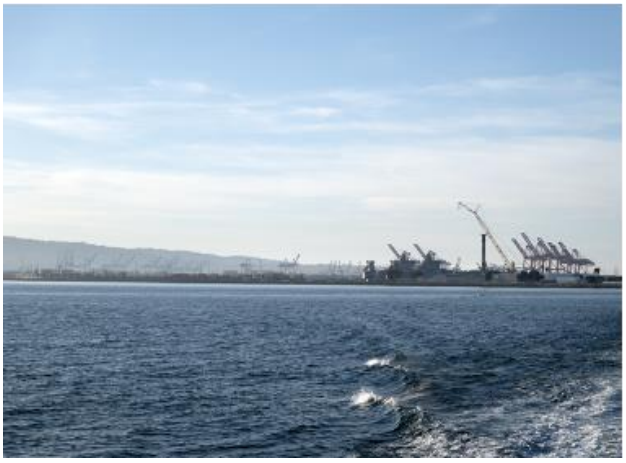


Left: Proposed site for the Pier Wind Terminal Development Project, Port of Long Beach (Cheli 2025). Right: Proposed site for the Humboldt Bay Offshore Wind Heavy Lift Multipurpose Marine Terminal Project, Wigi (Humboldt Bay) (Jacobson 2025).

Summary Report: Permitting for Offshore Wind Port Development

The new report, *Permitting for Port Infrastructure to Support Offshore Wind in California*, ("the Report," available at https://schatzcenter.org/publications/) identifies permitting and planning processes required for developing California port infrastructure to support offshore wind. This summary highlights key findings and sections from the Report.

Report scope

The Report addresses port projects designed for staging, assembling, and integrating floating offshore wind turbines—referred to as "staging and integration projects"—before turbines are towed to designated wind energy areas. It focuses on proposed projects in Wigi (Humboldt Bay)[1] and the Port of Long Beach. The Report identifies the numerous permitting, planning, and other authorizations required from federal, state, and local agencies, and focuses on the key permitting and environmental review processes that will holistically consider staging and integration projects. It also describes requirements for Tribal consultation and public involvement in key permitting processes and environmental review.

Port infrastructure for offshore wind (Section 1)

California has set ambitious planning goals to reduce greenhouse gas emissions and facilitate development of zero-emission, renewable energy resources.[2] Offshore wind development plays a key role in meeting these renewable energy goals.[3] To support offshore wind, new port

[1] Wigi is the Soulatluk (Wiyot language) name for the body of water commonly called Humboldt Bay today. In recognition of its long-held name, the Report generally uses "Wigi" instead of or in addition to "Humboldt Bay."
[2] 100 Percent Clean Energy Act of 2018 (Senate Bill 100, De León, Chapter 312, Statutes of 2018).
[3] California Energy Commission. 2021. 2021 SB 100 Joint Agency Report – Achieving 100

infrastructure capable of staging, assembling, and integrating floating turbines must be built in California.[4] Wigi (Humboldt Bay) and the Ports of Long Beach and Los Angeles are among the few locations statewide with sites suitable for this infrastructure.[5] Staging and integration projects have been proposed in Wigi (Humboldt Bay) and the Port of Long Beach.[6]

Permitting, planning, and environmental review (Section 2 and Appendices A – D)
Permitting for staging and integration projects is complex, potentially requiring over 20 authorizations from four to six federal agencies, three to five state agencies, and two or more local agencies—each with distinct regulatory processes and requirements (**Section 2** and **Appendix A)**. Obtaining these authorizations is likely to take three to four years after environmental review begins, and extensions or appeals could lengthen this timeline (**Appendices C and D**).

Public trust tidelands and submerged lands management (Section 3)
Staging and integration projects will be located at least partly on public trust tidelands and submerged lands. These lands are generally managed by the California State Lands Commission, who issues leases for activities on public trust lands.[7] In some places, the Legislature granted public trust tidelands and submerged lands to local grantees like the Humboldt Bay Harbor, Recreation and Conservation District (Humboldt Bay Harbor District). Local grantees authorize activities on public trust tidelands and submerged lands granted to them instead of the California State Lands Commission.[8] However, the California State Lands Commission retains oversight authority and may still be responsible for issuing leases for certain kinds of dredging activities or for project components located on public trust lands that have not been granted to local grantees.[9]

Recent legislation (Senate Bill (SB) 286) requires the California State Lands Commission and local grantees to consider including reasonable compensatory mitigation for unavoidable

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Percent Clean Electricity in California: An Initial Assessment;

[4] Trowbridge, Matt, Jennifer Lim, Shane Phillips, Ashley Knipe (Moffatt & Nichol). 2023. California Floating Offshore Wind Regional Ports Assessment. BOEM, Report No. OCS Study BOEM 2023-010. Contract No. 140M0121D0008: 7; Shields, Matt, Aubryn Cooperman, Matilda Kreider, Frank Oteri, Zoe Hemez, Liz Gill, Ashesh Sharma, Kyle Fan, Walt Musial, Matt Trowbridge, Ashley Knipe, Jennifer Lim. 2023. The Impacts of Developing a Port Network for Floating Offshore Wind Energy on the West Coast of the United States. Golden, CO: National Renewable Energy Laboratory. NREL/TP-5000-86864.

[5] Trowbridge, California Floating Offshore Wind Regional Ports Assessment, BOEM, Section 6; Lim, Jennifer, Matt Trowbridge (Moffatt & Nichol). 2023. California State Lands Commission. AB 525 Port Readiness Plan. CSLC, Project No. 221194.

[6] Humboldt Bay Harbor, Recreation, and Conservation District. 2023. Notice of Preparation of Draft Environmental Impact Report for Humboldt Bay Offshore Wind Heavy Lift Multipurpose Marine Terminal Project (NOP); Port of Long Beach (Aspen Environmental Group). (November 30, 2023). CEQA Initial Study for the Pier Wind Terminal Development Project Port of Long Beach.

[7] Cal. Pub. Res. Code § 6301.

[8] *See* Cal. Pub. Res. Code §§ 6009, 6009.1; *City of Long Beach v. Marshall*, 11 Cal. 2d 609 (1938). The management duties of grantees and the uses permitted on granted lands are defined by the statute granting the lands to trustees, the public trust doctrine, and the California Constitution.

[9] Cal. Pub. Res. Code §§ 6009, 6009.1, 6301, 6306.

impacts to fishing and Tribal interests when issuing a lease for an "offshore wind energy project."[10] It remains somewhat unclear whether this requirement applies to staging and integration port projects.

California Coastal Act and Coastal Zone Management Act review (Section 4)
Staging and integration projects require review under the California Coastal Act and the Coastal Zone Management Act. These projects will require coastal development permits under the California Coastal Act.[11] Pursuant to SB 286, the California Coastal Commission will generally issue a consolidated coastal development permit for staging and integration projects that are in the coastal development permitting jurisdiction of both the Commission and a local government with a certified local coastal program.[12] It is somewhat unclear, but is unlikely, that the Coastal Commission will process a consolidated coastal development permit for offshore wind related projects in other circumstances. Port governing bodies with certified port master plans are likely to issue coastal development permits for projects within their jurisdiction. Generally, ports must update or amend their port master plans, and obtain certification from the Coastal Commission, before issuing coastal development permits for staging and integration projects.[13] Local governments with permitting authority may similarly need to amend their local coastal programs and obtain certification from the Coastal Commission. Under the Coastal Zone Management Act, the Coastal Commission has federal consistency review authority over staging and integration projects.[14] However, separate federal consistency review will likely be limited for projects authorized by a Coastal Commission-issued coastal development permit or those consistent with a certified port master plan.[15]

Government-to-government consultation with Tribal Nations (Section 5)
Many ports in California are located in areas of historical, cultural, economic, and environmental significance to Tribal Nations. Meaningful government-to-government consultation for staging and integration projects can help recognize Tribal Nations' sovereignty, identify impacts to Tribal interests, and develop appropriate management, avoidance, and mitigation strategies. Agencies authorizing staging and integration projects must consult with Tribal Nations under certain circumstances, including:

- **Environmental review:** Lead agencies under the California Environmental Quality Act (CEQA) must offer consultation opportunities to federally recognized and non-federally recognized Tribal Nations that are traditionally and culturally affiliated with a proposed project area.[16] It is currently unclear whether lead agencies under the National Environmental Policy Act (NEPA) are required to provide federally recognized Tribal

[10] Cal. Pub. Res. Code § 7100(b).
[11] *See* Cal. Pub. Resources Code §§ 30600, 30106.
[12] Cal. Pub. Resources Code §§ 30601.4, 30601.3.
[13] Cal. Pub. Resources Code § 30715.
[14] *See* 16 U.S.C. § 1456, Section 307 of the CZMA; Cal. Pub. Res. Code § 30330.
[15] *See* Cal. Pub. Resources Code § 30719; 15 C.F.R. § 930.6(c). *Cf. Sierra Club v. California Coastal Com.*, 35 Cal. 4th 839, 861 (2005).
[16] Cal. Pub. Res. Code §§ 21080.3.1, 21080.3.2, 21082.3, 21084.2, 21084.3.

Nations likely to be affected by a proposed project with an opportunity for consultation.[17] However, NEPA specifically allows federal agencies to designate a Tribal Nation as a joint lead agency or cooperating agency, and many federal agencies have Tribal consultation policies that require them to consult with Tribal Nations that may be impacted by an agency's action on a project.[18]

- **California Coastal Act permitting:** The California Coastal Commission's Tribal Consultation Policy requires it to consult with Tribal Nations in a variety of circumstances, including when a Commission decision on a coastal development permit, port master plan, or local coastal program would negatively impact Tribal interests.[19] It is unclear whether the Coastal Commission is subject to new requirements under SB 286 for consultation with Tribal Nations with fisheries that could be impacted by staging and integration port development projects.[20]

- **Ports and harbor districts:** Ports and harbor districts responsible for environmental review and permitting for staging and integration projects may have Tribal consultation policies or other commitments to consultation with Tribal Nations that may be impacted by staging and integration projects.

Agencies may also consider coordinated consultation and engagement for related projects, such as wind energy area development and related transmission infrastructure projects. Although federal, state, and local agencies are generally not required to enter into co-management agreements or share decision making authority, recent California legislation (Assembly Bill 1284) makes clear that certain state agencies—including the California Coastal Commission and California State Lands Commission—have authority to enter into co-governance and co-management agreements with federally recognized Tribal Nations to share responsibility, decision making, and partnership in resource management and conservation within a Tribal Nation's ancestral lands and waters.[21]

Public notice and engagement requirements (Section 6)

Staging and integration projects are likely to impact communities near ports that face diverse health, environmental, educational, economic, and accessibility burdens.[22] Public engagement can help to inform decision makers of community concerns and impacts of projects. Federal, state, and local agencies developing environmental review documents and considering permits for staging and integration projects are typically subject to public notice and engagement

[17] *See* 40 C.F.R. §§ 1501.9(c)(1), 1502.4(c), 1503.1, 1503.4(a) (Council on Environmental Quality (CEQ) regulations providing Tribal consultation requirements during NEPA review); 90 Fed. Reg. 10610-01, Removal of National Environmental Policy Act Implementing Regulations (2025) (removing CEQ regulations effective April 11, 2025); 90 Fed. Reg. 11221 (2025) (correcting original notice).
[18] 42 U.S.C. § 4336a(a).
[19] California Coastal Commission. 2018. Tribal Consultation Policy.
[20] *See* Cal. Pub. Res. Code § 30601.4(a)(4).
[21] Cal. Gov't Code § 11019.82.
[22] Shields, Impacts of Developing a Port Network for Floating Offshore Wind Energy on the West Coast, NREL.

requirements under various laws, including:

- **Environmental review:** Lead agencies under CEQA must generally provide public notice during the scoping process, after issuing draft environmental review documents, and before making a final decision on the environmental documents. Lead agencies under NEPA must provide public notice of an intent to prepare an Environmental Impact Statement (EIS) with a request for public comment and must make an EIS available to the public.[23]

- **California Coastal Act planning and permitting:** The Coastal Commission is generally required to hold a public hearing and provide notice to the public and interested parties when deciding on coastal development permits and amendments to port master plans and local coastal programs.[24] The Coastal Act and Coastal Commission regulations generally require ports with certified port master plans and local governments with certified local coastal programs to provide the public with notice of permitting and planning decisions and an opportunity to participate.

- **Ports and harbor district permitting:** Ports and harbor districts may have public noticing and review requirements that apply to the processing of permits for development within their jurisdiction.

A table below summarizes the likely roles of the key agencies involved in permitting and planning for staging and integration projects in Wigi (Humboldt Bay) and the Port of Long Beach. Additional agencies involved in the permitting and planning process for these projects are identified in **Appendix A**.

Agency	Anticipated Role
California Coastal Commission	Responsible for decision on certification of any amendments to port master plans and local coastal programs related to staging and integration projects, including the Port of Long Beach port master plan amendment. Likely to process consolidated coastal development permits for projects in areas where a certified local coastal program governs and the Coastal Commission has permitting jurisdiction, including the proposed project in Wigi (Humboldt Bay).
Humboldt Bay Harbor, Recreation and Conservation District	Lead agency under CEQA for environmental review of the Humboldt Bay Offshore Wind Heavy Lift Multipurpose Marine Terminal project. Responsible for processing a Development Permit for the project under the Humboldt Bay Harbor, Recreation, and Conservation District Act.

[23] 42 U.S.C. § 4332(C) (citing 5 U.S.C. § 552); 42 U.S.C. § 4336a(c).
[24] Cal. Pub. Resources Code §§ 30714, 30716, 30315(b), 30512(a), 30513, 30514(b); Cal. Code Regs. tit. 14, §§ 13015, 13016.

Port of Long Beach	Lead agency under CEQA for environmental review of the proposed Pier Wind Terminal Development project. Responsible for amending the port master plan to incorporate the proposed project. Likely responsible for processing a Harbor Development Permit, which is a consolidated coastal development permit under the certified port master plan and a construction permit under the Long Beach City Charter, if the port master plan amendment is certified by the Coastal Commission.
U.S. Army Corps of Engineers (USACE)	Lead agency under NEPA for environmental review of the proposed Port of Long Beach Pier Wind Terminal Development project. Responsible for processing any necessary permits under the Clean Water Act (Section 404), Rivers and Harbors Act of 1899, and Marine Protection, Research and Sanctuaries Act.
U.S. Department of Transportation Maritime Administration (MARAD)	Likely lead agency under NEPA for environmental review of the Humboldt Bay Offshore Wind Heavy Lift Multipurpose Marine Terminal project.
California State Lands Commission	Unlikely to issue leases or be the lead agency for environmental review under CEQA for the projects proposed within Wigi (Humboldt Bay) or the Port of Long Beach. May exercise its oversight authority over granted public trust lands and could potentially require a lease for certain types of dredging on granted lands or for project components located on ungranted public trust lands.

This report was prepared by Awbrey Yost and Arne Jacobson of the Schatz Energy Research Center. To read the full report and learn more about the permitting landscape for California's offshore wind port infrastructure, visit schatzcenter.org/publications.

- Main Report
- Appendices

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