Secretary Thomas Harris
Louisiana Department of Natural Resources
LaSalle Building
617 North Third Street
Baton Rouge, Louisiana 70802

Re: Notice of Intent for Leasing State Lands and Water Bottoms for the Exploration, Development and Production of Wind Energy

## Dear Secretary Harris:

Our organizations, National Wildlife Federation, National Audubon Society, Coalition to Restore Coastal Louisiana, Healthy Gulf, Louisiana Wildlife Federation, Orleans Audubon Society, and Taproot Earth, promote the responsible deployment of offshore wind energy in the Gulf of Mexico. Responsible offshore wind energy (i) avoids, minimizes, mitigates, and monitors adverse impacts on wildlife and habitats, (ii) minimizes negative impacts on other ocean uses, (iii) includes robust consultation with Native American tribes and communities, (iv) meaningfully engages state and local governments and stakeholders from the outset, (v) includes comprehensive efforts to avoid impacts to underserved communities, and (vi) uses the best available scientific and technological data to ensure science-based stakeholder-informed decision making.

Offshore wind offers an opportunity to combat the threats of climate change to both wildlife and communities by transitioning our energy economy to renewable sources and away from high conflict, highly damaging fossil fuels. Collectively, our organizations have a robust history of advocacy, conservation, and coastal restoration work in Louisiana, and we have worked diligently throughout the federal offshore wind permitting process to ensure best practices and responsible wildlife protections are implemented in the deployment of offshore wind in the Gulf. We have serious concerns about whether offshore wind in state waters can meet the criteria of responsible development, particularly under the current permitting regime, which lacks a robust environmental analysis and comprehensive siting process. We therefore submit our

<sup>&</sup>lt;sup>1</sup> See eNGO RFI Comments at https://www.regulations.gov/comment/BOEM-2021-0041-0025; See eNGO Call Comments at https://www.regulations.gov/comment/BOEM-2021-0077-0031; See eNGO Scoping Comments at https://www.regulations.gov/comment/BOEM-2021-0092-0017; See eNGO Draft WEA Comments at https://www.regulations.gov/comment/BOEM-2022-0036-0090; See eNGO Draft EA Comments at https://www.regulations.gov/comment/BOEM-2022-0036-0090; See eNGO PSN Comments at https://www.regulations.gov/comment/BOEM-2023-0021-0042.

comments on the Notice of Intent for Leasing State Lands and Water Bottoms for the Exploration, Development and Production of Wind Energy by the Louisiana Department of Natural Resources.<sup>2</sup>

# Environmental Considerations Specific to Louisiana's State Waters

As the state of Louisiana embarks upon the siting and deployment of offshore wind in state waters, we caution that nearshore (within 3 nautical miles) siting of turbines is unprecedented in the United States and rare in Europe, as it often poses greater risks to wildlife and habitats.

Although the Block Island Wind Farm, the first commercial offshore wind farm in the United States, is located in state waters off of Rhode Island, before the 30 megawatt project was sited, the regulating entity, the Rhode Island Coastal Resources Management Council (a corollary to the Louisiana State Mineral and Energy Board), embarked on a rigorous spatial planning initiative. This planning and adaptive management tool, the Ocean Special Area Management Plan (Ocean SAMP), has been lauded as a national model for marine spatial planning, and enabled the Council to fulfill its mandate to preserve, protect, develop, and restore coastal areas. While Block Island is the only offshore wind farm in state waters, it is located 16 miles from the mainland, and therefore does not present the same risks as a project located within the 3 nautical mile state waters boundary.

Conversely, the Nautilus Offshore Wind Project,<sup>6</sup> a proposed 25 megawatt project 2.8 miles off the coast of New Jersey, failed to proceed to development for a number of reasons, but importantly, was largely opposed by environmental groups for its poor siting and high risk to coastal wildlife and habitats. The project would have placed turbines in a critical avian migratory corridor and the large size of the turbines would have put many birds, including protected species, at risk.<sup>7</sup>

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https://www.dnr.louisiana.gov/assets/OMR/media/forms\_pubs/NOI\_Wind\_Leasing\_Rules\_for\_the\_Regist er.pdf

<sup>&</sup>lt;sup>3</sup> Rhode Island Coastal Resources Management Council (2013). Rhode Island Ocean Special Area Management Plan: Ocean SAMP - Volume 2. Report by Rhode Island Coastal Resources Management Council.

<sup>4</sup> http://www.crmc.ri.gov/aboutcrmc.html

<sup>&</sup>lt;sup>5</sup> Tetra Tech Inc. (2012). Block Island Wind Farm and Block Island Transmission System Environmental Report/Construction and Operations Plan. Report by Tetra Tech Inc.. Report for Deepwater Wind. Retrieved from

https://tethys.pnnl.gov/sites/default/files/publications/BlockIsland 2012.pdf

<sup>&</sup>lt;sup>6</sup> Formerly known as the Fishermen's Energy Atlantic City Windfarm.

<sup>&</sup>lt;sup>7</sup> Hewett, A. (2018, December 18). News: Environmental groups applaud New Jersey BPU rejection of Nautilus Offshore Wind Project. Offshore Wind Energy.

https://offshorewind.nwf.org/2018/12/news-environmental-groups-applaud-new-jersey-bpu-rejection-of-na utilus-offshore-wind-project/

In our federal advocacy, we have stressed that the unique characteristics of nearshore waters in general, in combination with the ecological importance and sensitivity of Louisiana's coastal habitat specifically, underscore the importance of making environmentally-informed siting decisions. The Gulf's nearshore and coastal waters (<20 nautical miles) contain the most biologically productive areas. During the federal comment process for siting offshore wind in the Gulf of Mexico, in which the Bureau of Ocean Energy Management (BOEM) solicits stakeholder and expert input to help inform its siting decisions, we cautioned against permitting offshore wind turbines within 20 nautical miles from shore. This science-based precautionary measure was recommended to protect coastal bottlenose dolphin populations, as well as to avoid impacts to the Gulf's billions of neotropical migrant birds, nesting colonies of coastal and marine birds, and wintering waterfowl. BOEM adopted this recommendation, along with other wildlife-focused avoidance, minimization, and mitigation measures designed to protect species in the deployment of offshore wind.

Whether the project is located in state waters or federal waters, Rhode Island or Louisiana, each location and project requires thorough analysis and scrutiny. Ultimately, our organizations evaluate projects based on whether or not they can be responsibly developed at a particular location, meaning, in part, whether or not the risks offshore wind poses to wildlife and habitat can be sufficiently avoided, minimized, and mitigated to reduce significant adverse impacts. Louisiana's wetlands and coastal waters create a productive and vital ecosystem that supports numerous species of marine mammals, sea turtles, birds, fish, invertebrates, and habitats. Our evaluation of projects in state waters will use a science-based approach to assess the unique characteristics of the Louisiana Coastal Zone to help advise the state in its siting decisions. While not an exhaustive list of environmental concerns, below, we outline several key taxa-specific considerations that should inform siting of offshore wind in state waters. For additional information on Gulf of Mexico-specific wildlife concerns, please refer to our past federal comments.<sup>1</sup>

## Marine Mammals

Over 30 marine mammal species reside in the Gulf of Mexico. Louisiana's Barataria Bay in particular is home to a well-known population of over 2,000 bottlenose dolphins. This population is made up of long-term, year-round residents who generally stay within 1.75 km of shore. This population was severely injured from the Deepwater Horizon Oil Spill. Atlantic spotted dolphins and Risso's dolphins are also sometimes found nearshore.

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<sup>&</sup>lt;sup>8</sup> Wells, R. S., Schwacke, L. H., Rowles, T. K., Balmer, B. C., Zolman, E., Speakman, T., ... & Wilkinson, K. A. (2017). Ranging patterns of common bottlenose dolphins Tursiops truncatus in Barataria Bay, Louisiana, following the Deepwater Horizon oil spill. *Endangered Species Research*, 33, 159-180.

Additionally, there is a resident, breeding population of sperm whales that resides just south of, and within 100 km from, the Mississippi River Delta. Although these whales tend to prefer deeper waters, they can be found closer to shore in Louisiana and are keenly sensitive to underwater noise.

Vessel strike and underwater noise, especially from pile driving, have the potential to create serious harm for marine mammals. Additional potential threats include habitat disturbance/loss and behavioral changes leading to reduced fitness. Marine mammals in the US are all protected by the Marine Mammal Protection Act (MMPA), and endangered populations such as the endemic Rice's Whale are also protected under the federal Endangered Species Act (ESA).

#### Sea Turtles

Five of the world's seven sea turtle species inhabit the Gulf of Mexico year round, and all five of these species are protected by the ESA: leatherbacks (*Dermochelys coriacea*) (endangered), loggerheads (*Caretta caretta*) (threatened), Kemp's ridleys (*Lepidochelys kempii*) (critically endangered), green (*Chelonia mydas*) (threatened), and hawksbill (endangered) (*Eretmochelys imbricata*).<sup>10</sup>

Adults can be found feeding and resting in surface waters of coastal Louisiana, and therefore are vulnerable to vessel strike and altered foraging and migrating patterns. Coastal Louisiana in particular is considered a hot spot for sea turtle foraging activity, especially for Kemp's ridleys and loggerheads. In recent years, these two species have been making a nesting comeback as well, with loggerhead nesting sites in Grand Isle and Kemp's ridley sites in the Chandeleur Islands. The Mississippi Sound is a crucial developmental habitat for juvenile Kemp's ridleys. During the cooler months especially (December-May), this species tends to migrate to very nearshore waters on both sides of the Mississippi River Delta. As many as 82 percent of juvenile Kemp's ridley sea turtles use the northern Gulf of Mexico to forage with high site fidelity, and individuals from this crucial

<sup>&</sup>lt;sup>9</sup> Davis, R. W., Ortega-Ortiz, J. G., Ribic, C. A., Evans, W. E., Biggs, D. C., Ressler, P. H., ... & Würsig, B. (2002). Cetacean habitat in the northern oceanic Gulf of Mexico. *Deep Sea Research Part I: Oceanographic Research Papers*, *49*(1), 121-142.

<sup>&</sup>lt;sup>10</sup> NOAA Fisheries (2022, June 28). *Frequent Questions: Northern Gulf of Mexico Sea Turtle Strandings*. NOAA.

https://www.fisheries.noaa.gov/southeast/marine-life-distress/frequent-questions-northern-gulf-mexico-se a-turtle-strandings

<sup>&</sup>lt;sup>11</sup> Hart, K. M., Iverson, A. R., Fujisaki, I., Lamont, M. M., Bucklin, D., & Shaver, D. J. (2018). Marine threats overlap key foraging habitat for two imperiled sea turtle species in the Gulf of Mexico. *Frontiers in Marine Science*, *5*, 336.

<sup>&</sup>lt;sup>12</sup>Coleman, A. T., Pitchford, J. L., Bailey, H., & Solangi, M. (2017). Seasonal movements of immature Kemp's ridley sea turtles (Lepidochelys kempii) in the northern Gulf of Mexico. *Aquatic Conservation: Marine and Freshwater Ecosystems*, *27*(1), 253-267.

population can be found along the shore across Louisiana's coast. <sup>13</sup> Juveniles and post-hatchlings are also associated with Sargassum mats, which they use for food and protection. <sup>14</sup> Sargassum habitat around the Gulf Coast, including parts of Louisiana, has been designated as Critical Habitat for loggerhead sea turtles. <sup>15</sup> In addition, recent tracking surveys show that adult leatherback sea turtles that nest in the Caribbean use Louisiana waters as a residential area. <sup>16</sup> Areas of high risk of vessel collision should be identified, and appropriate mitigation measures taken to avoid take of endangered sea turtles during installation and operation.

#### Birds

An estimated 100 million migratory, nesting, and wintering birds rely on Louisiana's coast annually. These include species listed and protected under the ESA, such as Piping Plover (Charadrius melodus) (endangered), Red Knot (Calidris canutus rufa) (threatened), and Eastern Black Rail (Laterallus jamaicensis) (threatened), as well as candidate species such as the Golden-winged Warbler (Vermivora chrysoptera). Migratory birds are also protected under the Migratory Bird Treaty Act (MBTA). LDNR should explicitly consider foraging movements around colonial waterbird nesting rookeries (e.g., by Brown Pelican, tern species, heron and egret species), near-shore movements of shorebirds (e.g., sandpipers and plovers), noise and construction effects on marshbirds (e.g., rails and bitterns), and spring and fall migratory movements (including ecological differences thereof) of trans-Gulf migratory species (e.g., passerines, long-distance migratory shorebirds, and various waterbirds and seabirds) when evaluating potential risk of offshore wind development to birds.

#### **Fishes**

Nearshore Louisiana waters are home to two coastal fish species that are protected under the ESA: giant manta rays (*Manta birostris*) (threatened) and Gulf sturgeon (*Acipenser oxyrinchus*) (threatened). As with several sea turtle and marine mammal species, the giant manta ray is often

<sup>&</sup>lt;sup>13</sup> Gredzens, C., & Shaver, D. J. (2020). Satellite Tracking Can Inform Population-Level Dispersal to Foraging Grounds of Post-nesting Kemp's Ridley Sea Turtles. Frontiers in Marine Science, 7. doi:10.3389/fmars.2020.00559

<sup>&</sup>lt;sup>14</sup> Witherington, B., Hirama, S., & Hardy, R. (2012). Young sea turtles of the pelagic Sargassum-dominated drift community: habitat use, population density, and threats. *Marine Ecology Progress Series*, *463*, 1-22.

<sup>&</sup>lt;sup>15</sup>NOAA Fisheries (2022a, April 18). *Loggerhead Turtle – Northwest Atlantic Ocean DPS Critical Habitat Map.* NOAA.

https://www.fisheries.noaa.gov/resource/map/loggerhead-turtle-northwest-atlantic-ocean-dps-critical-habit at-map

<sup>&</sup>lt;sup>16</sup> Evans, D. R., Valverde, R. A., Ordoñez, C., & Carthy, R. R. (2021). Identification of the Gulf of Mexico as an important high-use habitat for leatherback turtles from Central America. *Ecosphere*, *12*(8), e03722. <sup>17</sup> https://delta.audubon.org/news/birds-louisiana%E2%80%99s-coast-landscape-vital-habitats

seen around the Mississippi River Delta (Farmer at al. 2002);<sup>18</sup> this area should be avoided. Part of easternmost coastal Louisiana has been designated as Critical Habitat for the Gulf sturgeon.<sup>19</sup>

#### Benthic

Benthic habitat in Louisiana state waters is a mosaic of fine sediment deposits, mixes of fine and sand sediments, and sand deposits which serve as habitat to a variety of organisms that are the base of the marine food web, including molluscs, annelids, and crustaceans. <sup>20,21</sup> Marine seagrass meadows occur east of the Mississippi River, behind the Chandelur Islands and provide critical nursery and refugia habitat. <sup>22</sup> Louisiana's benthic habitats have been impacted by oil and gas infrastructure, shell mining, bottom trawling, the development of seasonal Gulf Hypoxia, and the Deepwater Horizon Oil Spill. Planning and restoration efforts are underway to address oil spill injuries to these habitats and areas where these efforts are underway should be avoided. <sup>23</sup>

### Coastal Restoration Efforts

Coastal land loss in Louisiana has spawned an extensive effort to restore and sustain a thriving coastal ecosystem. Overall the last ten years, hundreds of millions of dollars of state and federal monies have been invested in the planning, design and implementation of projects throughout Louisiana's coastal area. Amany of these projects rely on using sediment from the Mississippi River, the Ship Shoal borrow area in south-central Louisiana at the 10-meter isobath, and sediment dredged from within the basins. It is essential for the success of the restoration program and the protection of the past and future state and federal investments that the location of planned restoration projects, the borrow source sites, and the sediment pipeline corridors be avoided in the

<sup>&</sup>lt;sup>18</sup> Farmer, N. A., Garrison, L. P., Horn, C., Miller, M., Gowan, T., Kenney, R. D., ... & Kajiura, S. (2022). The distribution of manta rays in the western North Atlantic Ocean off the eastern United States. *Scientific Reports*, *12*(1), 6544.

NOAA Fisheries. (2022, April 18). Gulf Sturgeon Critical Habitat Map and GIS Data. NOAA.
 https://www.fisheries.noaa.gov/resource/map/gulf-sturgeon-critical-habitat-map-and-gis-data
 Khalil, Syed M., et al. "Surficial sediment distribution maps for sustainability and ecosystem restoration of coastal Louisiana." *Shore & Beach* 86.3 (2018): 21.

<sup>&</sup>lt;sup>21</sup> Farrell, Douglas H. "Benthic molluscan and crustacean communities in Louisiana." *Rice Institute Pamphlet-Rice University Studies* 65.4 (1979).

<sup>&</sup>lt;sup>22</sup> Handley, L., D. Altsman, and R. DeMay. "Seagrass status and trends in the northern Gulf of Mexico: 1940–2002." (2007): 1-267.

<sup>&</sup>lt;sup>23</sup> Deepwater Horizon Natural Resource Damage Assessment Trustees. (2016). Deepwater Horizon oil spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement.

<sup>&</sup>lt;sup>24</sup> Coastal Protection and Restoration Authority. Fiscal Year 2024 Annual Plan: Integrated ecosystem restoration and hurricane protection in coastal Louisiana.

<sup>&</sup>lt;sup>25</sup> Gregory W. Stone, et al. "Ship Shoal as a Prospective Borrow Site for Barrier Island Restoration, Coastal South-Central Louisiana, USA: Numerical Wave Modeling and Field Measurements of Hydrodynamics and Sediment Transport." *Journal of Coastal Research*, vol. 20, no. 1, 2004, pp. 70–88. *JSTOR*, http://www.jstor.org/stable/4299269. Accessed 8 June 2023.

siting of wind turbine locations. Consultation with the Coastal Protection and Restoration Authority should be done to avoid conflicts with restoration efforts.

## Avoidance: The First Step in the Mitigation Hierarchy

Siting is the most critical stage for implementing an efficient and responsible development process that avoids the greatest impacts to imperiled species and sensitive habitats, and increases the efficiency for developers and agencies by avoiding costly delays due to avoidable conflicts. By frontloading the environmental assessments of sites and directing developers to appropriate locations for development, permitting agencies can avert the most detrimental impacts of development—particularly those that can not be effectively mitigated or minimized through project design. The state can more efficiently use resources to identify lower conflict sites for development at the earliest stages of the process to avoid major impacts, so that later stages, such as coastal use permit evaluations, focus on minimizing and mitigating impacts. Since developers take risks and devote time and money to nominate a site for a lease, developers also benefit from the increased regulatory certainty that comes with strong guidance on siting that steers them towards more practical, vetted sites.

At the federal level, BOEM initiates its offshore wind leasing through its site identification process, which identifies Wind Energy Areas (WEAs). The process is started either through an unsolicited lease request from a developer or BOEM's own initiative (likely due to explicit interest from nearby states). BOEM may choose to issue a Request for Interest in Commercial Leasing (RFI), which helps the agency determine whether there is competitive interest in an area, as well as glean initial information from stakeholders about site suitability (though this step is not required). A Call for Information and Nominations (Call) is the required process BOEM uses to synthesize the information gathered (either through the RFI or other conversations with stakeholders and experts) into a Call Area. Comments in response to the Call help BOEM to further winnow the area under consideration and to develop WEAs. Recently, BOEM has developed an additional comment opportunity in which it solicits feedback on the suitability of the identified WEAs, and provides the public with an explanation of the spatial modeling and decision making process. Before leasing, BOEM also conducts an Environmental Assessment on the impacts associated with leasing (but not developing) the WEAs as well directs a process (Proposed Sale Notice and Final Sale Notice) to determine stipulations and conditions of the lease.

Through this rigorous process, BOEM gradually eliminates areas from consideration that pose significant resource conflicts in order to identify areas where any risks to wildlife and habitats (as well as other resources) can be reasonably minimized and mitigated. This process has changed over

time, and with stakeholder feedback and over a decade of learning, BOEM has increased opportunities for stakeholder input and transparency into decision making regarding suitability of areas for offshore wind development. LDNR should adopt the lessons learned from the federal process and ensure the state process also incorporates ample opportunities for robust stakeholder feedback and transparency at the earliest stages of the site selection process to help avoid unsuitable areas for offshore wind development.

# Louisiana Department of Natural Resources Obligations Under the State and Local Coastal Resource Management Act

Under the State and Local Coastal Resources Management Act (SLCRMA) of 1978, Louisiana's comprehensive coastal planning law, the Louisiana Department of Natural Resources (LDNR) is tasked with administering the coastal management program. <sup>26</sup> In conjunction with the Louisiana Department of Wildlife and Fisheries (LDWF), LDNR created the Coastal Use Guidelines, which serve as legally enforceable criteria for granting, conditioning, denying, revoking, or modifying coastal use permits and are based on the following environmental guidelines dictated by the SLCRMA:

- 1. To encourage the full use of coastal resources while recognizing it is in the public interest of the people of Louisiana to *establish a proper balance between development and conservation*.
- 2. Recognize that *some areas of the coastal zone are more suited for development than other areas* and hence use guidelines which may differ for the same uses in different areas.
- 3. Require *careful consideration of the impacts of uses on water flow, circulation, quantity, and quality* and require that the discharge or release of any pollutant or toxic material to the water or air of the coastal zone be within all applicable limits established by law, or by federal, state, or local authority.
- 4. Recognize the *value of special features of the coastal zone* such as barrier islands, fishery nursery grounds, recreation areas, ports and other areas where development and facilities are dependent upon the utilization of or access to coastal waters, and areas particularly suited for industrial, commercial, or residential development and manage those areas so as to enhance their value to the people of Louisiana.

<sup>&</sup>lt;sup>26</sup> SLCRMA of 1978 §214.26.

- 5. Minimize, whenever feasible and practical, detrimental impacts on natural areas and wildlife habitat and fisheries by such means as encouraging minimum change of natural systems and by multiple use of existing canals, directional drilling, and other practical techniques.
- 6. Provide for adequate corridors within the coastal zone for transportation, industrialization, or urbanization and encouraging the location of such corridors in already developed or disturbed areas when feasible or practicable.
- 9. *Minimize detrimental effects of foreseeable cumulative impacts on coastal resources* from proposed or authorized uses.<sup>27</sup>

To adhere to the goals of the SLCRMA, the Coastal Use Guidelines consequently state that, "It is the policy of the coastal resources program to avoid the following adverse impacts. To this end, all uses and activities shall be planned, sited, designed, constructed, operated, and maintained to avoid to the maximum extent practicable<sup>28</sup> significant:

- 1. reductions in the natural supply of sediment and nutrients to the coastal system by alterations of freshwater flow;
- 2. adverse economic impacts on the locality of the use and affected governmental bodies;
- 3. detrimental discharges of inorganic nutrient compounds into coastal waters;
- 4. alterations in the natural concentration of oxygen in coastal waters;
- 5. destruction or adverse alterations of streams, wetland, tidal passes, inshore waters and water bottoms, beaches, dunes, barrier islands, and other natural biologically valuable areas or protective coastal features;
- 6. adverse disruption of existing social patterns;
- 7. alterations of the natural temperature regime of coastal waters;
- 8. detrimental changes in existing salinity regimes;

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<sup>&</sup>lt;sup>27</sup> Louisiana Revised Statute §49.214.27 (emphasis added).

<sup>&</sup>lt;sup>28</sup> The "maximum extent practicable" qualifier requires a balancing test to determine if the proposed use conforms with the qualified standard. The permitting authority must perform a "systematic consideration" of the pertinent information pertaining to the use, site and impacts and weigh their relative significance. If the activity does not conform to the qualified standard, it may still be allowed if 1) the public benefits resulting from the proposed use would clearly outweigh the adverse impacts resulting from noncompliance with the qualified standard; 2) There are no feasible and practical alternative locations, methods, and practices for the use that are in compliance with the qualified standard; and 3)The use is water dependent *or* would result in significant public benefits *or* would serve an important regional, state, or national interest.: 43 La. Admin. Code, Part 1 § 701; LDNR, Guide to Developing Alternatives and Justification Analyses for Proposed Uses within the Louisiana Coastal Zone (Mar. 2020), available at: <a href="http://www.dnr.louisiana.gov/assets/OCM/permits/NAJ/Combined\_Document\_rev1\_Mar2020.pdf">http://www.dnr.louisiana.gov/assets/OCM/permits/NAJ/Combined\_Document\_rev1\_Mar2020.pdf</a>. It is in the best interest of LDNR to perform a siting analysis to determine if there are "feasible and practical alternative locations" should the activity not comply with the qualified standard.

- 9. detrimental changes in littoral and sediment transport processes;
- 10. adverse effects of cumulative impacts;
- 11. detrimental discharges of suspended solids into coastal waters, including turbidity resulting from dredging;
- 12. reductions or blockage of water flow or natural circulation patterns within or into an estuarine system or a wetland forest;
- 13. discharges of pathogens or toxic substances into coastal waters;
- 14. adverse alteration or destruction of archaeological, historical, or other cultural resources;
- 15. fostering of detrimental secondary impacts in undisturbed or biologically highly productive wetland areas;
- 16. adverse alteration or destruction of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands;
- 17. adverse alteration or destruction of public parks, shoreline access points, public works, designated recreation areas, scenic rivers, or other areas of public use and concern;
- 18. adverse disruptions of coastal wildlife and fishery migratory patterns;
- 19. land loss, erosion, and subsidence;
- 20. increases in the potential for flood, hurricane and other storm damage, or increases in the likelihood that damage will occur from such hazards;
- 21. reduction in the long term biological productivity of the coastal ecosystem."29

## Suggested Changes to to the Wind Leasing Rules

We find that the leasing process, which authorizes LDNR through the State Mineral and Energy Board (SMEB) to award leases for wind energy, does not sufficiently adhere to the goals of the SLCRMA, nor the Coastal Use Guidelines, as it does not include an environmentally robust siting process. We urge the LDNR to use this opportunity to amend Louisiana Administrative Code 43:V. Chapter 7 to enhance the oversight of LDNR regarding nominations of state water for wind leases, the examination and evaluation of those wind leases, and the submission of bids on state tracts offered for wind lease (§709, §711, §713, §715, and 717). The nine step leasing process predominantly puts the onus on the applicant to evaluate the site for environmental concerns, with

<sup>&</sup>lt;sup>29</sup> 43 La. Admin. Code, Part I § 701.

<sup>&</sup>lt;sup>30</sup> Steps in the wind leasing process under La. Admin. Code Title 43 Part V § 705; 1) registration by applicants with the Office of Mineral Resources; 2) pre-nomination research; 3) nomination of state lands and water bottoms for wind lease; 4) examination and evaluation of the nomination; 5) issuance of an advertisement of the state tract to be offered for a wind lease and a request for bids; 6) submission of bids; 7) examination and evaluation of bids; 8) award of the state wind lease; and 9) issuance and execution of the state wind lease contract.

little transparent, empirical, or systematic oversight by LDNR or meaningful input from stakeholders.

## Section 709 Pre-Nomination Research [Formerly LAC 43:I.1009]

Additional guidance should be provided by LDNR to direct wind development to the most suitable, lower resource-conflict locations. When an applicant prepares to nominate state waters for lease, they conduct "pre-nomination research" to determine whether the lands or water bodies fall into one of six categories including 1) Louisiana Wildlife and Fisheries Commission/Louisiana Department of Wildlife and Fisheries Property; 2) School Indemnity Lands; 3) Tax Adjudicated Lands; 4) Vacant State Lands; 5) White Lake; and 6) Legal Areas. The applicant must also ensure that the site is not subject to other active or non-released land agreements. The applicant is not given any other guidance that would advise on the suitability of the site with respect to potential environmental impacts from wind energy.

Other renewable energy permitting agencies have taken a proactive approach to siting that directs applicants towards low conflict, low environmental value sites to avoid high-impact ecological consequences to important resources. By starting with this guidance, the permitting authorities provide increased regulatory certainty to potential developers, and protect the interests of the state. As we outlined above, at the federal level, BOEM's siting process includes a gradual winnowing of potential areas for commercial lease sales, incorporating multiple opportunities for stakeholder and expert input and analysis. While this process is, in part, dictated by federal law, in its discretion BOEM has elected to incorporate additional processes that enhance its environmental review, including employing the National Centers for Coastal Ocean Science (NCCOS) to create a suitability model that identifies optimal areas for offshore while minimizing conflicts.

States and federal agencies have endeavored to create and implement more robust siting processes. Generally, these efforts to identify suitable sites for renewable energy fall into three categories:

1. Spatial Planning Approach: uses mapping software to identify lowest and highest priority areas for development, factoring in variables including but not limited to, environmental sensitivity, critical habitat, presence of endangered or threatened species, migratory corridors, visual impacts, proximity to environmental justice communities, wind energy resource, bathymetry, slope, sediment type, geohazards, etc. The NCCOS modeling is an example of using a spatial planning approach at the federal level, but this approach has also been used at the state level by the New York State Energy Research & Development

Authority in their Great Lakes Wind Energy Feasibility Study<sup>31</sup> and the Rhode Island Ocean SAMP mentioned above.<sup>32</sup> Environmental Nonprofits have also assisted in these efforts for terrestrial renewable siting. Notably, mapping efforts such as Siting Renewables Right employ spatial planning to synthesize layers of wildlife, land-use, and engineering data to inform siting decisions.<sup>33</sup>

- 2. Tiered Approach: uses a decision framework that collects information in increasing detail to evaluate risk and make siting and operational decisions. The tiered approach provides the opportunity for evaluation and decision making at each tier, enabling a developer and regulatory agency to proceed or abandon the project or collect additional information. The US Land-Based Wind Energy Guidelines are structured under this framework at the federal level, where questions at each tier help determine environmental risks at the landscape and project scales. The Southern Nevada District Office of the Bureau of Land Management implemented a tiered prioritization process to evaluate renewable energy applications on public lands and direct development towards high priority areas and away from low priority sites. The tiers evaluate regulatory compliance, local considerations, and resource considerations before ranking applications as high, medium, or low priority. This approach encourages developers to make environmentally informed siting decisions because high priority applications would move through the leasing process faster and are less likely to face conflict and litigation, while development in low priority areas is disincentivized.
- 3. Thematic Approach: This approach enumerates the principles, themes, or guidelines that direct the regulatory agency in its decision making, however, the approach does not provide an explicit decision framework. The 2009 Offshore Siting Principles and Guidelines for Wind Development in the Great Lakes were an early example of this approach in the offshore wind space. <sup>36</sup> Though the Ocean SAMP uses the spatial modeling

<sup>&</sup>lt;sup>31</sup> New York State Energy Research and Development Authority (NYSERDA). 2022. "New York Great Lakes Wind Energy Feasibility Study," NYSERDA Report Numbery 22-12. Prepared by the National Renewable Energy Laboratory, Advisian Worley Group, and Brattle Group/Pterra Consulting. nyserda.ny.gov/publications

<sup>&</sup>lt;sup>32</sup> Rhode Island Coastal Resources Management Council (2013). Rhode Island Ocean Special Area Management Plan: Ocean SAMP - Volume 2. Report by Rhode Island Coastal Resources Management Council.

<sup>&</sup>lt;sup>33</sup>https://www.nature.org/en-us/what-we-do/our-priorities/tackle-climate-change/climate-change-stories/sit e-wind-right/

<sup>&</sup>lt;sup>34</sup> US Fish and Wildlife Service (USFWS) (2012). U.S. Fish and Wildlife Service Land-Based Wind Energy Guidelines. Report by US Fish and Wildlife Service (USFWS).

<sup>&</sup>lt;sup>35</sup>https://www.blm.gov/sites/blm.gov/files/Nevada\_SNDO\_IM-SNDO-2020-001\_Renewable\_Energy\_Priority.pdf

<sup>&</sup>lt;sup>36</sup> Great Lakes Commission (2009). Offshore Siting Principles and Guidelines for Wind Development on the Great Lakes. Great Lakes Wind Collaborative.

approach mentioned above, it also enumerates a set of general policies including, "... that the preservation and restoration of ecological systems shall be the primary guiding principle upon which environmental alteration of coastal resources will be measured. Proposed activities shall be designed to avoid impacts and, where unavoidable impacts may occur, those impacts shall be minimized and mitigated."<sup>37</sup>

We strongly encourage LDNR to employ one or multiple of these siting approaches to better guide applicants in their pre-nomination research. Identifying inappropriate sites for development and guiding applicants away from high conflict, high ecological value locations provides greater certainty to developers that their leasing process is less likely to face environmental and legal challenges.

Section 711 Nomination of State Lands and Water Bottoms for Wind Lease [Formerly LAC 43:I.1011] and Section 717 Submission of Bids on State Tract Offered for Wind Lease [Formerly LAC 43:I.1017]

LDNR requires that the applicant attend a pre-nomination meeting with the Office of Mineral Resources with a packet that includes:

(7) a summary of the environmental issues including, but not limited to, avian and baseline noise levels, the environmental impact of the placement of wind turbines and other equipment necessary for the exploration, development and production of wind energy, and the steps proposed to minimize the environmental impact, along with any supporting environmental impact documentation;<sup>38</sup>

This same information is also required to be submitted during the bidding process.<sup>39</sup> Although applicants are not limited to only provide the information included on this list, LDNR has the ability to *require* applicants to conduct baseline research that is critical for future monitoring, minimizing, and mitigating of impacts. LDNR is missing an opportunity at a pivotal point in the offshore wind development process. At *minimum*, LDNR should ensure the applicant addresses the environmental concerns enumerated in Section 701 of the Louisiana Administrative code to ensure compliance with SLCRMA. Notably, LDNR should require applicants to provide information to help the agency evaluate the site for the potential of significant impacts to:

<sup>&</sup>lt;sup>37</sup> Rhode Island Coastal Resources Management Council (2013). Rhode Island Ocean Special Area Management Plan: Ocean SAMP - Volume 1. Report by Rhode Island Coastal Resources Management Council

<sup>38 43</sup> La.Admin. Code, Part I § 711.

<sup>&</sup>lt;sup>39</sup> 43 La.Admin. Code, Part I § 717.

- Destruction or adverse alterations of streams, wetland, tidal passes, inshore waters and
  waterbottoms, beaches, dunes, barrier islands, and other natural biologically valuable areas
  or protective coastal features;
- 10. Adverse effects of cumulative impacts;
- II. Detrimental discharges of suspended solids into coastal waters, including turbidity resulting from dredging;
- 15. Fostering of detrimental secondary impacts in undisturbed or biologically highly productive wetland areas;
- 16. Adverse alteration or destruction of unique or valuable habitats, critical habitat for endangered species, important wildlife or fishery breeding or nursery areas, designated wildlife management or sanctuary areas, or forestlands;
- 18. Adverse disruptions of coastal wildlife and fishery migratory patterns;
- 20. Reduction in the long term biological productivity of the coastal ecosystem. 40

Section 713 Examination and Evaluation of Nomination for Wind Lease [Formerly LAC 43:I.1013]

Under the current regulations, the Secretary of LDNR has the authority to "evaluate the wind lease nomination pursuant to R.S. 41:1733 and determine whether the proposed wind lease is appropriate." First, we encourage LDNR to make public the criteria used by the Secretary to evaluate, "the environmental impact of the placement of wind turbines and other equipment necessary for the exploration, development, or production of energy from wind..."

Second, we urge LDNR to enhance its intra- and inter-agency coordination to assist in the evaluation of environmental impacts of proposed leases. It is our understanding that while SMEB is directed to issue leases with approval from the Secretary, arequires some environmental data from applicants, and indicates in its regulations that it will evaluate environmental impacts, SMEB does not employ environmental scientists to conduct that evaluation. We also understand that coordination is limited with internal departments, such as the Office of Coastal Management, which administers Coastal Use Permits and does conduct environmental review, and is completely

 $<sup>^{\</sup>mbox{\tiny 40}}$  43 La. Admin. Code, Part I  $\S$  701.

<sup>&</sup>lt;sup>41</sup> 43 La. Admin. Code, Part I § 713.

<sup>42</sup> LA Rev Stat § 41:1733

<sup>43</sup> LA Rev Stat § 41:1733

<sup>44 43</sup> La.Admin. Code, Part I § 711

<sup>&</sup>lt;sup>45</sup> LA Rev Stat § 41:1733

separate from the lease process. We strongly advise coupling these processes and ensuring that expert level scientists and analysts assist in environmental evaluations.

Further, we advise that other agencies should also be consulted early to advise on siting decisions at the lease stage, such as the LDWF, the US Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and the National Oceanic and Atmospheric Administration (NOAA).

Section 715 Advertisement of State Tract Offered for Wind Lease and Request for Bids [Formerly LAC 43:I.1015]

The leasing and bidding process is a unique opportunity to require the potential lessee to adhere to environmental standards as a condition of the lease. In our national advocacy, for example, we leverage the comment opportunity during the Proposed Sale Notice to request BOEM include lease stipulations to hold the lessee to high environmental standards and, when multi-factor bidding is used, to incorporate bid credits that promote stakeholder engagement and environmental mitigation funding.<sup>46</sup>

Under the current framework, LDNR already incorporates language to require compliance with wind energy standards:

The state wind lessee and state wind lease operator shall be required, in the state wind lease contract, to take measures to reduce risk to the state, including but not limited to, effecting compliance with any and all wind energy standards established by the American National Standards Institute (ANSI), the American Wind Energy Association (AWEA),<sup>47</sup> the International Electrotechnical Commission (IEC), and any other entity responsible for establishing wind industry consensus standards. Standards for wind energy development/operations include, but are not limited to:

- a. wind turbine safety and design;
- b. power performance;
- c. noise/acoustic measurement;
- d. mechanical load measurements;
- e. blade structural testing;
- f. power quality; and
- g. siting.<sup>48</sup>

<sup>&</sup>lt;sup>46</sup> See eNGO PSN Comments at https://www.regulations.gov/comment/BOEM-2023-0021-0042.

<sup>&</sup>lt;sup>47</sup>As of 2021, the American Wind Energy Association is now the American Clean Power Association.

<sup>&</sup>lt;sup>48</sup> 43 La. Admin. Code, Part I § 715.

We strongly encourage LDNR to develop, in consultation with experts and stakeholders, a set of environmentally protective standards to be incorporated as lease stipulations. As state leasing in Louisiana would be precedent setting given that all but one currently planned and leased offshore wind projects reside in federal waters farther out to sea, it is unlikely that current best practice recommendations for mitigation used by BOEM, the industry, and environmental groups will fully capture the unique needs to responsibly develop state waters. Nevertheless, we can generally recommend the following categories of restrictions that seek to address some of the major risks posed by offshore wind to wildlife and habitats.

- **Birds:** Avian impacts are likely to be high in nearshore waters given birds' use of the northern Gulf of Mexico and Louisiana's coast, especially for seabirds, <sup>49</sup>

  Nearctic-Neotropical migratory landbirds, <sup>50</sup> and shorebirds. <sup>51</sup> As such, LDNR should coordinate with avian experts and wildlife agencies to determine the breadth and magnitude of impacts offshore wind may pose to these populations, including to species listed under the ESA. Upon consultation, it is likely that suggested stipulations would include: siting restrictions, operational targeted curtailment, turbine height restrictions, lighting restrictions, collision monitoring requirements, commitments to using best available minimization technology, and commitments to data transparency.
- Marine Mammals: Consultation with cetacean experts and wildlife agencies is highly recommended to develop lease stipulations, particularly considering the vulnerability of coastal dolphin populations and the vulnerability of marine mammals to vessel strikes and noise impacts resulting from offshore wind development. Consequently, protective lease stipulations would likely include vessel speed restrictions (particularly in locations and during seasons of highest risk), noise restrictions and requirements to implement noise attenuation technologies during construction, commitments to use quiet foundations, seasonal and/or time of day restrictions on noisy activities, use of real-time passive acoustic monitoring, requirements for protected species observers, required separation distances, use of exclusion zones, and mandatory reporting of sightings and detections.
- Sea Turtles: Given the imperiled statuses of sea turtles and the difficulty of detecting them visually and acoustically, stipulations would likely include speed restrictions (particularly

 <sup>&</sup>lt;sup>49</sup> Remsen, JV, BP Wallace, MA Seymour, DA O'Malley, and EI Johnson. 2019. The regional, national, and international importance of Louisiana's coastal avifauna. Wilson Journal of Ornithology 131:221-242.
 <sup>50</sup> Rappole, JH, and MA Ramos. 1994. Factors affecting migratory bird routes over the Gulf of Mexico.
 Bird Conservation International 4:251-262.

<sup>&</sup>lt;sup>51</sup> Withers, K. 2002. Shorebird use of coastal wetland and barrier island habitat in the Gulf of Mexico. The Scientific World Journal 2:514-536.

through areas of visible jellyfish aggregations or floating vegetation lines or mats), requirements for protected species observers, required separation distances, use of exclusion zones, and mandatory reporting of sightings and detections. Consultation with sea turtle experts and wildlife agencies is essential to protect these species.

• Adaptive Management and Mitigation Funding: Developers should be required to prepare adaptive management strategies and plans based on ongoing monitoring of the project. Data collection is the cornerstone of adaptive management that allows for iterative reflection on minimization and mitigation measures, and the "adaptation" of those measures based on objective standards or "triggers" that are biologically meaningful. We urge LDNR to impose lease stipulations to require comprehensive baseline and post-construction monitoring, data sharing, and the implementation of an adaptive management framework. The leasing process is also an opportune time to require the lease holder to commit to funding mitigation and or research relevant to impacts of offshore wind to wildlife.

## Conclusion

In 2022, Louisiana approved its first Climate Action Plan to drive the state towards net zero greenhouse gas emissions by 2050 and safeguard its vulnerable coasts and resources. As part of that action plan, the state intends to "advance equitable, efficient, and sustainable siting and permitting process for new energy infrastructure projects" including offshore wind. The plan recognizes that to achieve this goal, "[o]ur state's siting and permitting processes must be updated to ensure that new projects are equitably developed. Meeting our climate goals will also require revisiting Louisiana's existing practices and regulations that guide the development of new and expanded industrial facilities." Incorporating our recommendations is an important step towards implementing a more responsible development process that holistically considers the issue of siting at the earliest stages of the process to avoid the detrimental pitfalls of inappropriate siting of projects.

Although developing offshore wind at speed is important to mitigating climate change, poor processes and high conflict projects could erode support for this important clean energy source and ultimately undermine the industry's future in Louisiana. As discussed above, nearshore projects often have the highest level of conflict with human and natural resources. Prior to issuing leases,

<sup>&</sup>lt;sup>52</sup> Governor John Bel Edwards, Louisiana Climate Action Plans: Climate Initiatives Task Force Recommendations to the Governor, pg 109, (2022). https://gov.louisiana.gov/assets/docs/CCI-Task-force/CAP/Climate\_Action\_Plan\_FINAL\_3.pdf

Louisiana should undertake the recommended assessments to determine whether offshore wind can be responsibly developed in state waters.

Our organizations hope to engage with LDNR in an ongoing dialogue to improve this process. We appreciate the opportunity to comment on the NOI and offer our sincere partnership to ensure that responsible siting of offshore wind occurs in Louisiana for the benefit of its people and the protection of its wildlife and habitats.

Sincerely,

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