September 9, 2019

To: Energy Master Plan Comment's @bpu.nj.gov

From: The Environmental Commission of Cape May And The Green Team of Cape May

These groups drew upon many sources to help mobilize efforts to ensure that proposed implementation of wind turbine solutions become acceptable practices. We calculate that incorporating renewable energy, through the creation of offshore wind, will boost clean energy and slash greenhouse gas emissions.

September 9, 2019

To: New Jersey Energy Master Plan

Comments by:

The Cape May City Environmental Commission and The Green Team of Cape May

We wholeheartedly endorse:

Plans for a \$1.6 billion wind-energy farm - the largest of its kind in the U.S. - about 15 miles off the coast of Atlantic City won the backing of state regulators Friday, in a big leap forward for clean energy.

The New Jersey Board of Public Utilities chose Ocean Wind, a proposal by Danish Energy Company orated and supported by PSEG Power, to develop a 1,110-megawatt offshore wind farm. Ocean Wind was selected from among three projects.

Construction of the energy farm, which would produce enough electricity to power more than a half-million New Jersey homes, is expected to start in 2022 or 2023. The first phase would come online in 2024.

The project, the largest offshore wind proposal ever awarded in the United States, is estimated to add \$1.46 a month to an average residential electric customer's bill once the project becomes operational.

Developing offshore wind is a major part of Murphy's plan to boost clean energy in the Garden State. The Governor has called for New Jersey to develop 3,500 megawatts of wind power by 2030. Ocean Wind is just one step towards that goal; Murphy has also asked the NJBPU to solicit 1,200 megawatt projects in 2020 and 2022.

Murphy's larger goal is for New Jersey to get 100% of its power from clean energy by 2050 in order to slash greenhouse gas emissions and lower the state's contribution to global climate change. Last week, the NJBPU <u>unveiled a draft of the state's 2019 Energy Master Plan</u> - a document billed by the Murphy administration as the "initial blueprint" to achieving that goal.

Moreover, Jeff Tittel, the director of the New Jersey chapter of the Sierra Club, agrees that developing a wind industry with turbines out in the ocean will not only boost the state economy, it will also help ratepayers.

"Once you build them, the cost of operation and maintenance is so cheap that eventually your costs go down and your rates come down," he said. He said the plan to build the wind turbines 15 miles out to sea is a good one.

"There's fewer critters, birds out there. It's outside of the flyway. Bats only go within 2 miles of the shore," he said.

At the same time, "when you're 15 miles off the coast you won't see it from the shore because of the haze from the ocean."

And, Curtis Fisher, the northeast regional executive director of the National Wildlife Federation, called the move "the single largest victory for renewable energy in New Jersey history." "New Jersey is making a dramatic transformation from a fossil powered past to a clean, affordable and reliable energy future powered by offshore wind."

<u>"Wind Done Right"</u>, a story originally ran in the Spring 2018 issue of the National Audubon Magazine: Title - Survive & Protect.

After Audubon released its 2014 Birds and Climate Change report, which showed that climate change will threaten more than half of North America's birds if we don't rapidly reduce emissions, it became abundantly clear that the organization needed to focus more on expediting properly sited renewable energy. Audubon's goal is to ensure that 50 percent of America's energy comes from renewable sources by 2030. Audubon members believe this transition is important and the organization has a role to play: In a January 2018 survey of more than 2,300 members nationwide, every respondent supported more renewable energy investments. Eightynine percent said that renewable energy is critical to the health of the planet, and 78 percent said that fossil fuels harm global bird populations.

Further, more than 90 percent said that Audubon should collaborate with the clean energy industry on bird-friendly solutions. Those efforts are already underway: Audubon is working closely with partners in the renewables industry and government to properly site projects and help them develop and implement practices and technologies such as IdentiFlight that avoid killing of birds by turbines. — Martha Harbison.

The Future: It's time for climate-ready fisheries

NOAA Fisheries notes in their report that it isn't fishing alone that is responsible for the decline of some of the fish stocks that were declared overfished. Fish stocks face pressures besides fishing, and climate change is already making management harder. As the impacts from climate change become more severe, these challenges are only going to increase. Ocean acidification, warming waters and oxygen loss in our ocean are altering the productivity abundance and geographical distribution of fish. We have no choice but to find ways to adapt the way we manage our fisheries so we can still fish sustainably even as climate change dramatically affects marine ecosystems. But, it is also essential that we reduce greenhouse gas emissions at the national and international level so that we can avoid extreme and devastating impacts to our fisheries and fishing communities.

To Promote Sustainable Fisheries

July 2015 U.S. Dept. of the Interior Bureau of Ocean Energy Management Office of Renewable Energy Programs

Best Practices Protocols 115 pages includes;

"Determining environmental impacts directly attributable to offshore wind energy vs. climate change may prove difficult. Therefore, we recommend ongoing monitoring of components - such as additional survey stations during the construction & operation to assess fish and invertebrate populations before and after offshore wind facilities are in place."

According to the Environmental Defense Fund

Nine years later: What's ahead for the Gulf?

BP's \$20 billion settlement funds largest environmental restoration in U.S. history

In 2010, BP's Deepwater Horizon rig exploded and created the largest offshore oil disaster in history, causing millions of barrels to leak into the Gulf of Mexico. April 2018 marked eight years since the spill.

Where are we now?

While the harrowing images of oil-soaked wildlife and beaches have subsided, science has revealed that the <u>impacts of the spill</u> are ongoing and significant.

BP agreed to settle out of court and pay more than \$20 billion. <u>A judge approved the settlement</u> on April 4, 2016.

What kind of impacts are we still seeing?

The oil disaster caused incomparable damage to an already-stressed Gulf Coast ecosystem. From dolphins to sea turtles to birds, we still are seeing the real and lasting environmental impacts of one of the worst oil spills in our nation's history.

Americans Agree: No Risky Offshore Drilling

Recent Gallup Polls report more of us want green energy practices in place.

Cape May City's Energy Masterplan 2019

As Cape May City proposes to promote itself as a more carbon neutral champion, the City's Energy Action Masterplan creates positive responses to aggressively implementing and managing goals set forth by Federal, State and Municipal Land Use laws.

<u>The Fourth National Climate Assessment</u>, 1600 pages of findings, briefly states, "The impacts of climate change are intensifying across the country...how much they intensify will depend on actions taken to reduce global greenhouse gas emissions." The report was released on November 23, 2018. It was produced by 13 federal agents and many world scientists.

<u>The 2019 Energy Master Plan of the State of New Jersey</u> has as its Main Goal: Reduce projected energy use by 20% by 2020 and meet 20% of the State's electricity needs with Class 1 renewable energy sources by 2020. The combination of energy efficiency, conservation and renewable energy resources, should allow New Jersey to meet any future increase in demand without increasing its reliance on non-renewable resources.

The Municipal Land Use Law, Chapter 291, Laws of New Jersey 1975

Page 1, Purposes of the Act: n. to Promote utilization of renewable energy resources.

Page 4, Inherently beneficial use means a use which is universally considered of value to the community...such as solar or photovoltaic energy, or a wind structure, Pages 78 and 79 outline municipal ordinances relative to small wind energy systems.

Page 34 (16) A green building and environmental sustainability plan element, shall encourage and promote renewable energy systems...

Energy touches the lives of every New Jersey resident, every day.

In Cape May City, the priorities that we aggressively protect have been given positive recognition by: The Sustainable Jersey Program, a program which seeks to engage public participation in free initiatives. Cape May City has achieved the highly regarded Silver Certification Aware four times: 2011, 2012, 2014 and 2017. Highlighting these achievements come from efforts of dedicated citizens, business owners, the Green Team members, and the Environmental Commission.

As responsible stakeholders, the City of Cape May remains committed to adhering to the City's "Green Building Resolution," 13-05-2011.

Eligible improvements offer both environmental and economic benefits by stimulating job creation. Positive leadership seeks opportunity from complex circumstances. Growing Cape May's Green Economy is important. And, according to the Bureau of Labor Statistics, the top growing job classification over the next ten years will be solar photovoltaic installers. These positions are expected to at least double by 2026. Wind turbine service technicians came in number 2, with those jobs projected to grow by more than 96% etc.

More pages follow original report.

Taken from Cape May's MasterPlan adopted March 2019

9.0 <u>CONSERVATION ELEMENT</u>

9.1 <u>Introduction</u>

This Element will describe existing conditions and issues affecting the City of Cape May, provide goals, objectives and recommendations for conservation, determine stakeholders and reference other plans involving conservation.

The vast majority of land not developed in Cape May is environmentally constrained by floodplain, wetlands or both. These environmentally sensitive lands, and the wildlife habitats that they support, are very much a part of what makes Cape May an attractive area to live and vacation and are also important for environmental tourism, such as birding. Where much of these lands are unable to be developed due to State development regulations, Cape May should strive to acquire lands that are potentially developable in environmentally sensitive areas to preserve these lands from development and enable those to be used for passive recreation areas.

9.2 <u>Goals/Objectives</u>

This 2019 Reexamination Report has prioritized the protection and preservation of its environmental assets recognizing the importance to the City's character and economy. As indicated in this Reexamination, the City has a unique advantage over other shore communities in that its beach, harbor and environmental resources create a sense of place no other town inner region can offer. This coupled with the City's historic and cultural assets provides the City with a unique branding and marketing advantage. The City's primary focus is now on the preservation of these assets for all City residents and visitors.

The following are the goals and objectives for conservation in the City:

Goal: To protect the quality of the City of Cape May's natural and manmade environment in order to preserve the balance of its ecological systems and safeguard the future health and welfare of its residents and visitors.

Objectives:

- a. Conserve and protect environmentally sensitive resources including natural, scenic and historic areas in the City by requiring that new land uses be subject to performance standards designed to minimize potential adverse impacts.
- b. Minimize negative effects of land use upon the City's built environment through evaluation and implementation of performance standards for environmentally sensitive lands.
- c. Encourage the preservation of open space and environmentally sensitive lands in order to protect the environmental integrity of unique resources.
- d. Pursue the acquisition of wetlands and open space by the City and a consortium of public and private environmental groups.
- e. Provide controlled access to wetland areas to promote environmental protection and public education.
- f. Acquire environmentally sensitive lands in East Cape May known as "Sewell Point". Acquisition of the tract would ensure the area east of Pittsburgh Avenue would be retained as open space for passive environmental recreation.
- g. Strive to maximize the City's energy conservation and energy efficiency to aid the State of New Jersey in achieving its energy goals stated in the State Energy Master Plan.
- h. Foster conservation partnerships and develop nature branding for the City.

9.3 <u>Overview of Conservation Planning Efforts</u>

In addition to the planning efforts noted in this Master Plan Reexamination 2019, Cape May has participated in various planning efforts over the past decade that have been used to update and further develop this element. This element has been developed to incorporate information and implement recommendations these cumulative plans into a document to guide future efforts.

Environmental Resource Inventory for the City of Cape May

In September 2017, the Cape May Environmental Commission with the aid of the Association of Environmental Commissions (A.N.J.E.C.), the Cape May City Green Team, and Cape May City Council completed the update of the Environmental Resource Inventory (ERI). This inventory update addresses and provides the following:

- * Cape May City Master Plan Recommendations
- * Data Base of Open Space (R.O.S.I.)

- * Wildlife Inventories, Threatened & Endangered Species
- * Water Resources including Potable, Wetlands, Estuaries, CAFRA, Ocean,

Harbor and Storm water

- * Vegetation & Landscape including Dune grass, NJ and Plant List for Wildlife, Shade Tree, Xeriscaping, Water Conservation Garden
- * Open Space, Sewell Point Tract
- * Chemical Contamination & Hazardous Waste
- * Energy Conservation

The ERI and the September 2017 Update is hereby incorporated in this element by reference and is the basis for this updated element.

More pages follow original report.

9.4 Environmental Commission

The City of Cape May's Environmental Commission function is to study and make recommendations concerning open space preservation, water resources management, air pollution control, solid waste management, noise control, soil and landscape protection, environmental appearance, marine resources and protection of flora and fauna. The Commission also maintains and updates the Environmental Resource Inventory for the City. The Commission also conducts research.....

3.0 <u>RESILIENCY ELEMENT</u>

3.1 Introduction

In the aftermath of Superstorm Sandy and other natural disasters occurring at an increasing frequency, resiliency has emerged as an integral aspect of sound planning principles. According to the Oxford English Dictionary, "resiliency" can refer to ability to rebound, the nature of being elastic, or the capacity to recover. As a framework for community planning, resiliency looks to ensure that communities do not merely recover, but are in a stronger position than before to withstand additional hazards and ensure community safety and quality of life for posterity. In recognizing the importance of resiliency, the New Jersey State Legislature now requires municipal land use elements to strategize for storm resiliency and address risks and hazards such as sea level rise and flooding.

The Resiliency Element will describe existing conditions and vulnerabilities affecting the City of Cape May, provide strategies and recommendations for municipal resilience, determine additional stakeholders and other plans involving resilience, and describe an Action Plan for implementing resiliency measures.

Cape May is vulnerable to hazards that are both man-made and natural. Its location at the Cape has brought it prosperity, and the City has long reaped the benefits of tourism, beach and ecological resources and historical landmarks. However, those characteristics are a double-edged sword: The City's location renders it vulnerable to natural hazards that affect coastal communities, such as flooding and shifts in coastal geomorphology.

The challenges that the City is facing are long-term and not entirely within the control of the municipality. However, these issues gained new urgency following the landfall of Superstorm Sandy in 2012. Superstorm Sandy caused significant damage to both coastal and inland communities in New York, New Jersey, and nearby states. Cape May was lucky in that Superstorm Sandy struck to the north causing considerable damage to other municipalities from flooding, storm surge and wind. Lessons learned from this storm are important to planning Cape May's future resiliency....more pages follow the original.