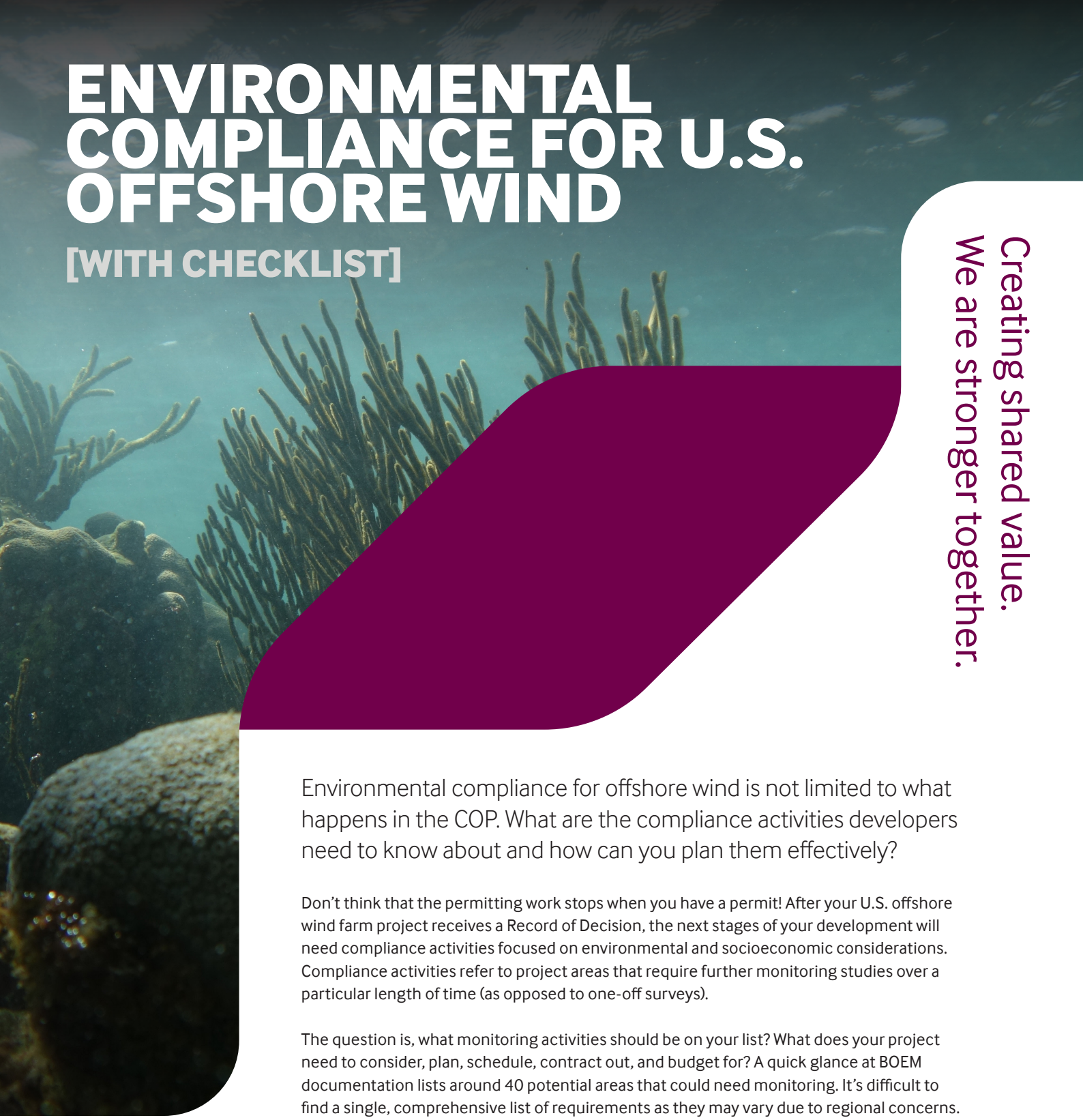

ENVIRONMENTAL COMPLIANCE FOR U.S. OFFSHORE WIND

[WITH CHECKLIST]

Creating shared value.
We are stronger together.

Environmental compliance for offshore wind is not limited to what happens in the COP. What are the compliance activities developers need to know about and how can you plan them effectively?

Don't think that the permitting work stops when you have a permit! After your U.S. offshore wind farm project receives a Record of Decision, the next stages of your development will need compliance activities focused on environmental and socioeconomic considerations. Compliance activities refer to project areas that require further monitoring studies over a particular length of time (as opposed to one-off surveys).

The question is, what monitoring activities should be on your list? What does your project need to consider, plan, schedule, contract out, and budget for? A quick glance at BOEM documentation lists around 40 potential areas that could need monitoring. It's difficult to find a single, comprehensive list of requirements as they may vary due to regional concerns. What is vital for one wind farm may not be necessary for another.

With this in mind, we dug deeper into the potential compliance monitoring that might be needed for your offshore wind farm development, specifically as it pertains to federal permitting. Depending in which navigable waterways the proposed work will take place, compliance may need to be met depending on what state laws exist and with the state regulators. However, we are only focusing on the federal permits in this article.

To help you keep track, we've created a checklist of the compliance monitoring areas in question.

DELIVERING GREAT WORK FOR CLIENTS

ENVIRONMENTAL COMPLIANCE FOR U.S. OFFSHORE WIND [WITH CHECKLIST]

Managing environmental compliance effectively

By the time you plan your construction schedule, you will need to have determined what environmental compliance studies are required for your project, considering **pre-construction, construction, and post-construction** phases.

Although monitoring may seem like a task to address after permitting, you should be wary of leaving compliance planning until the late stages of your project. The regulatory agencies may ask you about your proposed activities early on, so knowing how and what you will need to monitor is important.

In the permitting stage (i.e., during COP preparation), you will submit environmental monitoring plans to BOEM and NMFS for approval. You will design a monitoring program defining how study activities will be repeated over several years. In the construction stage, you will implement the plans that have been approved and analyze the data that has been collected. With effective environmental compliance monitoring, unexpected project costs and work delays can be prevented, and environmental impacts can be reduced.

This table shows the studies you may need to consider. Note that not all of the areas to consider will require full-scale repeat studies; some may need individual assessments – such as sediment dispersion modeling – and some may need full, in-field monitoring programs over five years.

Environmental Compliance Checklist – Offshore Wind Farm Projects

RESOURCE	POTENTIAL ENVIRONMENTAL COMPLIANCE CONSIDERATIONS
☐ Water Quality 	An Oil Spill Response Plan (OSRP) for offshore and a Stormwater Pollution Prevention Plan (SWPPP), including erosion and sedimentation control measures, and a Spill Prevention, Control, and Countermeasures (SPCC) Plan for onshore compliance are generally required.
☐ Coastal and Terrestrial Habitat 	On-site monitoring may be required throughout the project lifespan. Requirements generally include a Stormwater Pollution Prevention Plan (SWPPP), including erosion and sedimentation control measures, and a Spill Prevention, Control, and Countermeasures (SPCC) Plan.
☐ Marine Mammals and Sea Turtles 	BOEM generally recommends two annual cycles of vessel-based or aerial surveys, plus two annual cycles of PAM (passive acoustic monitoring). Exclusion and monitoring zones for marine mammals and sea turtles will be established for pile driving and high-resolution geophysical (HRG) survey activities, typically requiring the use of qualified and National Oceanic and Atmospheric Administration (NOAA)-approved protected species observers.
☐ Avian and Bats 	BOEM recommends two annual cycles of surveys (boat-based, aerial or high-res digital aerial). Additional surveys pre, during and post construction may be required as well as the preparation of an avian management plan for listed onshore and offshore species.
☐ Benthic and Shellfish 	Additional multiple-year monitoring could be required by BOEM and NMFS, as well as a plan for no-anchoring areas during all phases of construction and operation.
☐ Finfish and Essential Fish Habitat 	Site-specific benthic habitat assessments and spawning surveys for various fish species are generally required as well as a plan for vessels prior to construction to identify no-anchor areas, sensitive areas, or other areas to be avoided.

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☐ **Noise**	BOEM and NMFS can implement mitigation measures (although noise is not regulated under federal law). NMFS can require an incidental take authorization and the incorporation of noise attenuation systems such as bubble curtains, as appropriate.
☐ **Visual impact**	A Visual Impact Assessment (VIA) could be requested by BOEM.
☐ **Cultural (Marine and Terrestrial)**	Additional offshore and onshore archaeological analysis and/or investigation should be considered to further assess potential sensitive areas during construction. Incorporate an unanticipated Discovery Plan for implementation that will include stop-work and notification procedures to be followed if a cultural resource is encountered during installation.
☐ **Socioeconomic and Environmental Justice**	Develop a detailed plan to meet state and local requirements that include traffic and other control measures for onshore construction and operation and maintenance (O&M).
☐ **Commercial and Recreational Fisheries**	Develop and implement a comprehensive communication plan during offshore construction to inform all mariners, including commercial and recreational fishermen, and recreational boaters, of construction activities and vessel movement. Consider involvement with collaborative science with the commercial and recreational fishing industries pre-, during, and post-construction.
☐ **Navigation**	Develop and implement a comprehensive communication plan during offshore construction for submitting information to the U.S. Coast Guard (USCG) to issue Local Notice to Mariners and the Department of Defense (DoD) during offshore installation activities.

Three key tips:

1) Be aware that U.S. regulatory processes for offshore wind permitting are still in relatively early stages and may continue to evolve.
They are also quite different from those in other regions outside the U.S. This means that it can sometimes be hard to anticipate what regulatory challenges you might experience and factoring this into your overall project schedule will be beneficial.

2) Clarity is key.
BOEM are responsible for putting documentation out for public review, so project documentation needs to clearly communicate any issues to BOEM and be easily understood by other stakeholders, including the public.

3) Contracts for environmental consultancy are sometimes awarded to different partners at different stages.
Consider what this may mean for your project in terms of information sharing and access to data. For example, in the case of a request for supplemental reports, developers must open lines of communication between their original environmental consultant and a third party, or liaise between them. Similarly, developers need to work with BOEM to ensure that the data collected follows their data sharing guidelines. It is important to plan for this in the early stages of your project.

You are welcome to contact our team via Kelly Knee, Executive Director, Ocean Science. You might also like to read our other articles on offshore regulatory permitting across the U.S. offshore wind industry here