for the sanctuary’s visitors.



How big will the turbine be?

We are proposing a Gaia turbine – an 11 kw machine that will be placed on a 120 foot monopole tower. It has two (rather than the more common three) blades, with a total rotor diameter of 13 meters or 43 feet. Categorized as a “small” or “micro” turbine it is a type designed for farms, small business, and community projects—rather than the considerably larger turbines built for commercial or industrial applications.



Where will the turbine be placed? Will there be an impact on visitors?

The turbine will be located just off the sanctuary’s main parking lot, adjacent to our new solar panel array, and is expected to have minimal impact on trails and program areas or on residential areas.

Will the turbine be visible?

The turbine has been sited to minimize visual impacts within the community and surrounding areas. Mass Audubon is currently in the process of conducting a study to assess the view of the turbine from key vantage points. The turbine will be visible to sanctuary visitors and we will be providing interpretive materials at the nature center to highlight our work to achieve “net zero” status for the nature center.

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What is the construction time frame?

We will be applying for permits from the town of Wellfleet early in 2013 and hope to construct the turbine in late fall and winter of 2013 into 2014. The construction window has been timed to minimize impact on wildlife and on sanctuary visitors.

What about noise and flicker? Will neighbors be affected?

Mass Audubon has placed a high priority on identifying and selecting a turbine that is quiet, given its location on a wildlife sanctuary. This specific, two-blade turbine is considered to be one of the quietest of the “micro” models, designed to rotate at a steady speed and not increase in speed in high winds, ensuring that sound levels remain low across a range of wind speeds. We have visited several Gaia turbines that are operational in other states (NY, OH, and MI) to ensure that they are as quiet as advertised. Our permitting team will be completing a sound study to present at the public hearing. The turbine is proposed to be sited so as to eliminate the possibility that flicker would affect any neighboring properties.



Would birds and bats be affected?

Mass Audubon is first and foremost an organization committed to protecting the species and habitats of Massachusetts' natural communities. Based on a recent evaluation, we do not believe that the turbine will have an adverse impact on either birds or bats. Mass Audubon has completed a pre-construction baseline monitoring study on birds and bats and will be continuing this work this summer and fall. Following construction, we are planning a three year study of birds and bats to ensure that the turbine does not cause a significant adverse impact on these species. This data will be made publicly available.

Where can I learn more?

For more information about Wellfleet Bay's proposed turbine, contact sanctuary director Bob Prescott by calling 508-349-2615 or by email: rpscott@massaudubon.org. Check our website regularly for updates on the progress of the project. More information about the Gaia wind turbine can be found at: <http://www.gaia-wind.com/133-11kw-turbine/> The website of the National Wind Coordinating Collaborative offers plenty of objective, easy-to-understand information about wind energy, its benefit to communities and role in addressing climate change, as well as potential negative impacts. The US Fish and Wildlife Service offers another useful site on wind energy development.