

Offshore Wind Energy has been proposed, with studies and permitting underway all along the Atlantic coast. The RISAA Board of Directors has been involved in the process since all “wind farms” will have an effect - good or bad - on recreational fishing. In order to keep RISAA Members informed, the Board put this question up for discussion, and asked if any of them would tackle it in order to help all RISAA Members make their own decisions on offshore wind energy. Rich Hittinger accepted the challenge.

How can offshore wind create a positive or negative impact on recreational fishing?



by Capt. Richard Hittinger

I'd like to start my answer with a little background. I have been involved with Ocean Planning associated with wind farm development since 2008, nearly 13 years.

I believe that the Rhode Island CRMC did a good job laying the groundwork for the first offshore wind energy (OWE) project in the US, the Block Island Wind Farm (BIWF), and that, in general, the project only damaged fishing in the area during the 2 years of construction.

RISAA has been involved with this process for this entire time as well. We have provided comments to OWE developers and regulatory agencies and we have given these OWE participants many articles in the RISAA newsletter and time at our monthly seminars over the years.

RISAA has asked all developers and regulatory agencies for sampling of recreational fish in the area before, during, and after construction for at least the last 5 years, but these requests have been virtually unanswered even though the developers have spent millions of dollars on geophysical survey ships over many weeks at sea.

Recreational fishing ignored

At the same time commercial fishermen have taken a much different approach; one of a much harder opposition to these projects. The result is that OWE developers are continuing to push forward with projects that will occupy an area the size of the State of RI and they pay significantly more attention to commercial fishing and totally ignore recreational fishing, or at best, give mention to the For Hire (charter boats) sector of recreational fishing.

As an example, the Draft Environmental Impact Statement (DEIS) for the South Fork Wind Farm (SFWF) to be **located on Cox Ledge** doesn't even mention private recreational fishing and only mentions For Hire recreational fishing in passing, while an entire section is devoted to Commercial Fishing. This, even though Cox Ledge is the “Crown Jewel” of offshore recreational fishing and several hundred private recreational trips travel to Cox to fish every year.

With the wording of the question including both positive

and negative effects, I respond that there is a potential for the additional structure of wind turbines to provide additional surfaces for marine fouling organisms.

However, monopiles (one single 36' diameter pipe pounded into the seafloor), as proposed for all new turbine bases south of new England, will certainly provide much less surface area and less structure than jacketed foundations (4-legged cross braced structures) such as at Block Island Wind Farm.

To compensate for the inevitable damage caused during pile driving, developers should incorporate improvements in the scour pads at the base of turbines that could improve development of complex habitat.

This should include 3-dimensional structures such as large reef balls that will both reduce the need for large scour pads by dispersing currents near the sediment surface and make up for some

of the complex bottom habitat that is lost during installation of the monopiles and scour protection required (for reference see page 31 of the RISAA Newsletter, January 2021 issue at <https://www.risaa.org/newsletter/0121/Jan2021.pdf>).

Not only are monopiles less beneficial for marine growth, but they also are far more dangerous during installation.

A monopile foundation must not only support the weight of the full turbine system, but it must resist the twisting and turning stresses caused by the wind acting on the long arm of this single shaft from the height of the hub to the bottom of the ocean.

This is much different than the jacketed foundation which relies on four legs nailed into the seafloor at an outward angle with cross bracing between the legs for additional support. (to page 21)



South Fork Wind Farm at Cox Ledge



Turbine foundations: jacketed in front vs monopile in rear (energy.gov photo)