

# 2021 West Coast Wind Update

*By John Benson*

*July 2021*

## 1. Introduction

I was not totally surprised when I heard that the current administration was opening up two new areas for California to build offshore wind farms. The signals have been there that the state wanted to do this for a couple of years, and several of these projects are in the early planning stage.

The new administration is taking a positive approach to permitting offshore wind projects. President Biden's VP, Ms. Harris is a former Senator (etc.) from California, so opening our state's waters was just a matter of time.

My last two posts on these potential projects are described and linked below.

**2021 Offshore Wind – West Coast, Turbines...:** *This post will cover West Coast activity, a new Mid-Atlantic leadership organization, and recent developments for off-shore turbines.*

<https://energycentral.com/c/cp/2021-offshore-wind-%E2%80%93-west-coast-turbines-and-other-developments>

**California Offshore Wind (2019):** *In a 2019 post I indicated that there were no active projects on the U.S. West Coast. Although that is still basically true, there is quite a bit of early-stage activity on the California coast. This post reviews that activity, and possible barriers to future development.*

<https://www.energycentral.com/c/cp/california-offshore-wind>

This post will describe the latest news on political and other progress on the West Coast Projects.

## 2. The Need for Windpower

As I was mostly done with this post, one of our newspapers published an article about why we really need windpower, and sooner rather than later.

Climate change has already thrown California many curve balls, and this will continue into the future.

*California's energy stock is in a uniquely California conundrum. Intense drought conditions are exhausting the state's supply of hydroelectricity, which begs the question of whether we can rely on water-generated power long-term in a hotter and drier California.<sup>1</sup>*

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<sup>11</sup> By The Sacramento Bee Editorial Board, "If droughts continue, California can't rely on hydroelectricity. But there's another solution," June, 23, 2021, <https://www.sacbee.com/opinion/editorials/article252287273.html>

*In 2019, during a non-drought year, water provided 17% of the state's power, according to the California Energy Commission. In 2015, during the throes of the last drought, it generated 6%.*

*This year's outlook for hydroelectric power is already grim. Hydro supplies are down 40%, according to Bloomberg researchers. The Bee's Dale Kasler reported last week that historically-low water levels at Lake Oroville, one of California's largest reservoirs, could trigger the first closure of the Edward Hyatt Power Plant since it was built in the 1960s.*

*A reliable power supply is critical to help Californians avoid the health dangers posed by extreme temperatures. The past week drove that reality home. A record-setting heat wave prompted the state's grid manager, the California Independent System Operator, to issue Flex Alerts over consecutive days. For the second time in less than a year, Californians were asked to conserve electricity.*

*Thankfully there weren't any rolling blackouts this time. But even with greater preparation and more storage, nothing is guaranteed.*

*High temperatures are returning again this week — with the hottest months still ahead — and that means the demand on electricity will keep spiking.*

*The answer to our problems is not in rivers or lakes but in the ocean. Last month, the Biden administration announced plans to build roughly 380 wind turbines in federal waters off the California coast. Eventually, the turbines will generate 4,600 megawatts — enough to power 1.6 million homes. This was a breakthrough for California, where progress has been slow on offshore wind development, and nonrenewable sources like natural gas still provide most of our power...*

### **3. Recent Political Moves**

*Secretary of the Interior Deb Haaland, National Climate Advisor Gina McCarthy, Under Secretary of Defense for Policy Dr. Colin Kahl, and California Governor Gavin Newsom today announced an agreement to advance areas for offshore wind off the northern and central coasts of California. This significant milestone is part of the Biden-Harris administration's goal to create thousands of jobs through the deployment of 30 gigawatts of offshore wind by 2030.<sup>2</sup>*

*These initial areas for offshore wind development could bring up to 4.6 GW of clean energy to the grid, enough to power 1.6 million homes.*

*The Department of the Interior, in cooperation with the Department of Defense and the State of California, has identified an area ("the Morro Bay 399 Area") that will support 3 gigawatts of offshore wind on roughly 399 square miles off California's central coast region, northwest of Morro Bay. The Department of the Interior is also advancing the Humboldt Call Area as a potential Wind Energy Area (WEA), located off northern California. These identified areas will enable the build out of a significant new domestic clean energy resource over the next decade or more.*

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<sup>2</sup> U.S. Department of the Interior Press Release, "Biden-Harris Administration Advances Offshore Wind in the Pacific", May 25, 2021, <https://www.doi.gov/pressreleases/biden-harris-administration-advances-offshore-wind-pacific>

*"I believe that a clean energy future is within our grasp in the United States, but it will take all of us and the best-available science to make it happen. Today's announcement reflects months of active engagement and dedication between partners who are committed to advancing a clean energy future," said Secretary of the Interior Deb Haaland. "The offshore wind industry has the potential to create tens of thousands of good-paying union jobs across the nation, while combating the negative effects of climate change. Interior is proud to be part of an all-of-government approach toward the Biden-Harris administration's ambitious renewable energy goals."*

*Today's announcement comes after years of collaboration between the Departments of the Interior and Defense to find areas offshore the central coast of California that are compatible with the Department of Defense's training and testing operations. The Bureau of Ocean Energy Management (BOEM) issued a Call for Information and Nominations for offshore wind on October 19, 2018, for three areas off the central and northern coasts, including Humboldt and Morro Bay.*

*The Department of Defense engages in significant testing, training and operations off the coast of California that are essential to national security. The Department of the Interior acknowledges the critical nature of current and future military testing, training and operations and acknowledges that ensuring the operational integrity thereof is a national security imperative. Interior's Bureau of Ocean Energy Management will work with the Department of Defense to ensure long-term protection of military testing, training and operations, while pursuing new domestic clean energy resources.*

*"Tackling the climate crisis is a national security imperative and the Defense Department is proud to have played a role in this important effort," said Dr. Colin Kahl, Under Secretary of Defense for Policy. "The Defense Department is committed to working across the U.S. government to find solutions that support renewable energy in a manner compatible with essential military operations. Throughout this effort, the Defense Department has worked tirelessly with the White House, the Department of the Interior, and the State of California to find solutions that enable offshore wind development while ensuring long-term protection for testing, training, and operations critical to our military readiness. The Defense Department applauds this step and looks forward to continued coordination to address the climate crisis."*

*In addition to contributing to the goals of the Biden-Harris administration, the development of offshore wind can help California reach its goal of carbon free energy by 2045, create good-paying, union jobs, and foster investments in coastal communities. Offshore wind resources are typically stronger and more consistent than land-based wind and is especially strong in the evening hours when solar production drops off, ensuring that it can make an important contribution to California's electric grid...*

*BOEM, in partnership with California, will hold an Intergovernmental Renewable Energy Task Force meeting on June 24 to discuss the identified areas off the north and central coasts as potential WEAs. Following the task force meeting, the WEAs can be finalized and will undergo environmental analysis; BOEM will also undertake government-to-government tribal consultation. The processes for the northern and central coasts will then be merged in a Proposed Sale Notice (PSN) for one lease sale auction, targeted for mid-2022.*

The meeting referenced in the last paragraph of the above press release apparently occurred on June 21. The article below described the result of this meeting.

*Offshore wind generation along the California coast is reportedly a federal and state priority, yet progress toward actual development is moving in a non-linear fashion following the latest negotiations between various agencies.<sup>3</sup>*

*The next steps in the process were outlined at a June 21 workshop convened by the Bureau of Ocean Energy Management in which several other agencies, including the California Energy Commission, participated.*

*Most notable among the developments are the expansion of the existing Morro Bay Call Area into a new call area known as The Morro Bay 399 Call Area and the decision to take the Diablo Canyon Call Area completely off the table...*

*The new Morro Bay 399 Call Area includes “two small areas not in the original Morro Bay Call Area,” BOEM’s Jean Thurston-Keller explained during the virtual meeting. Originally, it was a 311-square-mile area.*

*Because the Morro Bay Call Area has been expanded, the approval process must start over, beginning with a new call for public comment.*

*The approval process for both call areas will continue on two separate, parallel tracks, she explained, until a proposed sale notice is issued. This will also provide developers who have not yet indicated an interest in being considered as lessees for one or both areas with an opportunity “to get their finger in the hat,” said Thurston-Keller. She added that more interest is anticipated, especially given the announcement from the White House.*

*The new call will be published “very soon,” which Thurston-Keller said might be within the next two weeks, or before a July 13 intergovernmental task force meeting.*

*The precise rationale for dropping the Diablo Canyon Call Area—an area off San Luis Obispo of roughly 557 square miles—from consideration was not provided; however, military testing and training activities commonly occur along the southern and central California coasts. “DOD’s significant mission activities in the area,” according to a July 2020 CEC report published on the BOEM website, have prevented it from being considered despite the potential for such a development to use existing terrestrial infrastructure at the Diablo Canyon Nuclear Power Plant, due to be decommissioned in 2025, for grid interconnection, as NREL noted in a 2020 technical report.*

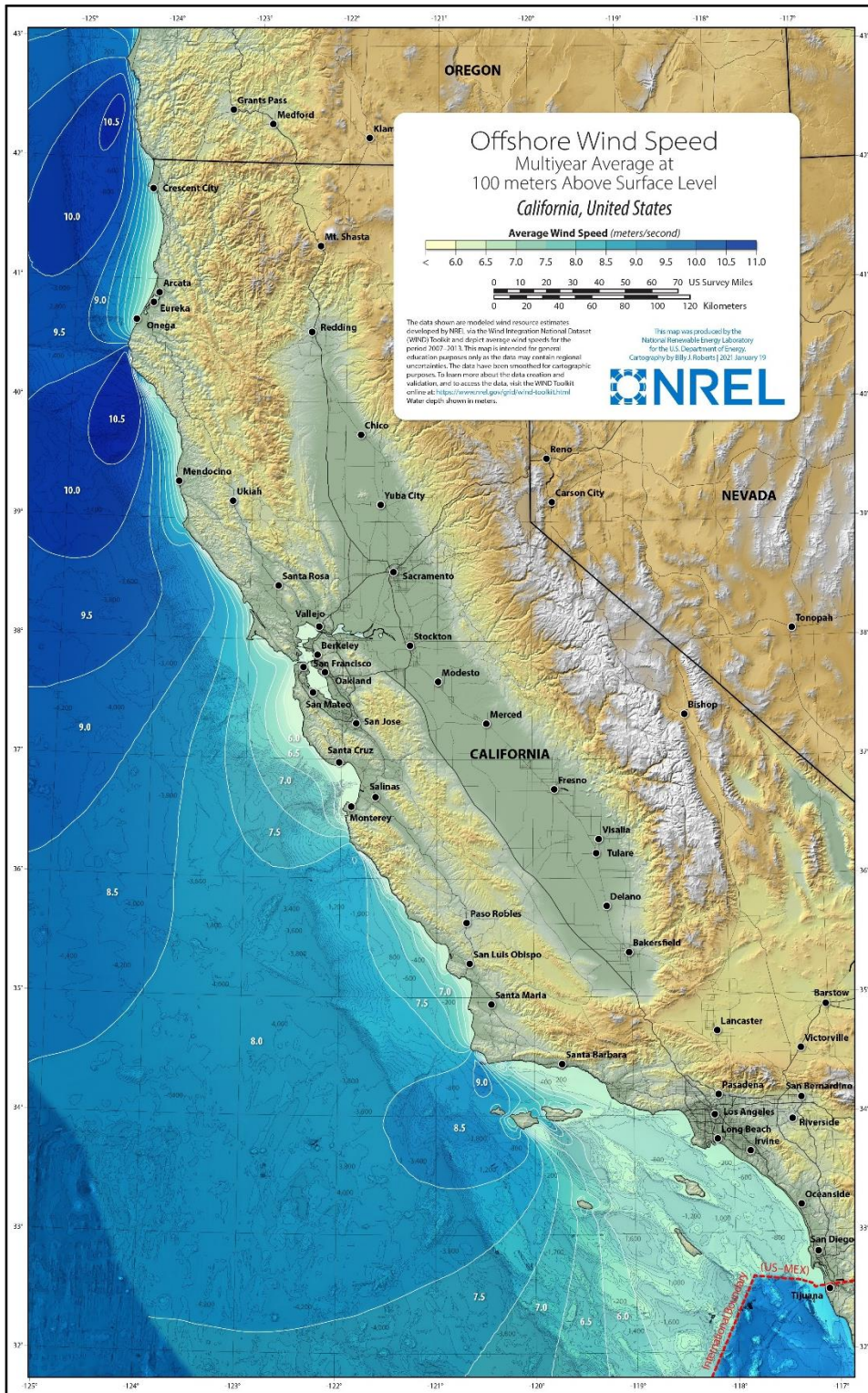
*“Should there be a desire to advance additional areas on the central coast, BOEM will consult with the Department of Defense,” John Romero, BOEM spokesperson, said in an email to California Energy Markets...*

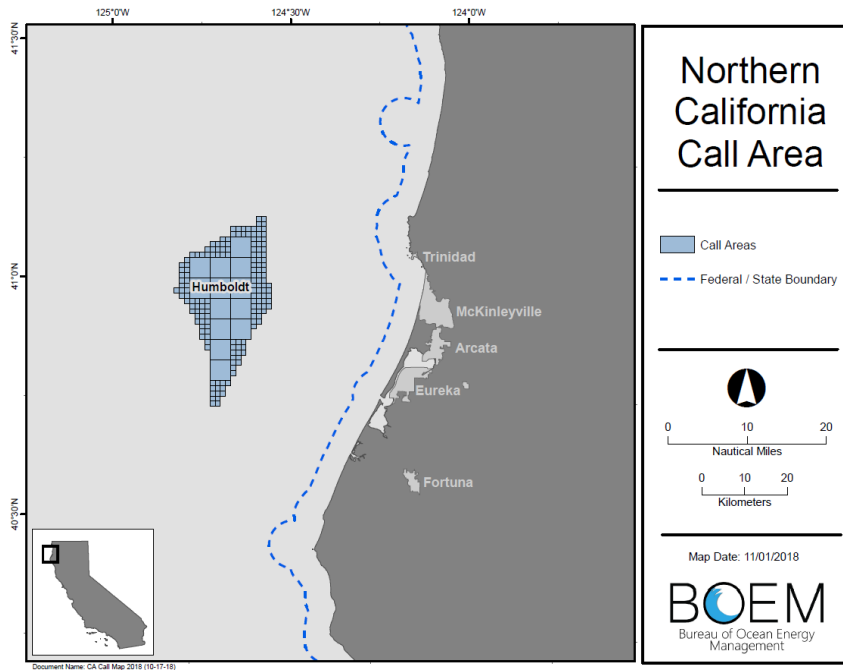
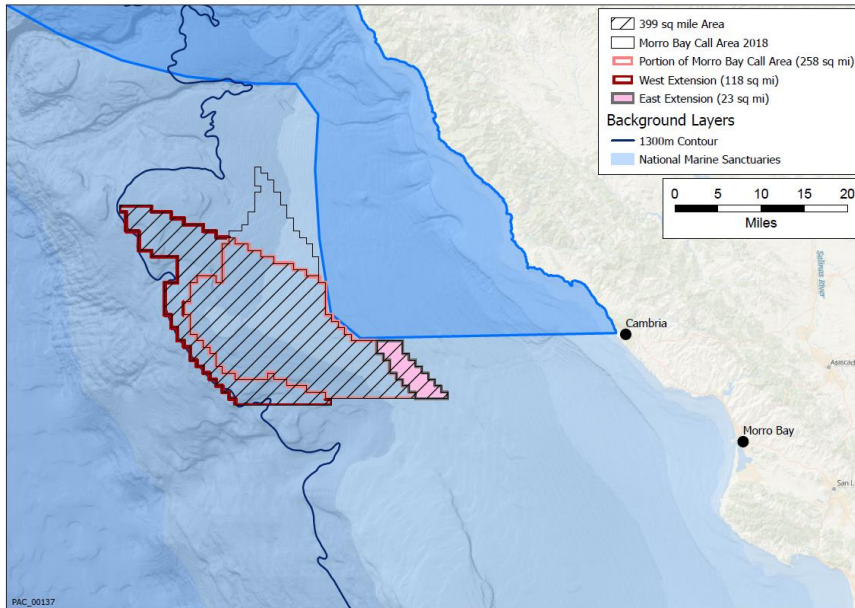
*Below is a wind-speed and depth map for California followed by maps of the two Wind Energy Areas. Note that Morro Bay is about 10 miles NW of San Luis Obispo.*

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<sup>3</sup> Linda Dailey Paulson and Jim DiPeso, California Energy Markets, “California Offshore Wind Development Process Takes Step Forward, Step Back,” Jun 25, 2021, [https://www.newsdata.com/california\\_energy\\_markets/regional\\_roundup/california-offshore-wind-development-process-takes-step-forward-step-back/article\\_20cd030c-d5ef-11eb-9a73-4b1dcfc65329.html](https://www.newsdata.com/california_energy_markets/regional_roundup/california-offshore-wind-development-process-takes-step-forward-step-back/article_20cd030c-d5ef-11eb-9a73-4b1dcfc65329.html)







Note that the above map shows the Humboldt Call Area.

## 4. Military Pilot Projects

Note that the military is supporting two pilot projects offshore from Vandenberg AFB. The wind-speed is particularly high in this area. This is caused by the coast's shape south of Point Arguello (the point sticking out west of LA and Santa Barbara). These projects are described in section 2.3 of "2021 Offshore Wind – West Coast, Turbines", linked in the Introduction.