# OUR OFFSHORE WIND FUTURE: VOLUME 2

CITIZENS CAMPAIGN FOR THE ENVIRONMENT

**Phone:** (516) 390-7150

**Email:** farmingdale@citizenscampaign.org

**www.citizenscampaign.org**

**225A Main Street Farmingdale, NY 11735**

**https://nylcvef.org**

NYLCVEF
EDUCATING FOR THE ENVIRONMENT

— ***Adrienne Esposito***, *Executive Director of Citizens Campaign for the Environment*

Our continued reliance on fossil fuels is pumping up heating costs, gasoline prices and harming public health! The escalating price at local gas pumps gives us a clear sense of the highly manipulated, rapidly increasing costs of fossil fuels. This instability in our energy costs should be a compelling reason to support offshore wind power. Some express concern that foreign countries like Norway and Denmark will be producing our energy. Frankly, I will take those countries over OPEC, the Organization of Petroleum Exporting Countries. Much of our oil comes from OPEC countries that don't exactly wish us well. Example: Saudi Arabia and Russia have agreed to cut oil production by 1.3 million barrels through the end of the year, because they can. Consequently, oil is now above $90 a barrel, an increase of 40% since June. Escalating fossil fuel costs affect many critical aspects of our societal needs: food, trucking, clothing, gasoline, air travel and shipping.

Climate change is making the planet an ever-more-unpredictable home. **The National Oceanic and Atmospheric Administration reports 23 extreme weather events from January to August in America, causing $57.6 billion in damages.** These damages are paid by taxpayers – you and I. Climate news often leads nightly broadcasts: temperatures above 100 degrees for weeks in large parts of the country, wildfires in Canada bringing orange skies over Manhattan, wildfires destroying Maui, flooding in Greece. We live on an island, and we love our beaches and ocean views. But our geography makes us likely to suffer drastically from rising sea levels and increasingly potent storms—hundred-year storms that now happen every few months. The torrential rain event that just happened in September caused massive flooding and expensive damage, gives us one more reminder that we are at ground zero for climate change impacts. The climate crisis is real and Long Island needs to do our part in this fight.

Sadly, wind skeptics focus their attention on what they see as pitfalls of wind turbines. I understand wind energy is not perfect, however, all large-scale energy infrastructure has some impact on the environment. It is up to us to choose the energy infrastructure with the least impact and that is wind power. Concerns such as the placement of cables carrying energy from the turbines to our homes and businesses can be addressed, and impacts can be mitigated. But associating whale deaths with offshore wind is simply wrong. NOAA designated an "Unusual Whale Mortality Event" starting in 2016, long before any offshore wind siting work in America. Scientists who study these magnificent mammals say that collisions with ships, entanglement in commercial fishing gear, and underwater drilling for fossil fuels are the real culprits.

We can not overstate the health value of transitioning to renewable energy. By switching to clean renewable energy like offshore wind, doctors say we can reduce the risk of developing asthma, heart and lung disease, heart attacks and cancer. That's a significant advantage!

Recently, wind companies have revised their earlier construction cost estimates. The causes of those upward revisions are the same factors that have affected all of us, such as the rising price of steel and shipping. It's the reality of where we are right now—not a case of wind turbine companies being greedy. Skeptics are wringing their hands about the future price of wind-generated electricity. In reality, the cost of shying away from renewable energy will be the increasing intensity of climate change and our continued reliance on manipulative oil producers like Saudi Arabia and Russia.

New York has wisely chosen to sharply reduce our reliance on fossil fuel plants. The goal is an electric grid free of fossil fuels by 2040. That will not be easy to achieve, but without offshore wind projects, it will be impossible. Failing to reach our renewable energy goals would be an historic blunder.

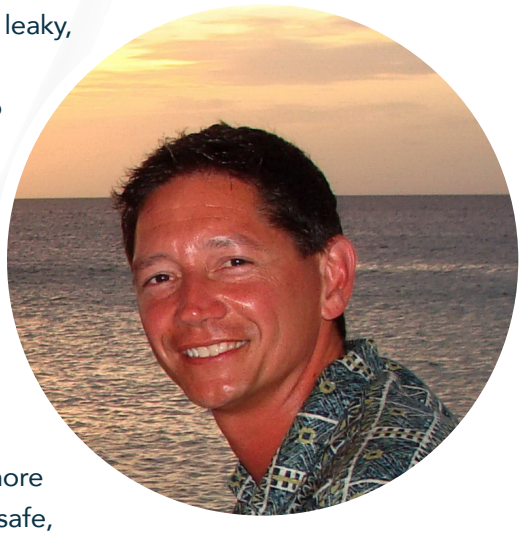
# Climate Change

— ***Scott Mandia**, Professor and Assistant Chair of Physical Sciences, Suffolk County Community College; co-founder Climate Science Legal Defense Fund*

In the year 0, the global population was estimated to be about 190 million. Wood and dung were the primary energy sources to meet energy demand. Since then, the global population has increased exponentially, and in 2022, we passed 8 billion. Energy demand has also increased exponentially and will continue to do so through this century. Most of the increased demand for energy has been met with fossil fuels (coal, natural gas, and oil). These fuels were created over many millions of years and mostly consist of dead plants and animals. Fossil fuel is finite, meaning it will eventually run out or be far too difficult and expensive to locate. Worse, burning these fuels has released billions of tons of heat-trapping gases including carbon dioxide and methane. We now live in a warm climate that has not existed on Earth for at least the past two million years, long before we built cities along coastlines and created farmlands in proper atmospheric conditions. If we wish to live in cities along existing coastlines and farm in temperate conditions, while also meeting the energy demands of a rapidly growing population, we must begin transitioning away from dirty, increasingly expensive fossil fuels.

Experts in sciences, the military, and in financial security warn us that if the global average temperature increases more than another 0.8°C (1.4°F), countries will run out of fresh water, cities will frequently be flooded, and military conflicts around the world will increase as people become more desperate for resources. At current global gas emission rates, the 2°C (3.6°F) tipping point will be exceeded around the year 2050. Of course, there is no reason the global emission rates should keep increasing. We have all the technology today to begin reducing those emissions. What we lack is political will.

All energy sources have their pros and cons. None of them are unicorns and rainbows. Coal and natural gas do supply massive amounts of electricity, are able to produce power 24/7, and work with our existing grid. Unfortunately, these fuels are finite, increasing in cost, and are the cause of dangerous climate change. We clearly cannot keep using them for the majority of our energy. As of now, natural gas supplies about 85% of Long Island's electricity. The greenhouse gas emissions from our grid are about 50% higher than the national average. Furthermore, natural gas pipelines are leaky, and the methane released can trap 80X more heat per molecule than carbon dioxide over the next 20 years of its lifetime.



Fortunately, offshore wind energy is a safe, clean, nearly infinite source for electricity generation that does not release any greenhouse gases once attached to the grid. Although it is not a perfect source of energy (wind does not always blow) wind can be used to reduce our need for natural gas here on Long Island. As Long Islanders, we know that a calm day is very rare. Wind is always blowing (especially when I play golf!) so it would be a rare occurrence that the wind turbines would be still, especially since offshore wind farms for New York will be between 15-50 miles offshore – an area that contains steady, strong winds. As reported in Bloomberg News in 2022, electricity from wind is 44% cheaper than natural gas in the US. Also in 2022, the US Dept. of Energy reported that wind power remains one of America's fastest growing energy sources and a generator of high-quality jobs. Wind power accounted for 32% of U.S. energy capacity growth in 2021, employs 120,000 Americans, and now provides enough energy to power 40 million American homes.

It seems to be a no-brainer to add wind power. We rely on dirty natural gas for most of the region's electricity and that increasingly costly heat-trapping gas brings the planet closer and closer to dangerous climate tipping points. We should heed the warnings from our experts. Let us invest in offshore wind power and reap the benefits of more jobs, a stronger economy, and a safer, cleaner, cheaper way to get our electricity.

# Whale Strandings Emphasize a Need for Practical Solutions

*— **Dr. Francine Kershaw**, Senior Scientist; Marine Mammals, Oceans Division, Nature Program **& Alison Chase,** Senior Policy Analyst; Oceans Division, Nature Program*

Several humpback and sperm whales have washed ashore New York and New Jersey beaches in recent months, distressing communities left wondering why. Some have blamed America's newest ocean use—offshore wind—for the deaths, proposing that noise associated with pre-construction surveys disorient whales and cause them to beach.

It's true that ocean noise is a major environmental problem. High-intensity noise, like the seismic blasting that the oil and gas industry uses to prospect deep under the seafloor, can disturb marine mammals, fish, and other species over large areas of ocean, and noise from commercial shipping has created a constant din. **But the sounds produced by offshore wind's pre-construction surveys are much lower in energy than more powerful industrial sources, and tend to be highly directional, making it very unlikely that they drove the whales off New York and New Jersey to strand.**

So, what has caused these deaths? It's hard to say. What we do know is that along the East Coast, humpback whales have been experiencing what's known as an Unusual Mortality Event, with elevated strandings, since 2016, and sperm whales—listed as endangered under the Endangered Species Act and as a depleted and strategic stock under the Marine Mammal Protection Act—have been experiencing elevated strandings in other parts of the world, including England and Tasmania, the reasons for which are also largely unclear.

For humpbacks, roughly 40 percent of necropsies carried out during the Unusual Mortality Event show harm from ship strike or entanglement. Unfortunately, this is not shocking as vessel strikes and entanglement in fishing gear eclipse all other direct human sources of mortality for most whales. Initial results from Marine Mammal Stranding Center scientists indicate that at least two of the humpback deaths in New Jersey probably stem from vessel strikes.

Other East Coast whales are also in trouble. Minke whales and North Atlantic right whales are also experiencing Unusual Mortality Events off the East Coast since 2017. Indeed, right whales are at imminent risk of extinction as a result of entanglement in fishing gear and vessel strikes. Necropsies of minke whales indicate that many animals are suffering from infectious disease or have been impacted by human interaction. All other large whale species found off the East Coast—blue whales, fin whales, and sei whales—are also listed as endangered, and are similarly impacted by human activities while struggling to recover from industrial whaling.

Underlying these threats is the specter of climate change. Ocean warming is changing the distribution of key prey species, and large whale distributions are also shifting as they track their prey. These shifts have brought whales into greater conflict with human activities like fishing and vessels in some instances and have made animals more susceptible to malnourishment and ill health in others.

What is crystal clear about the recent news is that it's time to take practical and important actions to protect our whales:

- Science is unequivocal on the value of vessel speed restrictions in reducing deaths of large whale species and sea turtles from vessel collisions, and a 10-knot speed limit for all vessels would significantly reduce lethal ship strikes. NOAA's recently proposed regulations to keep boats 35-feet or greater in length to 10-knots in right whale habitat would meaningfully reduce vessel strike risk for North Atlantic right whales—a necessary move to save the species from extinction—and have ancillary benefits in protecting other large whales and turtles and reducing chronic ocean noise. **NOAA should expeditiously approve its vessel speed rule, and work with its partner agencies to continue to pursue additional complementary measures,** such as sector-specific vessel slow-

downs, port incentive programs to encourage year-round speed reductions, and advancing near real-time monitoring programs and technologies to improve detections of whales out on the water.

- Entanglement in vertical buoy lines associated with pot/trap fishing gear is a leading cause of death of critically endangered right whales. Entanglements are also a horrific animal welfare concern. Whales can drown almost immediately or develop excruciatingly painful wounds that ultimately result in an animal's death weeks or months later. Entanglements also result in chronic stress, illness, and an impaired ability to successfully calve. **To save the North Atlantic right whale and reduce entanglement risk for other whale species, we must significantly invest in transitioning the American lobster and Jonah crab fisheries to ropeless (on-demand) fishing systems in a way that avoids economic burden on fishermen.** Ropeless fishing systems will virtually eliminate entanglements while keeping fishermen on the water and in business.

- **We also need strong federal mitigation and monitoring requirements that protect whales and other wildlife while responsibly developing offshore wind.** We need offshore wind and we need to do it right. Offshore wind can produce significant amounts of the clean, renewable energy we need to combat climate change. It's generally stronger and more consistent than onshore wind, and can be built near major coastal cities, where more than half of the U.S. population lives and energy needs are high. We can and must ensure these wind farms are built and operated in a way that protects our ocean environment and wildlife.

**Starting our important new U.S. offshore wind industry off strong with robust proactive protections in place helps ensure we protect our valuable and vulnerable wildlife, lessens the industry's liability risk, and builds trust.**

We don't need to choose between clean energy development and wildlife protection. For example, South Fork Wind, which will power 70,000 homes and businesses in New York by the end of this year, recently adopted smart vessel speed protections and stronger mitigation and monitoring measures during noisy construction activities to help protect the critically endangered North Atlantic right whale.

We can protect the wildlife we love and advance offshore businesses responsibly. As we increasingly use our ocean, it's abundantly clear that we need to take the steps we have on hand to protect whales and other species, and to fund the necessary research and monitoring to guide our decision-making.

*For additional information, see the statement from the Marine Mammal Commission (Feb. 21, 2023). https://www.mmc.gov/wp-content/uploads/Update-on-Strandings-of-Large-Whales-along-the-East-Coast-2.21.2023.pdf*

*Republished with permission from NRDC: https://www.nrdc.org/bio/francine-kershaw/whale-strandings-emphasize-need-practical-solutions*

# 2023 NEW YORK & NEW JERSEY
## *LARGE BALEEN WHALE STRANDING SUMMARY*

| SPECIES | DATE | LOCATION | PRELIMINARY GROSS NECROPSY FINDINGS* |
|---|---|---|---|
| Humpback whale | January 7 | Atlantic City, NJ | Traumatic injury - Blunt force - Suspect vessel interaction |
| Humpback whale | January 12 | Brigantine, NJ | Probable vessel strike |
| Humpback whale | January 18 | *~52 miles offshore of* Brigantine, NJ | No examination conducted, whale did not land |
| Humpback whale | January 28 | *~12 miles offshore of* Long Beach Island, NJ | Minimal documentation, whale did not land & no examination conducted |
| Humpback whale | January 30 | Lido Beach, NY | Probable vessel strike |
| Humpback whale | February 13 | Manasquan, NJ | Suspect vessel strike |
| Minke whale | February 17 | Far Rockaway, NY | Suspect vessel strike |
| Humpback whale | February 27 | Breezy Point, NY | Not examined - on jetty - Carcass marked by lacerations consistent w/ sharp force trauma |
| Humpback whale | March 1 | Seaside Park, NJ | Suspect vessel strike (histopathology pending to determine pre- or post-mortem) |
| Humpback whale | March 22 | *~70 miles offshore of* Long Beach Island, NJ | No examination conducted, whale did not land |
| Minke whale | May 5 | Moriches, NY | There is currently no definitive cause of death for this animal. Samples will need to be sent for analysis from the Pathology team |
| Humpback whale | May 18 | Babylon, NY | Suspect vessel strike |
| Humpback whale | May 31 | Raritan Bay, NJ | Suspect vessel strike |
| Humpback whale | May 31 | East Hampton, NY | Suspect vessel strike |
| Minke whale | June 14 | Bridgehampton, NY | No confirmation if live or dead. Not seen again following initial report |
| Humpback whale | June 26 | Hempstead, NY | External examination only due to degree of decomposition |
| Humpback whale | July 18 | Staten Island, NY | Live stranded, and then freed itself. Was not reported stranded again. |
| Humpback whale | August 11 | Brookhaven, NY | Suspect vessel strike |
| Humpback whale | August 12 | Long Branch, NJ | Large hematoma, suspect vessel strike |
| Humpback whale | August 14 | Hempstead, NY | Traumatic injury - Blunt force |
| Minke Whale | August 20 | Rockaway Beach, NY | No examination conducted, whale did not land |
| Humpback whale | August 25 | Rockaway Beach, NY | Suspect traumatic injury - Blunt force |

AMSEAS is responsible for responding to all large whales that wash up on New York shores.
Part of our stranding investigations involve collecting samples and sending them to a pathologist for further examination.

*All necropsy findings and suspected causes of death are preliminary. Pathology reports may take several months or longer to come back. Biological samples have various destination points to laboratories across the country. Labs have various response times, sometimes up to a year.

Whale stranding events in New York state are managed through implementation of the Long Island Sound Large Whale Response Plan. This plan brings together all agencies and organizations that are vested in large whale stranding events to communicate objectives, strategy, and tactics among the involved parties. Basic objectives of a whale response always include ensuring the safety of the responders, the public, and the animals, collecting data according to best practice and protocols set forth by NOAA Fisheries, and disseminating information to the appropriate agencies and the public. What may seem like a simple necropsy (animal autopsy) on the beach in actuality requires many hours of planning and coordination of resources to get a team to the beach.

The Atlantic Marine Conservation Society is the Greater Atlantic Region Stranding Network partner that provides scientific support during large whale, dolphin, seal and sea turtle necropsy examinations. The team gathers life history data through measurements, reviews both the external and internal anatomy of the animal, documents any areas of interest (such as lesions, bruising, scarring, etc.), and collects biological

samples from many parts of the animal, including skin, blubber, muscle, baleen/teeth, and internal organs. This process not only provides valuable information about an animal's biology and life history, but also can offer clues about the animal's cause of death. After this exam is completed, the team reviews all the data and photographs collected, creates reports and sends processed samples to established laboratories for analysis. This review process takes weeks to several months to complete before an official cause of stranding or death is determined. Continued stranding investigations are crucial to providing environmental managers data needed to protect these threatened or endangered species through regulation updates and mitigation measures.

***NOAA Fisheries is responsible for the stewardship of the nation's ocean resources and their habitat. They have put out a statement regarding the recent whale deaths and offshore wind development:***

"At this point, there is no scientific evidence that noise resulting from offshore wind site characterization surveys could potentially cause mortality of whales. There are no known links between recent large whale mortalities and ongoing offshore wind surveys.

Offshore wind developers conduct high resolution geophysical surveys to image the ocean bottom. The noises these surveys produce may disturb marine mammals. This is why offshore wind operators have requested Incidental Harassment Authorizations to allow for Level B harassment. Level B harassment includes actions that could disturb, but not injure or kill, a marine mammal by disrupting behavioral patterns, including migration, breathing, nursing, breeding, feeding, or sheltering.

The sound from these HRG surveys are very different from seismic airguns used in oil and gas surveys or tactical military sonar. They produce much smaller impact zones because, in general, they have lower noise, higher frequency, and narrower beam-width. The area within which these sounds might disturb a marine mammal's behavior is orders of magnitude smaller than the impact areas for seismic airguns or military sonar. Any marine mammal exposure to sound from HRG surveys would be at significantly lower levels and shorter duration, which is associated with less severe impacts to marine mammals."

“A robust offshore wind industry is critical to the future of our region. The working people we represent are on the front lines of the climate crisis. They leave their homes during severe weather events including Hurricane Irene, Superstorm Sandy, and Tropical Storm Isaias in order to repower our homes, rebuild our communities, and deliver public services. They do it all while dealing with the devastation inflicted on their own homes.

Inaction simply is not an option. Developing an all of the above energy approach to a new green economy that includes offshore wind, considers the workforce of today, and creates good union jobs with family-sustaining wages is an imperative. We must all stand together to combat misinformation campaigns that are jeopardizing the future of our economy, the environment and undermining our workforce.”

— ***Ryan Stanton***, *Executive Director, Long Island Federation of Labor*

“Offshore wind energy presents us with a unique opportunity to break free from the dual environmental and economic stranglehold of fossil fuels. The increasingly urgent climate crisis – and New York’s own climate law – demands that we boost our offshore wind capabilities, and this burgeoning industry is already benefiting Long Island’s economy with good paying union jobs. To protect our environment and invest in our communities, it’s imperative that we unite and urge our elected representatives to maximize Long Island’s offshore wind potential.”

— ***Julie Tighe***, *President of the New York League of Conservation Voters*

**This publication has been funded through the generous support of the Northlight Foundation.**