



**Comment Processing
America the Beautiful,
National Oceanic and Atmospheric Administration**

December 28, 2021

Re: Request for information on NOAA actions to advance the goals and recommendations in the report on Conserving and Restoring America the Beautiful

Submitted via regulations.gov - Docket No. NOAA-HQ-2021-0109

The American Clean Power Association (“ACP”)¹ welcomes the opportunity to provide comments on the National Oceanic and Atmospheric Administration’s (“NOAA”) request for information on advancing the goals of *Conserving and Restoring America the Beautiful* (“Report”). We support NOAA’s intent to further the early actions and progress to meet the conservation objectives of the Report, as well as the Biden Administration’s national goal to deploy clean energy and combat the threat of climate change.

Offshore wind development can help meet the President’s goal of conserving at least 30 percent of U.S. lands and waters by 2030. ACP and its members support NOAA’s goals to conserve marine biodiversity and reach “30 by 30,” which includes addressing climate change threats and accounting for coexistence of infrastructure, conservation, and natural resources. Conversely, we encourage NOAA to ensure that its conservation mandates are balanced against the need for carbon-free offshore wind energy. When considering impacts of offshore wind on its trust resources, including essential fish habitat and protected species, NOAA should account for (a) the role offshore wind plays in mitigating the climate threat to such resources; and (b) the potential co-benefits of offshore wind structures to such resources. As it moves forward with actionable steps from the Report, NOAA should factor in the effects of climate change and

¹ American Clean Power represents the renewable energy industry in the United States, bringing together over 1,000 member companies, 120,000 members, and a national workforce located across all 50 states. By uniting the power of wind, solar, storage, and transmission companies and their allied industries, we enable the transformation of the U.S. power grid to a low-cost, reliable, and renewable power system. Additional information is available at <http://www.cleanpower.org>. The American Wind Energy Association (AWEA), which is referenced in these comments, merged into ACP on January 1, 2021.



climate inaction in order to meet the administration’s goals for conservation and the need for mass-scale clean energy deployment to reduce further climate harms.

I. Offshore wind energy helps to curb climate change and meet clean energy goals for the nation.

Renewable energy deployment will play a central role in combatting climate change and is central to achieving the President’s climate goals. Recent studies from Lawrence Berkeley National Lab,² Princeton University,³ and the University of California at Berkeley⁴ have found that achieving the carbon reductions by 2050 that scientists believe are necessary to avert the worst impacts of climate change requires annual deployment of renewable energy, primarily wind and solar, to increase by two to three and a half times the level achieved in 2020. This requires expanding deployment of wind and solar from roughly 32 gigawatts deployed in 2020 to 60-70 gigawatts per year, every year, for the next couple of decades.

In his first climate change executive order (EO), signed on January 27, 2021, President Biden called deployment of clean energy technologies such as wind and solar energy “critical for climate protection,” and established that “[i]t is the policy of my Administration to organize and deploy the full capacity of its agencies to combat the climate crisis to implement a Government-wide approach that reduces climate pollution in every sector of the economy... especially through innovation, commercialization, and deployment of clean energy technologies and infrastructure.” The EO further called on the Administration to “accelerate the deployment of clean energy and transmission projects in an environmentally stable manner.”⁵

Even though most of today’s wind energy is from onshore facilities, the U.S. has a vast offshore wind energy resource with a technical potential of more than 2,000 gigawatts (GW), or

² Williams, J. et al., *Carbon-Neutral Pathways for the United States* (2021) available at <https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2020AV000284>, Wiser, R., et al., *Halfway to Zero: Progress towards a Carbon-Free Power Sector* (2021) available at <https://emp.lbl.gov/publications/halfway-zero-progress-towards-carbon>.

³ Jones, R., *Net-Zero America: Potential Pathways, Infrastructure, and Impacts* (2020) available at <https://www.evolved.energy/post/princeton-net-zero-america-project>.

⁴ Univ. of California-Berkeley, Goldman School of Public Policy, *The 2035 Project* (2021) available at <https://www.2035report.com/electricity/downloads/>.

⁵ Executive Order 14008, available at <https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad>.



nearly double the nation's current electricity use. Once tapped, this resource will incent tens of billions of dollars in investment and economic benefits, create tens of thousands of jobs, and forge a clear path to a clean energy economy.⁶ The offshore wind industry is poised to begin to fulfill its promise to bring substantial economic benefits to the nation.

NOAA's existing authorities to facilitate offshore wind energy deployment directly address the threat of climate change to America's natural resources. As NOAA is well aware, reducing greenhouse gas (GHG) emissions is crucial to maintain the ocean ecosystem, given the well-documented and substantial changes to regional oceanography that are associated with climate change (e.g., preferred range shifts, increased nutritional stressors like algal blooms, and prey abundance). Measures which function to mitigate climate change will have positive impacts to ocean resources, protected species, and the habitat on which they rely. Just one MWH of wind energy avoids 0.75 tons, or 1,500 pounds, of carbon dioxide emissions on average. Deploying 30 GW (or 30,000 MW) of offshore wind energy by 2030 would result in significant emissions reductions, resulting in long-term beneficial ocean impacts. Therefore, we urge NOAA to fully account for the reduction in GHG emissions that would result from deploying offshore wind in implementing its Report.

We also note that current conservation mapping does not wholly take into consideration the effects of climate change and the mitigation effects that offshore wind can provide. Measuring progress towards the Report goals should be done through annual review, and should include factors which actively mitigate and reduce threats to conservation, such as offshore wind deployment and renewable energy offsets.

⁶ See, e.g., Federal Revenue and Economic Impacts from BOEM Offshore Wind Leasing, American Clean Power Association (December 2021), available at <https://cleanpower.org/resources/federal-revenue-and-economic-impacts-from-boem-offshore-wind-leasing/> (finding, *inter alia*, that just BOEM's planned leasing in the next 4 years can create as much as \$120B in clean energy investment and as many as 128,000 construction jobs and 48,000 operations and maintenance jobs).



II. Co-benefits from offshore wind energy contribute to the coexistence of conservation and natural resources.

In establishing a conservation strategy, NOAA should also take into account the multiple uses the marine ecosystem has, their ability to coexist with activities such as offshore wind, and the significant economic and community benefits offshore wind can provide. It is well-documented that offshore wind projects can coexist with existing marine habitats to maintain a healthy ecosystem, and may even be beneficial to certain fish and invertebrate species.⁷ Artificial reef structures that create new habitats typically attract marine organisms to colonize the structures and eventually increase the overall biological diversity of the area. There are many instances where the long-term impact of structures on the Outer Continental Shelf have created habitat, foraging area, or protection for post-recruitment fishery resources by creating more availability of artificial reef.⁸ We urge NOAA to consider the co-benefits of offshore wind structures can attract fish, invertebrates, and marine mammals, which would persist for the life of a project and bolster conservation of a healthy seascape.

We believe much more research can be done to analyze the potential co-benefits of offshore wind and marine ecosystems, and we look forward to working with NOAA—as well as the U.S. Department of Energy (DOE) and the Bureau of Ocean Energy Management (BOEM)—to expand this body of knowledge and apply it to key policy decisions.

III. Offshore wind can benefit surrounding communities and encourage community participation.

A. Community Benefits

Because wind is a zero-marginal cost resource, development of offshore wind projects will tend to reduce energy prices – especially in the New England and Mid-Atlantic regions

⁷ Bureau of Ocean Energy Management, *Vineyard Wind 1 Offshore Wind Energy Project Supplement to the Draft Environmental Impact Statement* (June 2020) at 3-24 (“BOEM anticipates that the impacts of the presence of structures on finfish, invertebrates, and EFH may be neutral to beneficial. These impacts would be permanent as long as the structures remain.”).

⁸ See BOEM Study 2020-041, *Comparison of Environmental Effects from Different Offshore Wind Turbine Foundations* (2020); see also: Jennifer Wilson and Michael Elliot, *The Habitat-creation Potential of Offshore Wind Farms*, *Wind Energ.* 2009; 12:203–212; M. Sayer and M Baine, *Rigs to Reefs: A Critical Evaluation of the Potential for Reef Development Using Decommissioned Rigs, Underwater Technology*, 2002; 25, Vol. 2:93-98.



where prices are the highest in the lower 48 states.⁹ As a zero marginal-cost resource, offshore wind bids into the market close to or at zero dollars. These price effects result in lower electricity prices for consumers.

Offshore wind projects can also provide long-term benefits to communities as an environmental justice benefit, as offshore wind begins to displace fossil fuels.¹⁰ For example, an April 2018 report by LBNL identified several studies demonstrating economic benefits from reducing pollution via deployment of offshore wind along Atlantic Coast: “Buonocore et al. (2016) find that offshore wind in the Mid-Atlantic would provide between \$54/MWh to \$120/MWh of health and climate in benefits in 2017 and Millstein et al. (2017) find central estimates of air quality benefits from existing onshore wind worth \$26/MWh, \$110/MWh, and \$44/MWh in the Northeast, the Mid-Atlantic, and the Southeast regions, respectively, in 2015.”¹¹ These improvements are economically beneficial to the region and the local communities.

Additionally, because future offshore wind facilities would produce fewer GHG emissions than fossil-fuel-powered generating facilities with similar capacities, the reduction in GHG emissions due to future offshore wind projects (or avoidance of increased GHG emissions from equivalent fossil-fuel-powered energy production) would result in long-term beneficial impacts on demographics, employment, and economics. Offshore wind development has had a tremendous impact on the revitalization of coastal communities in Europe, turning once underutilized ports and their surrounding communities into booming economies. The east coast of the U.S. can and should benefit comparably,¹² and these benefits will not be limited to geographic scope for evaluating demographic, economic, and employment impacts.

⁹ See EIA, ELECTRIC POWER ANNUAL 2018 Table 2.10 (2019), <https://www.eia.gov/electricity/annual/pdf/epa.pdf>.

¹⁰ SDEIS at 3-65.

¹¹ See Andrew Mills et al., *supra* note 157, at 11 (citing Jonathan J. Buonocore, et al., *Health and Climate Benefits of Offshore Wind Facilities in the Mid-Atlantic United States*, ENVTL. RES. LETTERS 11 (7): 074019 (2016), <https://doi.org/10.1088/1748-9326/11/7/074019>; and Dev Millstein, et al., *The Climate and Air-Quality Benefits of Wind and Solar Power in the United States*, NATURE ENERGY 2 (9): 17134 (2017), <https://doi.org/10.1038/nenergy.2017.134>).

¹² See e.g. INT’L RENEWABLE ENERGY AGENCY, OFFSHORE WIND INVESTMENT, POLICIES AND JOB CREATION 6–7 (2018), https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2018/Sep/IRENA_offshore_wind_note_G7_2018.pdf?la=en&hash=B186614D923AB1F0A07D7285612C4B037057A0C0.



B. Community Participation

Collaborative and inclusive approach to conservation leads to greater stakeholder engagement and coordination, and the offshore wind industry is eager to engage in these activities. We enthusiastically support early and often stakeholder engagement in the conservation process. ACP and its membership support agency methods to improve coordination and engagement among stakeholders. To appropriately address the conservation and multi-use purpose of the Report, NOAA should leverage help from states to coordinate efforts with stakeholders and provide flexibility so that good faith efforts are made to engage with other stakeholders during planning for conservation or mitigation activities.

IV. NOAA programs should be well-coordinated to ensure program efforts are not at cross purposes.

NOAA should work with BOEM, DOE, and other agencies to ensure that NOAA's efforts to conserve and reach the Administration's 30 by 30 goal are complementary and not contradictory. As NOAA is well aware, the existing multi-stage process for offshore wind development governed by the Endangered Species Act (ESA), Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens), Marine Mammal Protection Act (MMPA), Coastal Zone Management Act (CZMA), and National Environmental Protection Act (NEPA), already requires coordination between federal agencies managing the multiple resources and uses of the Exclusive Economic Zone and the Outer Continental Shelf,

It is vital that each agency is using its unique expertise to facilitate the optimal use of ocean resources to reach a net zero emissions economy by 2050. For example, NOAA should ensure that marine sanctuaries are sited in a thoughtful way that accommodates the development of a robust offshore wind industry that can support a domestic supply chain and help meet state and federal climate goals. The efforts to create marine sanctuaries and the efforts to build renewable energy generation capacity that will reduce greenhouse gas emissions and fossil fuel consumption are both effective conservation programs. Ensuring the agencies are each coordinating to avoid unhelpful overlap and to maximize helpful program coordination will be key to achieving the goals outlined in the Report. The upcoming designation process for the



Chumash Heritage National Marine Sanctuary (NMS)¹³ is just one instance where careful siting can allow NOAA’s conservation and climate objectives to complement one another and amplify the total conservation impact.

Another example is the National Marine Fisheries Service’s (NMFS) consultation with BOEM during its review of construction and operation plans (COPs) for individual offshore wind projects. ACP hopes to work with NMFS going forward to ensure that its consideration of these projects better accounts for the climate and conservation benefits of offshore wind on fishing stocks and protected species.

V. Conclusion

Offshore wind can further NOAA’s conservation goals both by playing a major role in cutting GHG emission that are driving the climate crisis, and through conservation co-benefits resulting from the installation of offshore wind turbines. We look forward to continuing to work with NOAA as it implements the objectives of the Report.

Respectfully,

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¹³ ACP will elaborate on this point in its forthcoming comments to NOAA regarding its proposed designation of the Chumash NMS. *See* Notice of Intent to Initiate Designation of CHNMS, Docket No. NOAA-NOS-2021-0080, *available at* regulations.gov.