



## California North Coast Offshore Wind Studies

# Federal, State, and Local Environmental Permitting Processes for Offshore Wind Development on California's North Coast



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The Schatz Energy Research Center at Humboldt State University advances clean and renewable energy. Our projects aim to reduce climate change and pollution while increasing energy access and resilience.

Our work is collaborative and multidisciplinary, and we are grateful to the many partners who together make our efforts possible.

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## **GLOSSARY**

BGEPA	Bald and Golden Eagle Protection Act
BOEM	Bureau of Ocean Energy Management
CARB	California Air Resources Board
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
COHP	California Office of Historical Preservation
COP	Construction and Operations Plan
CSLC	California State Lands Commission
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DOD	Department of Defense
DNH	Determination of No Hazard
EA	Environmental Assessment
EIS	Environmental Impact Statement
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FESA	Federal Endangered Species Act
FONSI	Finding of No Significant Impact
FGC	Fish and Game Code
MBTA	Migratory Bird Treaty Act
MCE	Mission Compatibility Evaluation
MMPA	Marine Mammal Protection Act
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NOP	Notice of Preparation
OCS	Outer Continental Shelf
PATON	Private Aids to Navigation
RHA	Rivers and Harbors Appropriation Act
SAP	Site Assessment Plan
SLA	Submerged Lands Act
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USCG	U.S. Coast Guard
WEA	Wind Energy Area

## 1. INTRODUCTION

For California to meet its climate action goals of carbon neutrality with an increasing electricity demand, new sources of clean electricity need to come online. California could potentially support 8.4 gigawatts of offshore wind power, which would be about 9% of the electricity needed to reach Senate Bill 100 goals by 2045.<sup>1</sup>

Offshore wind also shows promise to complement other renewable energy sources such as solar power. The offshore wind resource is fairly consistent over the course of the year, enabling high levels of generation during the winter months when solar energy generation is lowest. In addition, analysis of diurnal patterns has shown that ocean wind speeds often remain strong into the evening hours when solar generation is ramping down for the day.<sup>2</sup>

To develop California's powerful offshore wind resource, environmental and regulatory challenges, among others, must be overcome. The current regulatory process for offshore wind is complex, and it is crucial to develop clear strategies for coordination and collaboration between federal, state and local agencies. Currently, there are at least 24 separate permitting processes associated with wind development in waters offshore from California.

The purpose of this document is to clarify the regulatory processes by:

- introducing the regulatory agencies and processes involved in permitting a California offshore wind farm
- providing a sample timeline that reflects interagency permitting dependencies
- describing key factors in the sequence of permitting
- giving a brief description of each permitting process that is included in the timeline

The Bureau of Ocean Energy Management (BOEM) designated three call areas off the coast of California in October of 2018 that could have a total resource potential of approximately 8.4 GW. These areas are: Humboldt, Morro Bay and Diablo Canyon.<sup>3</sup> Our example location for this report is the Humboldt Call Area. (Note: this report is part of the *California North Coast Offshore Wind Studies*<sup>4</sup> conducted during 2019 and 2020 by the Schatz Energy Research Center and partners to evaluate potential scenarios for wind farm development.)

California offshore wind projects would most likely be located in federal waters – which begin at three nautical miles and stretch to 200 nautical miles offshore – but components such as the power export cable from the wind project to shore would cross state and local boundaries, and thus enter the jurisdictions of the State of California and local permitting agencies. This report specifically reviewed those agencies involved in permitting development of the wind farm itself: from a wind farm site to power cable landfall. Permitting for port infrastructure and operations and expansion of electrical transmission systems are beyond the scope of this analysis.<sup>5</sup> The environmental permitting and review processes as well as agency involvement described in the Existing Conditions and Potential Environmental Effects report authored by

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<sup>1</sup> California Energy Commission Energy Research and Development Division - Utility-Scale Renewable Energy Generation Technology Roadmap Final Project Report: <https://ww2.energy.ca.gov/2020publications/CEC-500-2020-062/CEC-500-2020-062.pdf>

<sup>2</sup> Wind Speed Resource and Power Generation Profile Report: <http://schatzcenter.org/pubs/2020-OSW-R2.pdf>

<sup>3</sup> Energy Research and Development Division -Research and Development Opportunities for Offshore Wind Energy in California Final Project Report: <https://ww2.energy.ca.gov/2020publications/CEC-500-2020-053/CEC-500-2020-053.pdf>

<sup>4</sup> <http://schatzcenter.org/publications>

<sup>5</sup> See our Electricity Transmission Policy Analysis report for information on regulatory and permitting processes for transmission. This report is available at <http://schatzcenter.org/publications>.

H. T. Harvey & Associates was utilized to guide the permitting sequence timeline for offshore wind development in Humboldt Bay.<sup>6</sup>

## **2. PERMITTING AGENCIES**

For wind farm development in the Humboldt Call Area, at least 15 agencies would review permit applications and/or conduct consultations. The federal and state agencies listed below would presumably be involved in any project site along the California coast, while local agencies will be site-dependent. Each permitting agency will have a different consultation process in regards to offshore wind farm development; for more information regarding each process see the agency information provided in Appendix B. Firms or consortia considering development of an offshore wind project are encouraged to consult with the respective agencies early in the project planning process to discuss the requirements and timeline associated with each stage.

- The eight federal agencies involved in the process are: Bureau of Ocean Energy Management (BOEM), Federal Aviation Administration (FAA), Department of Defense (DOD), U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), U.S. Army Corps of Engineers (USACE), the Environmental Protection Agency (EPA), and the U.S. Coast Guard (USCG).
- The five state agencies involved in this process are: California State Lands Commission (CSLC), California Department of Fish and Wildlife (CDFW), California Coastal Commission (CCC), California Office of Historical Preservation (COHP), and the California State Water Resources Control Board.
- The two local agencies responsible for issuing permits within Humboldt County are the Humboldt Bay Harbor, Recreation and Conservation District and the North Coast Air Quality Management District.

BOEM is the lead federal agency responsible for the offshore lease process and would consult with federal agencies. It is anticipated that the California State Lands Commission (CSLC) will be the lead state agency responsible for the state lands lease for project components in state waters and would consult with state and local agencies. Note that the California Environmental Protection Agency is not mentioned above directly, but it oversees some of the listed agencies, such as the California State Water Resources Control Board and the North Coast Air Quality Management District.

## **3. PERMITTING PROCESS**

In this section we provide information on 24 of the permitting processes associated with commercial offshore wind development in California, of which fifteen are federal, seven are state, and three are local. In addition to the processes highlighted here, offshore wind development will require compliance with air and water quality regulations, endangered species reviews (both marine and terrestrial), military mission compatibility, aids to navigation, and local development permits. Many of the permitting processes described in this section have dependencies on when they can occur, as explored in Appendix A. See Appendix B for descriptions of each permit process.

### **3.1 Federal Permitting**

The Bureau of Ocean Energy Management (BOEM) is responsible for regulating renewable energy development in the outer continental shelf (OCS) of the United States. BOEM's regulatory process

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<sup>6</sup> From the California North Coast Offshore Wind Studies see: <http://schatzcenter.org/publications/>

consists of four sequential phases: 1) Planning and Analysis, 2) Leasing, 3) Site Assessment, and 4) Construction and Operations.<sup>7</sup>

### ***3.1.1 Planning and Analysis, and the Leasing Process***

During the Planning and Analysis phase, BOEM publishes a Call for Information and Nominations (Call) in the Federal Register to seek out interested developers and obtain comments on potential site conditions and resources for the area. Through this Call, BOEM seeks public input and stakeholder engagement. After reviewing the public input and developer nominations, BOEM delineates wind energy areas (WEAs), which are the boundaries within a given call area that will be considered for an individual competitive lease auction.<sup>8</sup> Once these WEAs have been identified, BOEM initiates the first phase of its National Environmental Policy Act review (NEPA), in which BOEM serves as the lead agency for the process. This first NEPA review begins with BOEM issuing a Notice of Intent (NOI) to conduct an environmental analysis for the call area. Under current regulations, this analysis will most likely be an Environmental Assessment. Federal and state agencies, and tribes, will be contacted for input, and early public comment periods will be held during the initial NEPA review process. If BOEM determines that the proposed project is a major federal action that will significantly affect the environment and more information is needed, BOEM will issue a NOI to draft an Environmental Impact Statement for the second NEPA review phase. Otherwise, if a significant environmental impact is not determined, BOEM will issue a Finding of No Significant Impact (FONSI).

The leasing process begins once BOEM issues a proposed sale notice for the identified WEAs. BOEM then publishes a final sale notice and conducts a competitive auction. The leasing phase ends when the lease is awarded to the winning applicant(s). Once a lease is awarded, the lessee is permitted to develop their site assessment and construction plans, which must be approved by BOEM before they can use the offshore area.

### ***3.1.2 Site Assessment, and Construction and Operations***

The third and fourth phases of BOEM's regulatory process are the Site Assessment and the Construction and Operations phases. Applicants may wish to consider submitting their Site Assessment Plan (SAP) and Construction and Operations Plan (COP) in conjunction to BOEM, thus merging the third and fourth phases of the regulatory process. Typically, the SAP is drafted to compile data that will be used to inform the applicant's COP later in the process. However, by drafting and submitting the documents in conjunction, rather than waiting for the SAP phase to conclude, applicants could potentially shorten the amount of time required for the overall offshore wind development permitting process.

After winning a renewable energy lease, the awardee has one year to submit an SAP to BOEM. The SAP review process can take up to 5 years, and the SAP must be approved by BOEM before the applicant can conduct any assessment activities within the lease area. (Note that the sample timeline in Figure 1 assumes that the SAP submission and review process will be completed within 1 year following the award.) While it is possible to request an extension on the one-year deadline to submit the SAP, doing so could extend the permitting timeline.

We expect that BOEM will begin the second phase of the NEPA review process and related consultations when the applicant submits their SAP and COP documents. A second NEPA review process will begin along with the connected processes (applicable if the state and federal agencies agree to a joint CEQA

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<sup>7</sup> For more information, see BOEM California Activities: <https://www.boem.gov/California>, and A Citizens Guide to the Bureau of Ocean Energy Management's Renewable Energy Authorization Process: <https://www.boem.gov/sites/default/files/renewable-energy-program/KW-CG-Broch.pdf>

<sup>8</sup> For more information regarding the leasing and auction process for renewable energy development on the OCS see: <https://www.boem.gov/sites/default/files/documents/newsroom/ocean-science/BOEM%20Ocean%20Science%202020%20Issue%202.pdf>



review) Under current regulations, it is anticipated that an Environmental Impact Statement (EIS) will be needed to fulfill the federal NEPA process for any offshore wind facility in California.

### 3.2 State Permitting

Certain wind farm components, such as power export and data cables, extend from the WEA to shore, crossing into the state's jurisdiction. Given that offshore wind development in California is still in BOEM's initial regulatory review phases, limited information is available regarding some aspects of state agency roles regarding offshore wind development. Under current regulation, there are two key state processes: the California Submerged Lands Act (SLA), enforced by the California State Lands Commission (CSLC), and the Coastal Zone Management Act (CZMA), which is managed by the California Coastal Commission (CCC).

California's coastal zone extends to 3 nautical miles offshore. The CCC and CSLC work together in regulating and issuing permits for development activities located within the coastal zone.

- The CSLC has jurisdiction over tidelands, submerged lands, and public trust lands located within California, extending from the mean high-tide line out to 3 nautical miles from shore.
- Under the SLA, an offshore renewable energy project involving state waters under the CSLC's jurisdiction will require a Submerged Lands Lease from the CSLC.
- Under CZMA, the CCC (which is one of the designated coastal zone management agencies under California's Coastal Management Program) is responsible for implementing federal consistency procedures and reviews. A proposed project's effects, rather than its location, will determine whether a federal consistency review is required. Therefore, offshore wind farm development that will cause foreseeable coastal effects regardless of its location, whether inside or outside of the coastal zone, can trigger a federal consistency review.<sup>9</sup>
- Under CZMA, an offshore wind development project would require a consistency certification, which is a review process for projects requiring federal permits and licensing, authorization, or funding to state and local agencies.

When BOEM begins its second NEPA review phase, the CSLC will require the California Environmental Quality Act (CEQA) review process to begin. Similar to the federal NEPA process, the state CEQA process will also likely consist of preparing an Environmental Impact Report (EIR) to fulfill its CEQA requirement. The CEQA process provides opportunities for public engagement. CSLC will issue a notice through the State Clearinghouse, and the general public will have at least 30 days to provide public comment on a document that includes a preliminary environmental assessment of affected resources. After this, the CSLC will make the decision of whether to prepare an EIR, and, if approved, a Notice of Preparation (NOP) will be issued to solicit further public input on the information gathered during the previous scoping and consultation process. The NOP is reviewed through the State Clearinghouse<sup>10</sup>, from which there will be at least a 30-day public comment period, and a public meeting will be held to gather comments for the EIR. A draft EIR will then be prepared. This initiates a stage in the process involving a minimum 60-day public comment period and a public meeting to gather comments on the draft EIR. Once the draft EIR is updated based on the comments received, the final step involves a public meeting held by CSLC to inform the certification decision for the final EIR.<sup>11</sup>

As mentioned previously, under current regulations a joint NEPA and CEQA review process could be conducted, in which BOEM and CSLC would coordinate to draft the EIS and EIR. Prior to the second NEPA review phase, the lead federal agencies and state agencies should initiate communication and also

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<sup>9</sup> For more information regarding the Coastal Zone Management Act and federal consistency procedures see: <https://www.coastal.ca.gov/fedcd/fedcndx.html>

<sup>10</sup> For more information about the State Clearinghouse see: <https://opr.ca.gov/clearinghouse/ceqa/>

<sup>11</sup> For more information regarding the California State Land Commission's role in offshore wind development see: <https://www.slc.ca.gov/renewable-energy/offshore-wind-applications/>



mutually agree on how to best coordinate the requirements of NEPA and CZMA. In cases where both NEPA/CEQA and federal consistency reviews have been required for a proposed project, federal agencies have either stated that their NEPA document contains the federal consistency review, or they reference the NEPA/CEQA environmental analysis in federal consistency submittals, where they can be used to supplement the analysis of a project's consistency with the applicable Coastal Act policy.

### **3.3 Local and Other Permitting**

Local governments can apply to be approved by the Coastal Commission to obtain permitting authority within the coastal zone. In such cases, a Local Coastal Program document provides guidance on future development and protection of coastal resources for local government entities that are partnered with the Coastal Commission.<sup>12</sup> Humboldt County is currently working on updating their Local Coastal Program, with a goal of gaining approval for permitting authority within the coastal zone in the county. Offshore wind projects will also require approval from local air districts, e.g. the North Coast Air Quality Management District in Humboldt County. Additional local ministerial approvals (i.e., grading, sewer, waste permits, etc.) may also be required for offshore wind projects.

## **4. SAMPLE PERMITTING TIMELINE FOR AN OFFSHORE WIND FARM ON CALIFORNIA'S NORTH COAST**

Figure 1 provides a sample permitting schedule for the development of an offshore wind farm in the Humboldt Call Area. Please note that this timeline does not include transmission line upgrades or improvements to Humboldt Bay harbor infrastructure. Close collaboration between agencies would be required to achieve full permitting as shown here within Year 8. This is an idealized timeline, and the permitting schedules for each process could be shorter or longer depending on various factors (e.g., agency turnaround time, submission of incomplete applications, etc.).

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<sup>12</sup> For more information regarding Local Coastal Programs within California see: <http://www.coastal.ca.gov/lcps.html>

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### Environmental Permitting Timeline

The agencies specified in the timeline with their respective processes are listed below.

#### FEDERAL AGENCIES

##### Bureau of Ocean Energy Management (BOEM):

Section 388 of the Energy Policy Act of 2005 (Lease Process, Site Assessment Plan and Construction and Operations Plan) and National Environmental Policy Act (NEPA)

**Department of Defense (DOD):** Mission Compatibility Evaluation (MCE)

**Environmental Protection Agency (EPA):** Clean Water Act 401 (CWA 401) and Clean Air Act

**Federal Air Administration (FAA):** Determination of No Hazard to Air Navigation (DNH)

**National Marine Fisheries Service (NMFS):** Federal Endangered Species Act (FESA), Magnus-Stevens Fisheries Act (MSA) and Marine Mammal Protection Act (MMPA)

**U.S. Army Corps of Engineers (USACE):** Rivers and Harbors Appropriations Act (RHA) and Clean Water Act 404 (CWA 404)

**U.S. Fish and Wildlife Service (USFWS):** Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act (MBGEPA) and Federal Endangered Species Act (FESA)

**U.S. Coast Guard (USCG):** Private Aids to Navigation (PATON)

#### CALIFORNIA AGENCIES

##### California State Lands Commission (CSLC):

California Environmental Quality Act (CEQA) and Submerged Lands Act (SLA)

**Department of Fish and Wildlife:** California Endangered Species Act (CESA) and CA Fish and Game Code Section 1600 (FGC)

**Coastal Commission:** Coastal Zone Management Act (CZMA)

**Office of Historical Preservation:** National Historic Preservation Act (NHPA Section 106)

**Water Boards:** Storm Water Permit

#### LOCAL AGENCIES (Humboldt County)

**Humboldt Harbor District:** Development Permit and Coastal Development Permit

##### North Coast Air Quality Management District:

California Air Resources Board (CARB) Permit

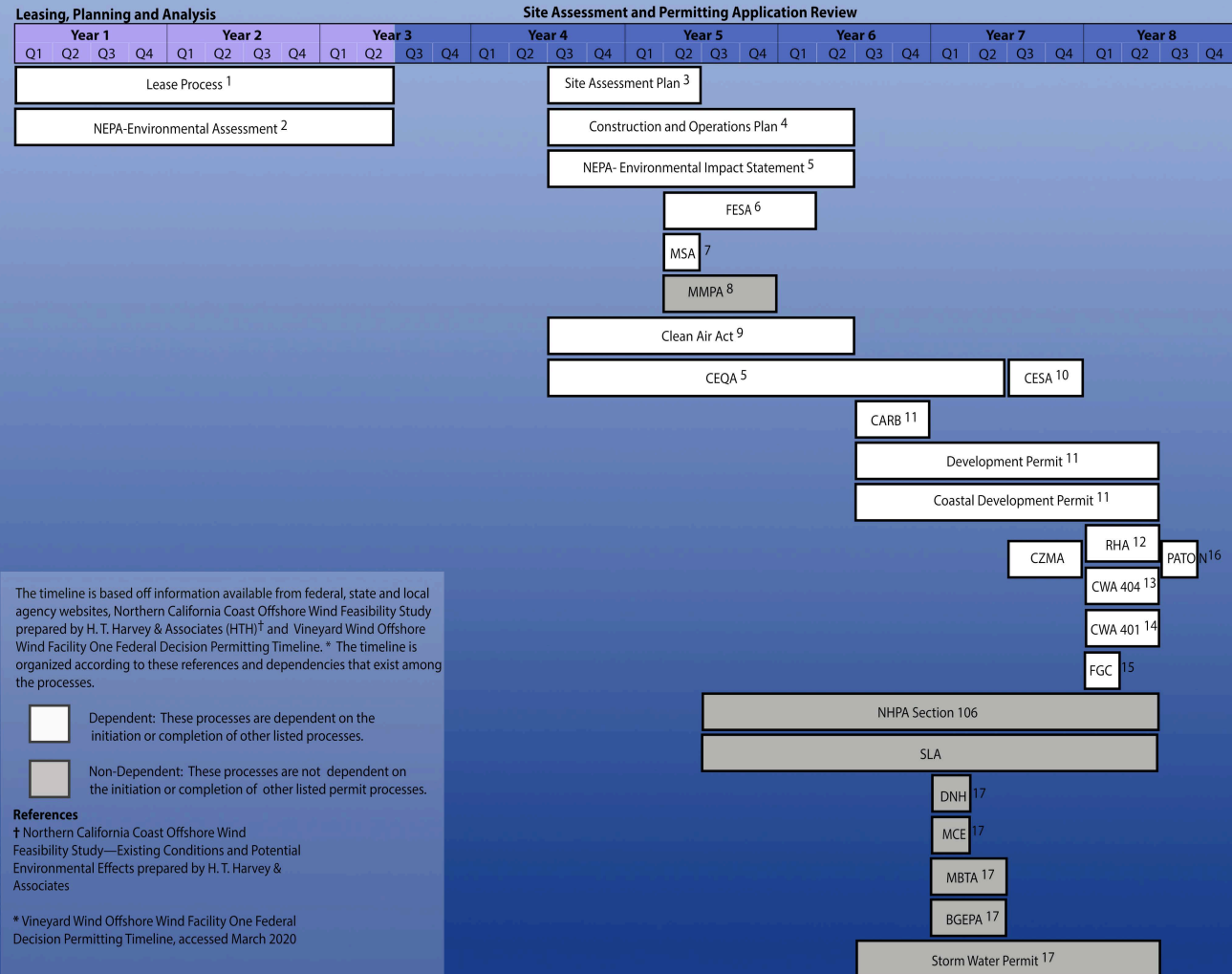


Figure 1. Idealized Environmental Permitting Timeline for Offshore Wind Projects. The overall permitting process may require more time that is indicated here.

Notes for Sample Permitting Timeline Table

1. The end of the Lease Process signifies that the lease was auctioned and awarded to an applicant and the applicant has one year to submit a Site Assessment Plan to be reviewed by BOEM.
2. The first NEPA review process, drafting an Environmental Assessment, is completed and the lease is awarded to the applicant by BOEM.
3. Applicant is awarded the Lease and submits a Site Assessment Plan.
4. Usually, the SAP is submitted prior to the Constructions and Operations Plan (COP), but, if submitted jointly, the applicant could potentially shorten the overall permitting processing timeline. The COP is associated with the completion of the FESA process. The FESA must be completed before COP approval can be granted.
5. Here, the NEPA-Environmental Impact Statement and CEQA reviews are shown as initiated in conjunction.
6. FESA and the MSA applications must be submitted in conjunction and the FESA review process must be completed before COP approval is granted. FESA must also be completed prior to the Clean Air Permit issuance.
7. MSA is associated with the initiation of the FESA process. FESA and MSA applications must be submitted in conjunction and the review process must be completed before COP approval. Also, the MMPA and MSA are submitted in conjunction in this example because both are reviewed by the NMFS.
8. The MMPA and MSA are submitted in conjunction in this example because both are reviewed by the NMFS.
9. Clean Air Act is associated with the completion of the FESA process. The FESA review process must be completed prior to the Clean Air Permit issuance.
10. CESA is associated with the completion of the CEQA review process. CEQA must be completed before CESA can be initiated.
11. CARB is associated with the initiation of the CEQA review process. CEQA must be initiated before CARB, Coastal Development, and Local Development permits can be issued.
12. RHA is dependent on the completion of CZMA. The CZMA process must be completed before starting the RHA and CWA 404 application process.
13. CWA 404 is dependent on the completion of CZMA. CZMA process must be completed before starting the RHA and CWA 404 process. CWA 401 and FGC are submitted in conjunction along with copies of CWA 404 application. CWA 401 certification must be obtained before the USACE can issue CWA 404 permit.
14. CWA 401 and FGC are submitted in conjunction along with copies of CWA 404 application. CWA 401 certification must be obtained before the USACE can issue CWA 404 permit.
15. CWA 401 and FGC are submitted in conjunction along with copies of CWA 404 application.
16. RHA and CWA 404 permits must be issued prior to submitting PATON application.
17. DNH, MCE, MBTA, BGEPA and the Storm Water Permit were placed towards the end of the review process because it is assumed that they have more flexibility as to when they can occur given that they have no connection to the other listed review processes. It is also assumed that they will begin after COP approval.

## APPENDIX A – ENVIRONMENTAL PERMITTING SEQUENCE

Any offshore wind project must navigate a complicated sequence of environmental permitting applications for federal, state, and local agencies. Note that BOEM cannot approve the proposed project until all of the various agencies' permits are approved. The permitting sequence for offshore wind development was guided by information provided in the Existing Conditions and Potential Environmental Effects report authored by H. T. Harvey & Associates<sup>13</sup>.

### Dependent Processes

The following three processes are foundational – meaning that other agencies require completion of these key reviews before they initiate or finalize their own permit processes:

#### *California Environmental Quality Act (CEQA)*

- CEQA review determines the timeline of the California Air Resources Board (CARB), Local Development, Coastal Development, and California Endangered Species Act (CESA) permitting processes.
  - The CARB, Local Development, and Coastal Development permits can be issued once CEQA review has been *initiated*.
  - The CESA process begins after *completion* of the CEQA review.

#### *Federal Endangered Species Act (FESA)*

- FESA review determines the timeline of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and Clean Air Act permitting processes, and the approval of a Constructions and Operations Plan.
  - The FESA and MSA reviews are initiated together, and both processes must be completed *prior* to approval of the Constructions and Operations Plan.
  - FESA review must also be completed *before* a Clean Air Act Permit can be issued.
  - The Marine Mammal Protection Act (MMPA) cannot permit take of FESA-listed marine mammals, which has to be addressed through the ESA. It is more efficient to submit the MMPA and ESA application documents in conjunction to NMFS, because although both are reviewed by the National Marine Fisheries Service (NMFS), their approval is by different divisions within the NMFS.

#### *Coastal Zone Management (CZMA)*

- CZMA review determines when the Rivers and Harbors Appropriations Act Section 10 (RHA), Fish and Game Code Section 1600 (FGC), CWA Sections 401 (CWA-401) and 404 (CWA-404), and the Private Aids to Navigation (PATON) processes can begin.
  - The CZMA process must be completed *before* the RHA and CWA-404 permit applications can be submitted to the USACE.
  - The CWA-401 and FGC applications must be submitted *in conjunction*, along with copies of the CWA-404 application.
  - CWA-401 certification must be obtained from the Environmental Protection Agency *before* the Army Corps of Engineers can issue the CWA-404 permit.
  - The RHA and CWA-404 permits must be issued by the USACE *before* the PATON permit application can be submitted to the U.S. Coast Guard.

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<sup>13</sup> From the California North Coast Offshore Wind Studies see: <http://schatzcenter.org/publications/>

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### **Independent Processes**

The following eight permitting processes do not depend on the initiation or completion of other environmental applications.

- Bald and Golden Eagle Protection Act
- Determination of No Hazard to Air Navigation
- Marine Mammal Protection Act
- Migratory Bird Treaty Act
- Mission Compatibility Evaluation
- National Historic Preservation Act Section 106
- Storm Water Permit
- Submerged Lands Act

## **APPENDIX B      PERMITTING PROCESS DESCRIPTIONS**

The development of an offshore wind farm in the Humboldt Call Area would involve 15 federal, state, and local agencies, with 24 permitting processes between them. Below are the descriptions for each of the permitting processes along with the agency website listed in alphabetical order for each government branch section.

### **Federal**

#### ***Approval of Private Aids to Navigation***

The Approval for Navigation Aids (33 Code of Federal Regulations 66) - Approval of Private Aids to Navigation is issued by the U.S. Coast Guard. The Approval for Private Aids to Navigation (PATON) is regulated by the U.S. Coast Guard under Title 33 of the Code of Federal Regulations, Part 66 (33CFR66). A PATON is a buoy, light, or daybeacon owned and maintained by anyone other than the United States Coast Guard (USCG). A permit is required from the USCG for any private aids within navigable waters that are regulated by the federal government.

References: USCG (n.d.)

Agency Website: <https://www.pacificarea.uscg.mil/Our-Organization/District-11/Prevention-Division/PatonOne/>

#### ***Bald and Golden Eagle Protection Act***

The Bald and Golden Eagle Protection Act - Eagle Conservation Plan is approved by the USFWS. The Bald and Golden Eagle Protection Act (BGEPA) prohibits anyone from "taking bald or golden eagles, including their parts, nests, or eggs." The exception to the BGEPA is if the taking is authorized under a federal permit issued by the Secretary of the Interior. The USFWS provides environmental review for proposed energy projects for public and private lands. The applicant will eventually prepare an Eagle Conservation Plan that follows the Eagle Conservation Plan Guidance (developed by USFWS, 2013) to help make wind energy facilities compatible with eagle conservation and the laws and regulations that protect eagles.

References: USFWS (n.d.), BGEPA and Permitting and USFWS (2013), Eagle Conservation Plan Guidance.

Agency Website: <https://www.fws.gov/birds/policies-and-regulations/laws-legislations/bald-and-golden-eagle-protection-act.php>

#### ***Clean Air Act***

The Clean Air Act (40 Code of Federal Regulation 55) - Outer Continental Shelf Air Permit is issued from the Environmental Protection Agency (EPA). The EPA is the agency responsible for implementing and enforcing the Clean Air Act requirements for the outer continental shelf (OCS) sources offshore the state seaward boundary of California. In some cases, OCS regulation may be delegated to a corresponding state or local air permitting agency. Applicants located within 25 nautical miles of the seaward boundary are required to comply with the air quality and permitting requirements of the nearest or corresponding onshore area. For applicants located beyond 25 nautical miles from the seaward boundary, they are subject to federal air quality requirements and will likely need an OCS permit.

References: EPA (2017), OCS Air Permit.

Agency website: <https://www.epa.gov/caa-permitting/caa-permitting-epas-pacific-southwest-region-9>

#### ***Clean Water Act (CWA) Section 401***

The CWA Section 401 - 401 Water Quality Certification is issued by the EPA. The purpose of the Section 401 permit is to provide states and tribes with authority to protect water quality within their jurisdiction. This is accomplished by authorizing states and tribes to certify that a discharge to navigable water from a



proposed activity complies with all applicable water quality standards, limitations, and restrictions. Also, under Section 401 of the CWA a federal agency cannot issue a permit that will result in discharge into waters of the U.S. until water quality certification is granted or waived.

References: EPA (2019), Section 401.

Agency Website: <https://www.epa.gov/cwa-401/final-rule-clean-water-act-section-401-certification-rule>

#### ***Clean Water Act (CWA) Section 404***

The U.S. Army Corps of Engineers (USACE) issues the Clean Water Act (CWA) Section 404- Individual Permit. The purpose of the Clean Water Act (CWA) Section 404 is to ensure that no fill or dredging will occur if a practical alternative exist that is less damaging to aquatic environments and will not degrade national waters. An individual permit must be issued by the USACE prior to any dredging or constriction activities within U.S. navigable waters, unless the activity is exempt from Section 404 regulation.

References: EPA (2020), Section 404.

Agency Website: <https://www.epa.gov/cwa-404/policy-and-guidance-documents-under-cwa-section-404>

#### ***Department of Defense Mission Compatibility Evaluation***

The Department of Defense (DOD) Mission Compatibility Evaluation 32 Code of Federal Regulation 211 - DOD Compatibility Approval is issued by the U.S. Department of Defense. The DOD's Mission Compatibility Evaluation (MCE) process provides an analysis of potential impacts to military operations. If impacts are identified, the DOD Clearinghouse works to identify mitigation strategies to minimize those impacts. The DOD Clearinghouse strongly encourages all energy applicants to seek out informal reviews as early as possible to identify potential compatibility issues prior to submitting applications to the Clearinghouse for the formal review process. Under the current regulation, 10 U.S. Code § 183a (c)(6), it should be noted that if a proposed energy project is known to be inside a military training route or in a radar surveillance line-of-sight that the DOD owns or operates in, then the project must be filed at least one year prior to construction.

References: DOD (2018) and Military Aviation and Installation Assurance Siting Clearinghouse. (n.d.).

Agency Website: <https://www.acq.osd.mil/dodsc/>

#### ***Energy Policy Act of 2005- Section 388***

Section 388 of the Energy Policy Act of 2005 - Subsection 8(p)(3) of the Outer Continental Shelf Lands Act (30 Code of Federal Regulations 585) consists of the Leasing Process, Site Assessment Plan and Construction and Operations Plan. The Bureau of Ocean Energy Management (BOEM) is in charge of regulating the above processes. The purpose of the Section 388 of the Energy Policy Act permit is to give the Secretary of the Interior, via the Bureau of Ocean Energy Management (BOEM), authority to issue leases, easements, or rights-of-way on the outer continental shelf for activities including those that produce or support production, transportation, or transmission of energy from sources other than oil and gas. Leases should be issued on a competitive basis where there is demand unless it is determined there is no competitive interest. An auction is held, and the lease is awarded to the winning applicant. The applicant must then submit a Site Assessment Plan and Construction and Operations Plan, which must be approved by BOEM before any construction can begin.

References: BOEM (2016).

Agency website: <https://www.boem.gov/renewable-energy/regulatory-framework-and-guidelines>

#### ***Federal Endangered Species Act- Section 7***

Section 7 of the Endangered Species Act - Biological Assessment/ Consultation is conducted by the USFWS and National Marine Fisheries Service (NMFS). Section 7 of the Federal Endangered Species Act (FESA) is utilized by federal agencies to promote the conservation purposes of the FESA. Federal

agencies consult with the USFWS and NMFS, as appropriate, to ensure that actions they “authorize, fund, or carry out are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitats.” The USFWS has responsibility over terrestrial and freshwater species while NMFS has jurisdiction over marine wildlife. An applicant may apply for an Incidental take permit if they believe that their legal project activities may result in “take” of endangered or threatened animal species. They must also submit a habitat conservation plan with their application for an incidental take permit. The habitat conservation plan submitted with the permit ensures that the effects of the authorized incidental take are adequately minimized and mitigated. It should be noted that the term “take” is defined as an action that harasses, harms, pursues, hunts, shoots, wounds, kills, traps, captures, collects, or an attempt to engage in any such conduct with the listed species.

References: USFWS (2011), Consultations with Federal Agencies; USFWS (2020), USFWS (n.d.).

Agency Website: <https://www.fws.gov/endangered/laws-policies/regulations-and-policies.html>

### ***Magnuson-Stevens Fisheries Conservation and Management Act***

The Magnuson-Stevens Fisheries Conservation and Management Act - Essential Fish Habitat Consultation is conducted by the National Marine Fisheries Service (NMFS). The NMFS, a part of the National Oceanic and Atmospheric Association (NOAA), is the federal agency responsible for implementing the Magnuson-Stevens Fisheries Act (MSA) and ensuring that U.S. fisheries comply with a wide range of conservation and management requirements. When a federal agency authorizes, funds, or undertakes an action that may adversely affect essential fish habitat (EFH), they must consult with NOAA Fisheries. An adverse effect of EFH is defined as the “direct or indirect effect that reduces the quality and/or quantity of the habitat and range from large-scale ocean uses to small-scale projects” along the coast. The NMFS conducts a consultation with the federal agency where they provide advice and recommendations to avoid, reduce, or offset these adverse effects.

References: NOAA (2019), EFH Assessment and NOAA (n.d.), Consultations for EFH.

Agency Website: <https://www.fisheries.noaa.gov/west-coast/habitat-conservation/essential-fish-habitat-west-coast>

### ***Marine Mammal Protection Act***

The Marine Mammal Protection Act (MMPA) - Incidental Harassment Authorization (annual) is issued by NMFS. The MMPA specifically prohibits the “taking” of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. Both the NMFS and U.S. Fish and Wildlife Service (USFWS) are responsible for implementing the MMPA and have shared responsibility dependent on the mammal species being affected. For activities related to offshore energy, development and production, there is an exemption, which in the form of an Incidental Take Authorization (ITA). The ITA authorizes the unintentional taking of small numbers of marine mammals, provided the activity would have a negligible impact on marine mammals and would have no unmitigable adverse impact on subsistence use of marine mammals. The ITA may be issued as an Incidental Harassment Authorization (an annual, site-specific authorization for activities with no potential for serious injury or mortality to marine mammals). This form requires a public review and comment period, as well as monitoring and reporting of the taking to verify a negligible impact.

References: NOAA (2020), ITA under the MMPA and NOAA (2017), Permits and Authorization.

Agency Website: <https://www.fisheries.noaa.gov/topic/marine-mammal-protection>

### ***Migratory Bird Treaty Act***

The Migratory Bird Treaty Act - Bird and Bat Conservation Strategy is approved by the U.S. Fish and Wildlife Service (USFWS). The Migratory Bird Treaty Act (MBTA) makes it illegal to “take, possess, import, export, transport, sell, purchase, barter, or offer for sale, any migratory bird, or the parts, nests, or

eggs of such a bird.” The exception to the MBTA is if the taking is authorized under a federal permit issued by the Secretary of the Interior. The USFWS provides environmental review for proposed energy projects for public and private lands. The applicant will eventually prepare a Bird and Bat Conservation Strategy using the USFWS Land-Based Wind Energy Guidelines (2012), which provides detailed guidance on the process for addressing bird and bat conservation at all stages of wind energy development.

References: BOEM (n.d.), MBTA. USFWS (2013), Renewable Energy Development. USFWS (2012), and Land Based Wind Energy Guidelines.

Agency Website: <https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>

### ***National Environmental Policy Act***

The National Environmental Policy Act (NEPA; 40 Code of Federal Regulations 1500-1508) in this case of an offshore wind farm development would be fulfilled by BOEM. BOEM is required to follow Department of the Interior regulations and executive orders. The NEPA process requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. Section 102 in Title I of the Act requires federal agencies to incorporate environmental considerations in their planning and decision-making through a systematic interdisciplinary approach. A lead federal agency is delegated, and they are then responsible for ensuring that all NEPA requirements are fulfilled. The lead agency also ensures that all federal agencies have prepared detailed statements assessing the environmental impacts of and alternatives to, major federal actions significantly affecting the environment. These statements are commonly referred to as Environmental Impact Statements (EIS) and Environmental Assessments (EA). BOEM is the lead federal agency for NEPA offshore wind development.

References: EPA (2017), NEPA.

Agency website: <https://www.epa.gov/nepa/national-environmental-policy-act-epa-region-9>

### ***No Hazard Determination to Air Navigation***

The No Hazard Determination to Air Navigation 14 Code for Federal Regulation 77- Aviation Obstruction Evaluation is issued by the Federal Aviation Administration (FAA). The FAA conducts a formal aeronautical study on existing or proposed construction as stated in Title 14, Code of Federal Regulations (14 CFR) Part 77 to ensure the safety of air navigation and the efficient utilization of navigable airspace by aircraft. An Aviation Obstruction Evaluation refers to aeronautical studies conducted by the FAA for any object that may affect the national airspace, air navigation facilities, or airport capacity. The No Hazard Determination to Air Navigation permit only applies within the United States airspace, which ends at 12 nautical miles offshore (this is also where international waters begin). Developers intending to construct structures in excess of 200 feet above ground level or in excess of established notification standards (lower if closer to airports) within United States airspace must submit a notice to the FAA. A Determination of No Hazard to Air Navigation will be issued when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard but would not have a substantial aeronautical impact to air navigation.

References: Capital Airspace Group (2017) and FAA (2020).

Agency Website: [https://www.faa.gov/air\\_traffic/obstruction\\_evaluation/](https://www.faa.gov/air_traffic/obstruction_evaluation/)

### ***Rivers and Harbors Appropriation (RHA) Act of 1899 Section 10***

The Rivers and Harbors Appropriation (RHA) Act of 1899 Section 10 - Individual Permit is issued by the U.S. Army Corps of Engineers (USACE). The Rivers and Harbors Appropriation (RHA) Section 10 regulates unavoidable impacts to traditional navigable waterways in the development/construction of harbors and other excavation activities. An individual permit must be issued by the USACE before any activities can begin.

References: EPA (2019), Section 10 RHA.

Agency Website: <https://www.spn.usace.army.mil/Missions/Regulatory/Jurisdiction-Determinations/>

## **California**

### ***California Endangered Species Act***

The California Endangered Species Act (14 California Code of Regulations 783.0–787.9) -Section 2081 Incidental Take Permit is issued by the California Department of Fish and Wildlife (CDFW). The California Endangered Species Act (CESA) prohibits the take of any species of wildlife designated by the California Fish and Game Commission as “endangered, threatened, or a candidate species.” If any state listed species is potentially impacted (by either direct impacts or habitat impacts) within the project area, an Incidental Take Permit (ITP), will be needed. Section 2081 of the California Fish and Game Code- ITP allows the CDFW to authorize the “[taking] of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met.” Under the ITP, permittee must implement “species-specific minimization and avoidance measures, and fully mitigate the impacts of the project.”

References: CDFW (2020), CESA and CDFW (2020), ITP’s.

Agency Website: <https://wildlife.ca.gov/Conservation/CESA>

### ***California Environmental Quality Act***

California Environmental Quality Act (California Code of Regulation 14 15000–15387) is enacted by California State Land Commissions (CSLC). The California Environmental Quality Act (CEQA), is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if possible. The purpose of CEQA is to “prevent or minimize damage to the environment through development of project alternatives, mitigation measures, and mitigation monitoring.” CEQA also discloses to the public the “significant environmental effects” of a proposed discretionary project, through the preparation of an Initial Study, Negative Declaration, or Environmental Impact Report (EIR). It is likely that the CSLC will be the lead agency under CEQA for offshore wind development and will be responsible for carrying out environmental impact analysis.

References: CDFW (2020), Summary of CEQA.

Agency Website: <https://www.opr.ca.gov/ceqa/>

### ***California Fish and Game Code Section 1600 et seq.***

California Fish and Game Code Section 1600 et seq. - Lake and Streambed Alteration Agreement is issued by CDFW. Fish and Game Code Sections 1600-1616 require any person, state, local government agency or public utility to notify the CDFW before commencing any activity that will alter or interfere with any physical aspects (channel, bed, bank and flow) of a river, stream or lake and also activities that will potentially affect fish and wildlife resources that use the stream and surrounding habitat (such as riparian zone, wetland, etc.). CDFW requires a Lake or Streambed Alteration Agreement (LSA) when project activities may “substantially adversely” affect fish and wildlife resources.

References: CDFW (2020), LSA Program.

Agency Website: <https://wildlife.ca.gov/Conservation/Environmental-Review/LSA/Laws-Regulations>

### ***California Submerged Lands Act***

The California Submerged Lands Act California Public Resources Code Section 6000 et seq. and 2 California Code Regulation 1900 et seq. - Submerged Lands Lease is issued by the California State Lands Commission (CSLC). The CSLC has jurisdiction over all “sovereign lands,” or lands held in trust by the State of California (which include the following State Reserved Lands and School Lands, tidelands, submerged lands three miles off the coast, and water bottoms of various navigable waters and their

tributaries). The CSLC is the agency that has jurisdiction to lease those lands. A Submerged Land Lease Permit is required for geological/geophysical surveys and leases, permits, or other entitlements for use of State lands.

References: CSLC (2020), Land Types and CSLC (2020), Current Regulations.

Agency Website: <https://www.slc.ca.gov/renewable-energy/offshore-wind-applications/>

### ***Coastal Zone Management Act- Section 307***

Section 307 of the Coastal Zone Management Act (15 Code of Federal Regulations 930 Subpart C) - Consistency Determination and Coastal Development Permit is issued by the California Coastal Commission. Section 307 of the Coastal Zone Management Act of 1972 (CZMA), the federal consistency provision, enables coastal states to have a say in federal agency decision making for activities that may affect a state's coastal uses or resources. Federal consistency requires that federal actions, within and outside the coastal zone, which have "reasonably foreseeable effects on any coastal use or natural resource of the coastal zone be consistent with the enforceable policies of a state's federally approved coastal management program." CZMA is interpreted by NOAA and oversees the application of federal consistency. The California Coastal Commission (CCC) is the responsible state agency for reviewing the proposed federal actions. Proposed developments in the coastal zone are regulated by coastal development permits, which help ensure that developments are brought into compliance with the policies of Chapter 3 of the Coastal Act. Generally, no development within the coastal zone may commence until a coastal development permit has been issued by either the CCC or a local government.

References: NOAA (2020), CZMA and CCC (2019), Coastal Development Permit.

Agency Website: <https://www.coastal.ca.gov/cdp/cdp-forms.html>

### ***General Construction Storm Water Permit***

General Construction Storm Water Permit (Water Quality Order 99-08-DWQ) - General Permit is issued by the California Water Boards. The California Water Board works in coordination with nine Regional Water Boards to "preserve, protect, enhance, and restore water quality" to ensure the protection of human health and the environment. The California Water Board is responsible for setting statewide water quality standards, issuing statewide general permits, conducting statewide surface and groundwater monitoring and assessments, and issuing orders for cleaning up contaminated sites. A General Construction Storm Water Permit is required for projects that will "disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres." To obtain a Construction General Permit, a certified Qualified Stormwater Pollution Prevention Plan (SWPPP) Developer must draft a SWPPP for the project.

References: California Water Boards (2019) and California Water Boards (n.d.).

Agency Website: [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/](https://www.waterboards.ca.gov/water_issues/programs/stormwater/)

### ***Section 106 of National Historic Preservation Act***

Section 106 of National Historic Preservation Act (36 Code of Federal Regulation 60, 800) - Section 106 Submission/ Consultation is conducted by the California Office of Historic Preservation. Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to consider the "effects on historic properties of projects they carry out, assist, fund, permit, license, or approve throughout the country." Under Section 106 of the NHPA, each federal agency must identify and assess the effects its actions may have on historic buildings and they must also consider public views and concerns about historic preservation issues when making final decisions.

References: Advisory Council on Historic Preservation (n.d.).

Agency Website: [https://ohp.parks.ca.gov/?page\\_id=1071](https://ohp.parks.ca.gov/?page_id=1071)



## **Local (Humboldt County)**

### ***California Air Resource Board (17 California Code of Regulations) - Operating Permit***

The California Air Resource Board (17 California Code of Regulations) - Operating Permit is issued by the North Coast Air Quality Management District. The North Coast Air Quality Management District has developed an Air Quality Attainment Plan with regards to the standards set by the EPA and the California Air Resources Board. They are responsible for enforcing the rules that limit pollution, issuing permits to ensure compliance and inspect pollution sources within Humboldt, Del Norte, and Trinity counties in Northern California.

References: North Coast Air Quality Management District (n.d.).

Agency Website: <http://www.ncuaqmd.org/index.php?page=permit.forms>

### ***Coastal Development Permit***

Coastal Development Permit is issued by the Humboldt Bay Harbor, Recreation and Conservation District. The same roles and responsibilities that are listed below for the Humboldt Bay Harbor, Recreation and Conservation District are expected for the Coastal Development Permit. It should be noted that Humboldt County is updating its local coastal program to expand the coordinated sea level rise planning around Humboldt Bay and address potential effects on coastal-dependent uses. If Humboldt County updates its local coastal program and becomes certified by the CCC, only a Coastal Development Permit will be required from the County rather than from the CCC. The above action is not a finalized decision, and is still dependent on the cable landing location, construction activities required for the proposed project, and if Humboldt County becomes certified by the CCC.

References: H. T. Harvey & Associates (2020).

Agency Website: <http://humbolddbay.org/harbor-overview>

### ***Development Permit***

The Development Permit is issued by the Humboldt Bay Harbor, Recreation and Conservation District. The Humboldt Bay Harbor, Recreation and Conservation District's board of commissioners are responsible for granting permits, franchises, and leases. In most cases, the Humboldt Bay Harbor, Recreation and Conservation District is also the lead agency for developing projects in regards to CEQA compliance and routinely works with other permitting agencies on the environmental assessment of proposed projects.

References: Humboldt Bay Harbor, Recreation and Conservation District (2020).

Agency Website: <http://humbolddbay.org/harbor-overview>



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