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# Th8b

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## STAFF REPORT: REGULAR CALENDAR

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| **Consistency Determination No.:** | **CD-0005-26** |
| **Applicant:** | **Bureau of Ocean Energy Management** |
| **Project Location:** | Platform Gilda, approximately 9 miles offshore Ventura County |
| **Project Description:** | Hydraulic fracturing of 16 oil wells on its existing offshore oil and natural gas production platform |
| **Staff Recommendation:** | Objection |

## SUMMARY OF STAFF RECOMMENDATION

On June 29, 2026, the Bureau of Ocean Energy Management (BOEM) submitted a consistency determination for DCOR, LLC's proposal to carry out hydraulic fracturing well stimulation (fracking) on 14 wells on its offshore oil platform, Platform Gilda. DCOR, LLC (DCOR) is already seeking Commission review of this project through a consistency certification (CC-0001-26) submitted to the Commission on February 26 and filed as complete on April 1, 2026. Prior to its submittal of a consistency determination for DCOR's project, Commission staff repeatedly advised BOEM staff that such a submittal would be improper and inconsistent with the Coastal Zone Management Act (CZMA) and its regulations. This is because the CZMA establishes that a consistency determination should only be submitted for federal agency activities – essentially, projects carried out directly by a federal agency – and the proposed project does not meet the definition of a federal agency activity. The project would be carried out by a private company, DCOR, and make use of its Outer Continental Shelf Lease, oil platform, oil wells, equipment and personnel. Further, BOEM acknowledges in its

February 26, 2026, letter to the Commission's Executive Director transmitting DCOR's consistency certification that the project is required to undergo federal consistency review and DCOR has properly provided a consistency certification for it:

> *Because DCOR is proposing a new activity that was not previously identified and evaluated in the existing approved [Development and Production Plan] for Platform Gilda, the proposed [Development and Production Plan] supplement is subject to all of the procedures of 30 CFR 550.267 through 550.273, including federal consistency review by the California Coastal Commission under the Coastal Zone Management Act.*
>
> *BOEM has received all necessary information in accordance with 15 CFR 930.76(a). BOEM hereby provides the required information to the California Coastal Commission (CCC) as required by 15 CFR 930.76(b) and 30 CFR 550.267(a)(3), we are providing you with a copy of the supplemental DPP and its accompanying information and attachments (including DCOR's coastal zone consistency certification).*

In addition, the CZMA specifies that if a project is subject to review as a consistency certification (also known as a "(c)(3)" review), it cannot also be subject to a consistency determination (also known as a "(c)(1)" review). This was confirmed by the United States Court of Appeals for the Ninth Circuit in its 2022 decision on litigation brought against BOEM by the California Attorney General, Commission and others for authorizing fracking in federal waters without required CZMA or NEPA review:

> *If a proposed federal agency activity can be reviewed under § (c)(3) [of 16 U.S.C. § 1456], the CZMA specifically provides that it cannot be reviewed under § (c)(1). 16 U.S.C. § 1456(c)(1)(A). Review under § (c)(1) and § (c)(3) is therefore mutually exclusive."*[1]

Therefore, BOEM's consistency determination should not have been submitted because the project is not a federal agency activity and was already under review by the Commission through DCOR's consistency certification. CZMA establishes that consistency certifications are the appropriate review mechanism for oil and gas development activities on Outer Continental Shelf leases that are subject to federal agency review and authorization as well.

In addition to the inconsistency of BOEM's submittal with CZMA, the underlying DCOR project also raises issues of inconsistency with the enforceable policies of the California Coastal Management Plan. These are discussed in detail in the staff report and

[1] *Environmental Defense Center, et al. v. Bureau of Ocean Mgmt., et al.*, 36 F.4th 850 (9th Cir. 2022) (citation omitted).

recommendation on DCOR's consistency certification, CC-0001-26, and also provided in this report below.

To summarize them, the proposed fracking operation from Platform Gilda would prolong and intensify oil production from a nearly half-century old marine facility and thus would increase the likelihood and severity of an oil spill from it or its seafloor oil pipeline. While DCOR has proposed various measures to protect against such as spill, including a robust inspection and maintenance program, similar measures have been shown to be ineffective in preventing oil spills in the past, including at other DCOR marine facilities in southern California. The CCMP recognizes this reality that spills cannot always be prevented and therefore includes requirements for effective cleanup and containment to be provided. The methods proposed by DCOR in its Oil Spill Response Plan provide its primary means of meeting this cleanup and containment requirement. However, most of the methods and equipment proposed to be used in this plan for cleanup and containment are the same as or similar to those that have been shown in recent years to be ineffective.

None of the three most significant marine oil spills that happened in southern California over the past decade (over 100,000 gallons from a pipeline rupture at Refugio State Beach, nearly 25,000 gallons from another pipeline rupture off of Long Beach and hundreds of gallons from a third pipeline leak off of Huntington Beach) were able to be effectively contained and ended up exposing miles of coastline and a range of sensitive habitat areas to oil. Cleanup was similarly ineffective. Past research by California's expert oil spill agency, the California Department of Fish and Wildlife Office for Spill Prevention and Response, discusses how oil spill recovery efforts in open ocean and shoreline areas like those included in DCOR's plan and carried out following these recent spills can capture less than 20% of the total spilled volume.

Accordingly, the proposed project fails to meet the CCMP requirement that effective cleanup and containment be provided for accidental spills. The increase to both the risk and severity of oil spills in the Santa Barbara Channel resulting from the proposed project and its inability to provide for effective cleanup and containment of them leads to its inconsistency with multiple other CCMP policies. The project would not maintain the quality of coastal waters or provide special protection for the areas of special biological and economic significance in the Santa Barbara Channel and vicinity, as required by the CCMP's marine biological resource protection policies. It would also put at risk the important fishing grounds in immediate proximity to Platform Gilda that generated nearly $12 million in commercial landings from 2015-2024 as well as other critical nearby fishing grounds[3], inconsistent with the CCMP's commercial and recreational fisheries protection policies. Further, the project would be inconsistent with the CCMP's policies requiring coastal access and recreational resources to be protected because it would introduce an expanded risk of oil spills. Protection is provided by eliminating or reducing risks, not by increasing them. Thus, the increased risk of spills resulting from the project

and the likelihood of such spills to result in beach and ocean closures and reductions in recreational opportunities make the project inconsistent with the CCMP's public access and recreation policies. Finally, DCOR has also not adequately demonstrated that the project's reliance on and intensified use of aged existing infrastructure – including the platform, export pipelines and onshore processing facility – would minimize hazards from seismic ground shaking, coastal storms and erosion, tsunamis and fire, and thus assure stability and structural integrity over the life of the project, as required by the CCMP's coastal hazards policy.

For these reasons and BOEM's improper preparation of and submittal of a consistency determination for DCOR's project, Commission staff recommends that the Commission **object** to Consistency Determination CD-0005-26. The motion and resolution are on **Page 6** of this report. The standard of review for this consistency determination consists of the enforceable policies of the CCMP (Chapter 3 of the Coastal Act).

Staff Note:

This item (CD-0005-26) is being heard in a combined hearing on Consistency Certification No. CC-0001-26 (DCOR, LLC) Item Th8a, which is a separate item with a separate staff report. Sections IV.C through H of this report are similar to those in the staff report for CC-0001-26.

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## EXHIBITS

Exhibit 1 – Vicinity Map – Platform Gilda and Pipelines to Shore
Exhibit 2 – Final Decision of the U.S. Court of Appeals for the Ninth Circuit in *Environmental Defense Center, et al. v. Bureau of Ocean Energy Mgmt., et al.*, 36 F.4th 850 (9th Cir. 2022)
Exhibit 3 – Platform Gilda Worst Case Discharge - Deterministic Simulation/Trajectory Calculations

# I. FEDERAL AGENCY'S CONSISTENCY DETERMINATION

The Bureau of Ocean Energy Management (BOEM) has determined the project is consistent to the maximum extent practicable with the California Coastal Management Program (CCMP).

# II. MOTION AND RESOLUTION

**Motion:**

> I move that the Commission concur with Consistency Determination CD-0005-26 on the grounds that the project described therein would be fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program. I further move that the Commission determine that the project described in Consistency Determination CD-0005-26 was appropriately submitted to the Commission for review as a consistency determination under the federal Coastal Zone Management Act.

Staff recommends a **NO** vote on the motion. Failure of this motion will result in an objection to the determination of consistency and will result in a determination that the project described in Consistency Determination CD-0005-26 was not appropriately submitted to the Commission for review as a consistency determination under the Coastal Zone Management Act. Failure of this motion will result in adoption of the following resolution and findings. An affirmative vote of the majority of the Commissioners present is required to pass the motion.

**Resolution:**

> The Commission hereby objects to Consistency Determination CD-0005-26 on the grounds that the project would not be consistent to the maximum extent practicable with the enforceable policies of the CCMP. The Commission further determines that the project described in Consistency Determination CD-0005-26 was not appropriately submitted to the Commission for review as a consistency determination under the Coastal Zone Management Act.

# III. APPLICABLE LEGAL AUTHORITIES

## A. Standard of Review

The federal Coastal Zone Management Act ("CZMA"), 16 U.S.C. § 1451-1464, requires that a federal agency affecting coastal resources be "carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs." Id. at § 1456(c)(1)(A). The implementing regulations for

the CZMA ("federal consistency regulations"), at 15 C.F.R. § 930.32(a)(1), define the phrase "consistent to the maximum extent practicable" to mean:

> … fully consistent with the enforceable policies of management programs unless full consistency is prohibited by existing law applicable to the Federal agency.

This standard allows a federal agency activity that is not fully consistent with California's Coastal Management Program ("CCMP") to proceed, if full compliance with the CCMP would be "prohibited by existing law applicable to the Federal agency." In its consistency determination, BOEM did not argue that full consistency is prohibited by existing law applicable to it or provide any documentation to support a maximum extent practicable argument. Therefore, there is no basis to conclude that existing law applicable to the Federal agency prohibits full consistency. Since BOEM has raised no issue of practicability, as so defined, the standard before the Commission is full consistency with the enforceable policies of the CCMP, which are the policies of Chapter 3 of the Coastal Act (Cal. Pub. Res. Code §§ 30200-30265.5).

## B. Types of Federal Consistency Reviews

The CZMA provides for two main types of federal consistency reviews: consistency determinations under 16 U.S.C. § 1456(c)(1)(A) and consistency certifications under 16 U.S.C. § 1456(c)(3). Consistency determinations are for "Federal agency activities"[2] and consistency certifications are for an activity by an "applicant for a required Federal license or permit."[3]

The term "Federal agency activity" is defined in the regulations as follows:

> [A]ny functions performed by or on behalf of a Federal agency in the exercise of its statutory responsibilities. The term "Federal agency activity" includes a range of activities where a Federal agency makes a proposal for action initiating an activity or series of activities when coastal effects are reasonably foreseeable, e.g., a Federal agency's proposal to physically alter coastal resources, a plan that is used to direct future agency actions, a proposed rulemaking that alters uses of the coastal zone. "Federal agency activity" does not include the issuance of a federal license or permit to an applicant or person (see subparts D and E of this part) or the granting of federal assistance to an applicant agency (see subpart F of this part).[4]

[2] 16 U.S.C. § 1456(c)(1)(A).
[3] 16 U.S.C. § 1456(c)(3)(A).
[4] 15 C.F.R. § 930.31(a).

## C. Objection Grounds

**Basis for Objection: Substantive Inconsistency**
Pursuant to 15 C.F.R. § 930.43, a state agency may object to a consistency determination if, based on the information available, it determines that the proposed activity is not consistent with the enforceable policies of the state's approved coastal management program. Section 930.43 sets forth two independent grounds for objection: substantive inconsistency and insufficient information. Section 930.43 provides that a state agency objection grounded in substantive inconsistency shall describe: (1) how the proposed activity is inconsistent with specific enforceable policies of the CCMP; (2) the specific enforceable policies (including citations); and (3) alternative measures (if they exist) which, if adopted by the federal agency, would allow the activity to proceed in a manner consistent to the maximum extent practicable with the enforceable policies of the CCMP. The Commission's objection set forth in this staff report is based on substantive inconsistency pursuant to Sections 930.43. The policy-by-policy findings contained in Sections IV.C - IV.G of this report discuss the proposed project's inconsistency with each applicable enforceable policy of the CCMP.

## D. State Agency Objection

The Coastal Zone Management Act's federal consistency regulations that establish the Commission's review authority allow a federal agency to proceed with its proposed activity despite an objection from a coastal state after it notifies the state agency that it still concludes its proposed agency activity is fully consistent with the enforceable policies of the state's coastal management program. Specifically, the federal consistency regulations (15 CFR § 930.43) provide:

> (a) In the event the State agency objects to the Federal agency's consistency determination, the State agency shall accompany its response to the Federal agency with its reasons for the objection and supporting information. The State agency response shall describe:
>
> (1) How the proposed activity will be inconsistent with specific enforceable policies of the management program; and
>
> (2) The specific enforceable policies (including citations).
>
> (3) The State agency should also describe alternative measures (if they exist) which, if adopted by the Federal agency, would allow the activity to proceed in a manner consistent to the maximum extent practicable with the enforceable policies of the management program. Failure to describe alternatives does not affect the validity of the State agency's objection.
>
> (b) If the State agency's objection is based upon a finding that the Federal agency has failed to supply sufficient information, the State agency's response

must describe the nature of the information requested and the necessity of having such information to determine the consistency of the Federal agency activity with the enforceable policies of the management program.

(c) State agencies shall send to the Director a copy of objections to Federal agency consistency determinations.

(d) In the event of an objection, Federal and State agencies should use the remaining portion of the 90-day notice period (see § 930.36(b)) to attempt to resolve their differences. If resolution has not been reached at the end of the 90-day period, Federal agencies should consider using the dispute resolution mechanisms of this part and postponing final federal action until the problems have been resolved. At the end of the 90-day period the Federal agency shall not proceed with the activity over a State agency's objection unless:

(1) the Federal agency has concluded that under the "consistent to the maximum extent practicable" standard described in section 930.32 consistency with the enforceable policies of the management program is prohibited by existing law applicable to the Federal agency and the Federal agency has clearly described, in writing, to the State agency the legal impediments to full consistency (See §§ 930.32(a) and 930.39(a)), or

(2) the Federal agency has concluded that its proposed action is fully consistent with the enforceable policies of the management program, though the State agency objects.

(e) If a Federal agency decides to proceed with a Federal agency activity that is objected to by a State agency, or to follow an alternative suggested by the State agency, the Federal agency shall notify the State agency of its decision to proceed before the project commences.

# IV. FINDINGS AND DECLARATIONS

## A. Background and Project Description

**Existing Operations and Prior Review**

The subject project is a proposal by DCOR, LLC. (DCOR) to carry out hydraulic fracturing ("fracking") on 16 of its existing oil production wells originating at Platform Gilda. Platform Gilda is an offshore oil and gas production facility operated by DCOR and located in approximately 205 feet of water approximately 8.8 miles offshore Ventura County in the Santa Barbara Channel (**Exhibit 1**). Platform Gilda is on the Outer Continental Shelf lease held by DCOR (lease no. OCS-P 0216) and DCOR would carry out the proposed project using its equipment, personnel and facility. The project also includes the transport of oil produced through use of the proposed hydraulic fracturing activities to shore through DCOR's existing seafloor oil pipeline.

Platform Gilda's original construction and initial operation were subject to federal consistency review by the Commission. In June of 1980, the Commission concurred with Union Oil Company of California's consistency certification no. CC-6-80 for a Plan of Development and related permits for Outer Continental Shelf Lease No. OCS-P 0216 that included the installation and operation of Platform Gilda, a 90-well slot offshore oil platform, as well as associated infrastructure, including seafloor pipelines for the transport of oil, natural gas and produced water between the platform and an onshore processing facility. The main purpose of the platform was for Union Oil Company to access its Outer Continental Shelf Lease No. OCS-P 0216. Ten of the proposed 90 well slots were also reserved for use by Chevron for development of an adjacent lease, OCS-P 0215[5]. In concurring with Union Oil Company's consistency certification, the Commission found that this element of the project was necessary for it to be consistent with the Coastal Act's requirement for consolidation of energy facilities because it would eliminate the need for a separate oil platform to be constructed by Chevron. In its findings in support of that concurrence, the Commission described drilling of Platform Gilda's 90 wells over a four-year period and an anticipated operating life for the platform and associated pipelines and infrastructure of approximately 18 years.

The Commission's findings also described a total peak production level from the Santa Clara Unit – the area of oil and gas production accessed by Platform Gilda and Platform Grace (located on Lease No. OCS-P 0217) – of 20,000 barrels of oil per day and a total extraction of 43 million barrels of oil and 40 billion cubic feet of natural gas. Platform Gilda and its associated pipelines have now been in operation for roughly 45 years, more than double the originally estimated lifespan, and, based on January 2026 data from BOEM, production from the Santa Clara Unit has exceeded initial estimates by nearly 9 million barrels of oil and 33 billion cubic feet of natural gas.

| **Platform Grace** | **Platform Gilda** | **Total** |
|---|---|---|
| **Cum. Oil Production:** 8.99 million barrels | **Cum. Oil Production:** 42.65 million barrels | **Oil Production:** 51.64 million barrels |
| **Cum. Gas Production:** 22.22 billion ft³ | **Cum. Gas Production:** 51.74 billion ft³ | **Gas Production:** 74.45 billion ft³ |

DCOR has operated Platform Gilda and its associated lease since 2005. The platform has operated continuously since installation in 1982, and 70 wells plus additional sidetracks and redrills have been drilled from the platform, with the most recent well drilled in 2014. Platform Grace, located on the adjacent and now-relinquished Lease No. OCS P-0217, has been out of service for several years and is being decommissioned.

[5] Lease OCS-P 0215 is now held by DCOR.

Platform Gilda is currently the only producing facility in the Santa Clara Unit offshore oil field. Current oil production is approximately 1,100 barrels per day. The platform also produces natural gas in association with oil production, with both products transported to shore via subsea export pipelines. The seafloor oil and gas pipelines were installed in 1982. The oil and gas pipelines, along with a third pipeline carrying produced water from the onshore processing facility back to the platform for reinjection, run along the seafloor and connect Platform Gilda with DCOR's Mandalay Onshore Facility in Oxnard (**Exhibit 1**).

Information provided by DCOR in its consistency certification and supplemental Development and Production Plan – cited in BOEM's consistency determination as supporting documents[6] – indicates that Platform Gilda operators, including DCOR, previously conducted fracking operations at this facility at times between 1986 and 2014, including 28 treatments on 14 wells. Commission staff is not aware of records of CZMA or National Environmental Policy Act ("NEPA") review of these prior fracking efforts or of notification provided to the Commission or public of them by the platform operators or BOEM (or its predecessor, the former Minerals Management Service). Commission staff is in the process of gathering additional information about these prior fracking efforts and their potential effects on coastal resources.

**Litigation History**

Prior litigation concerning the federal government's environmental review of well stimulation treatments on platforms in the Pacific Outer Continental Shelf ("OCS") is relevant to the background of this proposed project. The history of that litigation culminated in a 2022 decision by the United States Court of Appeals for the Ninth Circuit.[7] As discussed in more detail below, the Ninth Circuit found that the federal agencies are required to prepare a consistency determination under the CZMA and an Environmental Impact Statement ("EIS") under NEPA for the proposed federal action at issue in that case.

In an original lawsuit filed in 2014,[8] the Environmental Defense Center brought an action against BOEM and the federal Bureau of Safety and Environmental Enforcement ("BSEE")[9] for BSEE's approval of 51 permits authorizing oil companies to perform fracking and well stimulation treatments off the California coast without any environmental review under NEPA. That lawsuit resulted in a settlement in which the federal agencies agreed to conduct a programmatic Environmental Analysis ("EA")

[6] BOEM's CD states in its introduction "This Consistency Determination (CD) is based on... the Coastal Zone Management Act Consistency Analysis & Findings, Platform Gilda Well Stimulation Program Offshore Ventura County, Ca. [DCOR's consistency certification] (Padre Associates 2026), the Platform Gilda Well Stimulation Program Update to Development and Production Plan (DPP)...."

[7] *Environmental Defense Center, et al. v. Bureau of Ocean Mgmt., et al.*, 36 F.4th 850 (9th Cir. 2022).

[8] *Environmental Defense Center v. Bureau of Safety and Environmental Enforcement, et al*. (C.D. Cal. Case No. 2:14-cv-09281).

[9] BOEM and BSEE are component agencies of the U.S. Department of the Interior. The Department of the Interior is currently in the process of reunifying those two agencies into a single federal agency called the Marine Minerals Administration (MMA), as it was formerly called before 2011. This agency oversees the leasing and environmental management of outer continental shelf sand, gravel, and certain minerals.

under NEPA of well stimulation treatments in the OCS. Under the settlement, the federal agencies also agreed to a temporary moratorium on permit approvals authorizing well stimulation treatments until they completed the required environmental review.

Following that settlement, in 2016, BOEM and BSEE prepared an Environmental Assessment[10] and issued a Finding of No Significant Impact ("FONSI"). Plaintiff Environmental Defense Center, as well as the People of the State of California (through the Attorney General), the Coastal Commission, and others, then brought another lawsuit to challenge the adequacy of the federal agencies' review under NEPA and the CZMA (as well as the Endangered Species Act).[11] As to the NEPA claim, the plaintiffs argued that the federal agencies were required to prepare an EIS.[12] The Ninth Circuit found that the federal agencies failed to conduct the required "hard look" analysis in violation of NEPA and that they also should have prepared an EIS for the proposed action of allowing the use of selected well stimulation treatments ("WSTs") on all of the 43 current active leases and 23 operating platforms in the Pacific Outer Continental Shelf.[13] In addition, the Ninth Circuit found that the federal agencies had violated the CZMA because they had not prepared a consistency determination under the CZMA for that proposed action. The Ninth Circuit found that the proposed action, which was to "'approve the use of fracturing and non-fracturing WSTs' at all platforms on the Pacific Outer Continental Shelf if the treatments are 'deemed compliant with performance standards identified in BSEE regulations,'" constituted a federal agency activity under the CZMA.[14] Specifically, the Ninth Circuit found that the proposed action was a "plan that is used to direct future agency actions" that meets the definition of "Federal agency activity" under 15 C.F.R. § 930.31(a). The Ninth Circuit decision is available in **Exhibit 2.**

In addition to the Ninth Circuit's holdings in the case, the Court provided a discussion of the legal framework pertaining to an analysis of proposed oil and gas development in the OCS (emphasis added):

> *Declaring that the oil and natural gas reserves beneath the Outer Continental Shelf are a "vital national resource," Congress enacted the Outer Continental Shelf Lands Act ("OCSLA") to govern the development of offshore oil and gas resources in this*

[10] Programmatic Environmental Assessment of the Use of Well Stimulation Treatments on the Southern California Outer Continental Shelf (BOEM/BSEE 2016).

[11] *Environmental Defense Center, et al. v. Bureau of Ocean Mgmt.*, (C.D. Cal. Case No. 2:16-cv-08418).

[12] Under NEPA, an environmental assessment (EA) addresses the threshold questions of whether the proposed action has a significant environmental impact and whether additional environmental review is required. If the EA finds no significant environmental impact and conducts an adequate analysis, the agency may prepare a Finding of No Significant Impact that allows the agency to proceed without further NEPA review. If, however, the EA finds a significant environmental effect, the agency is required to prepare an environmental impact statement (EIS), which is a full-scale NEPA review with a more rigorous process, before the agency may proceed with the proposed action.

[13] *Environmental Defense Center*, 36 F.4th at 875, 882.

[14] *Id.* at 887 (citing 15 C.F.R. § 930.31(a)).

*region, while recognizing the crucial need to balance resource development with the protection of the human, marine, and coastal environments. Id. § 1332(3). The OCSLA provides for the right of coastal states to participate in decisions concerning the Outer Continental Shelf "to the extent consistent with the national interest." Id. § 1332(4)(C).*

*Congress created four phases for offshore oil and gas production. First, the Department of the Interior creates a leasing program to meet national energy needs for a five-year period. See id. § 1344. Second, the Department of the Interior holds lease sales. See id. § 1337. Third, the winning bidders obtain leases and submit exploration plans to the Department of the Interior, and these plans, if approved, authorize exploratory drilling. See id. § 1340. Fourth, if lessees discover commercially viable oil and gas deposits through their exploratory drilling, they then file development and production plans that would authorize them to construct a platform, install equipment, lay pipeline, and conduct other development activities. See id. § 1351.*

*Before commercial drilling, lessees must submit an Application for Permit to Drill or an Application for Permit to Modify. The Department of the Interior can then approve the drilling operations, approve with modification, or deny the application. See generally 30 C.F.R. §§ 250.410–465; id. § 550.281. Lessees are required to revise an approved development and production plan if they make certain operational changes, like changing the type or volume of production or increasing the amount of emissions or waste, or if they propose to conduct activities that require approval of a license or permit that is not described in their approved plan. Id. § 550.283. Id. BOEM and BSEE, two agencies within the Department of the Interior, manage the oil and gas activities described in OCSLA.*

*There are 23 oil and gas platforms in the federal waters on the Pacific Outer Continental Shelf off the coast of California. Oil companies installed these platforms between 1967 and 1989 and continue to rely on development and production plans approved in that time period for their drilling activities.*[15]

*…*

*Well stimulation treatments include oil extraction techniques that allow oil production to continue from wells with declining reservoirs. <u>These practices prolong drilling operations, and expand total production, by enabling oil companies to extract oil otherwise unreachable using conventional drilling methods</u>. The well stimulation treatments at issue in this case primarily consist of hydraulic fracturing (commonly known as fracking), which involves injecting a mixture of water, sand, and chemicals into a well at an extremely high pressure to fracture the rock formation.*

[15] *Id.* at 864-65.

> *Well stimulation treatments pose a variety of risks. Not all of the chemicals used in well stimulation treatments have been studied, but the known chemicals include carcinogens, mutagens, toxins, and endocrine disruptors. These chemicals can harm aquatic animals and other wildlife in the areas where well stimulation treatments are used. Well stimulation treatments also emit pollutants, including carcinogens and endocrine disruptors, into the air. And the high pressures used in these treatments can increase the risk of oil spills, especially because well stimulation treatments are often used on old wells. Enhanced well life and increased production thus come with a potential environmental price.*[16]
>
> …
>
> *To be sure, the use of well stimulation treatments will not occur in practice until an individual permit application has been approved. But as the district court explained, the agencies concede that no further programmatic environmental review of these treatments will be conducted. And it is "the effect of the action and not its label that must be considered." Or. Nat. Desert Ass'n v. U.S. Forest Serv., 465 F.3d 977, 985 (9th Cir. 2006) (citations omitted). Here, the effect of the FONSI is that it provides the agencies' final word on the environmental impacts of the proposed action and concludes that the authorization of well stimulation treatments will not have a significant impact. This programmatic conclusion will not be revisited, so Plaintiffs here "are able to show ... a completeness of action by the agency." Kern, 284 F.3d at 1070. Absent the proposed action approved in the EA, no permits could be sought.*[17]
>
> …
>
> *We reject the agencies' claim that the EA and FONSI are merely their "first, preliminary steps toward making a decision about the use of well stimulation treatments in the federal waters off the California coast," particularly in the context of this litigation, where 51 permits authorizing well stimulation treatments were approved without environmental review. There is no argument or evidence that these 51 already-approved permits will be revisited, especially after the agencies approved unrestricted use of well stimulated treatments in the EA and FONSI. It would make no sense to have a full environmental impact evaluation on one permit or multiple individual permits without considering the total environmental impact of the full picture. Environmental law does not require a court to miss the forest for the trees. The agencies' programmatic approval is not insulated from judicial review.*[18]

The Ninth Circuit remanded the case to the U.S. District Court with directions to "enjoin the [federal] agencies from approving well stimulation treatment permits until the agencies issue a complete EIS, rather than the inadequate EA on which they had relied" and also upheld "the injunctive relief the district court awarded to remedy the ESA and CZMA violations, which enjoined the agencies from approving any permits allowing well stimulation treatments offshore California until the agencies completed consultation with

[16] *Id.* at 865.
[17] *Id.* at 868.
[18] *Id.* at 869 (emphases added).

the Fish and Wildlife Service and consistency review with California."[19] On remand, the U.S. District Court issued an order amending its 2018 injunction by additionally enjoining the federal agencies "from approving well stimulation treatment permits until the agencies issue a complete EIS."[20]

As discussed in Section IV.B below, after the litigation concluded, BOEM prepared an EIS using expedited NEPA review procedures and published the EIS on April 17, 2026.[21] However, that EIS does not cover the proposed action described in the Ninth Circuit decision, which is to allow the use of selected well stimulation treatments on all of the 43 current active leases and 23 operating platforms in the Pacific Outer Continental Shelf. Instead, the EIS is specific to the WST activities proposed by DCOR at Platform Gilda. BOEM has not prepared or initiated any EIS for the proposed action described in the Ninth Circuit decision.

In addition, it is important to note that the CZMA "consistency review with California" referenced by the Ninth Circuit is the review of a consistency determination prepared by BOEM for its program of considering and approving the use of well stimulation treatments across the entire Pacific OCS for all platforms and leases. The review of an individual company's consistency certification for an applicant-specific individual well stimulation project on a particular platform or lease would therefore be expected to occur only after the requisite programmatic review had been completed. As of the current time, there has been no NEPA or CZMA review of such a program.

**Appropriateness of Consistency Determination No. CD-0005-26**
As discussed in Section III.B, above, the CZMA provides for two types of federal consistency reviews: consistency determinations and consistency certifications. The CZMA specifies that a project that requires a "Federal license or permit to conduct an activity" must follow the consistency certification review track.[22] Under CZMA § 307(c)(3)(A), the applicant for the permit or license – not the federal agency – certifies through a consistency certification that its proposed activity complies fully with the state's enforceable policies.[23] Moreover, if a project requires a consistency certification, the project is not reviewable as a consistency determination at all. As the Ninth Circuit explained (emphasis added):

> *Whenever a "Federal agency activity" may affect a state's coastal zone, the CZMA requires review of the action to confirm that it is consistent with the affected state's coastal management program. 16 U.S.C. § 1456. Not all consistency review under the CZMA is the same, however. If the federal agency takes the action itself, then § 1456(c)(1) of the CZMA requires the agency to "provide a consistency determination" to the designated state agency specifying whether the proposed*

[19] *Id.* at 891.
[20] Order dated July 13, 2023 (amending injunction dated Dec. 13, 2018), *Environmental Defense Center, et al. v. Bureau of Ocean Management, et al.* (C.D. Cal. Case No. 2:16-cv-08418).
[21] DCOR, LLC Well Stimulation Treatment Environmental Impact Statement (BOEM 2026). BOEM has not yet issued a Record of Decision for the EIS.
[22] 16 U.S.C. § 1456(c)(3)(A).
[23] 16 U.S.C. § 1456(c)(3)(A).

> *action is consistent with the state's coastal management program. But if the agency is not taking the action itself, and instead is approving a proposed plan or issuing a federal license or permit to an applicant, then § 1456(c)(3) requires the applicant to conduct the consistency review and include a "consistency certification" in its application confirming that the proposed activity complies with the affected state's coastal management program. Id. § 1456(c)(3). In other words, § (c)(1) review reaches activities where the federal agency is the "principal actor" while § (c)(3) review encompasses the "federally approved activities of third parties." Sec'y of the Interior v. California, 464 U.S. 312, 332, 104 S.Ct. 656, 78 L.Ed.2d 496 (1984). If a proposed federal agency activity can be reviewed under § (c)(3), the CZMA specifically provides that it cannot be reviewed under § (c)(1). 16 U.S.C. § 1456(c)(1)(A). Review under § (c)(1) and § (c)(3) is therefore mutually exclusive.*[24]

BOEM's Consistency Determination covers the same exact proposed project described in DCOR's Consistency Certification (No. CC-0001-26), which was submitted to the Commission on February 26, 2026, and filed as complete on April 1, 2026. The Consistency Certification is for DCOR's proposal to perform well stimulation activities (hydraulic fracturing) at Platform Gilda on 16 wells. In connection with that proposal, BOEM is reviewing the Supplemental DPP for authorization, and BOEM has prepared an EIS for that proposal.[25] As BOEM states in its Consistency Determination, "[t]he proposed federal action will authorize a well stimulation (hydraulic fracturing) program, specifically hydraulic fracturing, of 16 existing wells on Platform Gilda (OCS P-0216)."[26] Therefore, BOEM has submitted its Consistency Determination for a private activity that would be undertaken by DCOR and for which DCOR seeks a permit or license from BOEM. BOEM is not performing the proposed activity at issue.[27] The Commission is not aware of ever receiving a consistency determination for a project like the one under current consideration - or any other oil and gas development project - that would be undertaken by an oil and gas operator on the Pacific OCS and for which it seeks a federal license or permit. The Commission has reviewed well over 100 OCS oil and gas development projects over the past several decades and all have been reviewed by the Commission as consistency certifications prepared by the oil and gas operator. Moreover, BOEM's Consistency Determination is not for the proposed action at issue in the Ninth Circuit decision "to approve the use of fracturing and non-fracturing WSTs at

[24] *Environmental Defense Center*, 36 F.4th at 886-87 (emphasis added).
[25] BOEM, Consistency Determination (June 29, 2026), at 8; BOEM, Final Environmental Impact Statement, Docket No. BOEM-2025-0714 (April 17, 2026).
[26] BOEM, Consistency Determination, p. 8.
[27] 15 C.F.R. § 930.31. Moreover, the authorization by BOEM required for the Supplemental DPP does not qualify as a Federal agency activity requiring consistency determination review. Id. ("'Federal agency activity'" does not include the issuance of a federal license or permit to an applicant or person…")

all platforms on the Pacific Outer Continental Shelf if the treatments are deemed compliant with performance standards identified in BSEE regulations."[28]

Under the CZMA, the proposed activity in BOEM's Consistency Determination must be reviewed in a consistency certification, and not in a consistency determination. Therefore, Consistency Determination CD-0005-26 was not appropriately submitted for review by the Commission as a consistency determination.

**Environmental Setting**

The proposed project is located within the Santa Barbara Channel, an area considered to be among the most biologically productive marine environments along the California coast. Often referred to as the "Galapagos of North America," the Santa Barbara Channel and Channel Islands support extensive kelp forests, rocky reefs, soft sediment habitat, commercial and recreational fisheries, migratory and resident marine mammals, threatened and endangered sea turtles, sea birds, and highly productive marine food webs. National and state recognition for this ecologically rich area includes the Channel Islands National Park, the Channel Islands National Marine Sanctuary and nearly a dozen state marine reserves and conservation areas. These marine and coastal resources represent areas of special biological significance required to be protected under the Coastal Act.

The island and mainland shorelines in the project area also include the publicly accessible beaches and coastal areas of Ventura and Santa Barbara Counties that are popular recreational coastal destinations. These resources are managed for biological, recreational, and economic value and are closely tied to overall marine ecosystem health.

**Project Description**

DCOR submitted a supplemental Development and Production Plan and consistency certification to the Bureau of Ocean Energy Management (BOEM) for its proposed project, which transmitted them to the Commission on February 26, 2026, pursuant to 15 C.F.R. § 930.76. Following that, on June 29, 2026, BOEM submitted a consistency determination directly to the Commission for the same project. The introduction of BOEM's consistency determination states that it is based on materials previously prepared by DCOR, including its consistency certification and supplemental Development and Production Plan. As such, these DCOR documents are cited and referenced in this report as part of the review of BOEM's consistency determination. According to DCOR's supplemental DPP and the BOEM Final Environmental Impact Statement (EIS) published April 17, 2026, the project involves a hydraulic fracturing well stimulation (WST) program (commonly referred to as "fracking"). The project is designed to increase and extend production of oil and gas from the existing Platform

[28] *Environmental Defense Center*, 36 F.4th at 887 (internal quotations omitted). Although BOEM states that "[p]ursuant to the [Ninth Circuit] ruling, BOEM prepared this CD to determine whether the well stimulation activities proposed by DCOR for Platform Gilda are consistent with California's enforceable CZMA policies, to the maximum extent practicable," this is not what the Ninth Circuit decision required. Consistency Determination, p. 6.

Gilda by improving hydrocarbon recovery from its wells. DCOR's supplemental Development and Production Plan (DPP) indicates that the WST program is needed to counteract declining production levels at the platform and achieve greater economic production and well longevity. DCOR projects that the proposed fracking operations will increase production at Platform Gilda from its current level of approximately 1,100 barrels per day to approximately 4,000 barrels per day, a fourfold increase over current production levels.

DCOR proposes fracking of 16 existing wells: four in the Upper Repetto formation and 12 in the Lower Repetto formation, hydrocarbon-rich sedimentary rock units, consisting primarily of sandstone, located approximately 5,000-10,000 feet below the seafloor. Fracking is a method of well stimulation achieved by injecting fluids at high pressure into q target geologic formation to create fractures in the rock. Once the fractures are initiated, a proppant, typically sand or ceramic spheres, is carried into the formation by the fracturing fluid. The proppant remains in the fractures after pressure is released, holding them open to maintain improved flow for oil and natural gas extraction. As described in DCOR's supplemental DPP:[23]

> *[t]he proposed stimulation method involves "frac packing," which has some key significant difference from standard hydraulic fracturing and combines hydraulic fracturing with gravel packing. Frac packing is used in reservoirs that produce loose formation sand, where the operator must prevent that sand from flowing into the well. Due to the relatively low permeability and unconsolidated nature of these sands, well stimulation via frac packing is required to achieve economic production rates and well longevity. During a frac pack, a permanent downhole sand-control system (sand screens) is installed, and the fracturing fluid is injected to fracture the formation within the well casing across the perforated interval.*
>
> *Proppant is placed both in the fracture and in the annulus between the casing and immediately adjacent to the screen to form a stable gravel pack. Proppant will be pumped across the sand screen until the area around the screen becomes tightly packed—hence "frac-pack." After pumping stops, the proppant pack is left behind as a stable, permeable barrier that keeps formation sand out while still allowing oil and gas to flow. This technique provides both productivity enhancement and sand control, making it well-suited to the unconsolidated sands of the Repetto intervals.*

DCOR's proposed fracking operation contemplates 38 discrete frac pack stages distributed across the 16 wells, with up to six wells stimulated per year over a five-year program period. Individual wells in the Upper Repetto are planned for approximately two stages and Lower Repetto wells for approximately 2.5 stages each. Each frac pack stage is performed over approximately one day at the platform, followed by a three-day interval before the next stage, for a total of approximately 14 days of active stimulation per year. Each stage would involve a Diagnostic Fracture Injection Test (DFIT) to characterize formation pressure and fracture gradient, followed by the main frac pack job. Active pump time for the main job would be up to approximately two hours per stage. Operations would be conducted at surface pressures ranging from 5,000 to

10,000 psi, with pump rates of 12 to 25 barrels per minute and hydraulic horsepower (HHP) of up to 5,500 HHP. DCOR estimates fracture half-lengths to be 150 to 300 feet, and fracture heights to be 100 to 200 feet. DCOR would be targeting fracturing depths greater than 4,500 feet below the seafloor surface.

The stimulation equipment is proposed to be temporarily mobilized to Platform Gilda on a skid using the existing crew and support vessel fleet. No additional vessels including dedicated frack vessels would be used for the proposed project. The base fluid for the frac pack operations would be filtered seawater drawn from the surrounding ocean and mixed with chemical additives. Each stage would involve approximately 1,300 barrels of ocean water and 100,000 pounds of proppant (a sand or ceramic material used to hold open fractures in the target rock), averaging 75,000 pounds of proppant per stage. Following injection, all flowback fracking fluids are proposed to be routed through a closed-loop handling system, retained on the platform, and reinjected into existing injection wells from the platform that enter the same formation zone being fractured and produced. Solid waste, including residual sand, would be transported to a licensed onshore disposal facility. The total planned volume of fracking fluid DCOR proposes to use is approximately 50,000 barrels, with a total contingency volume of up to 100,000 barrels over the five-year program.

Platform Gilda currently produces in excess of 50,000 barrels of water per month from the Repetto formation, extracted along with oil as an oil emulsion mixture. This oil emulsion is managed through an existing seafloor pipeline system that first sends it onshore to a processing facility in coastal Oxnard, where the water is separated. That water, commonly referred to as “produced water” is then returned to the platform and discharged to the ocean. Those discharges are regulated by the federal Environmental Protection Agency through a general National Pollutant Discharge Elimination System (NPDES) permit. DCOR has not demonstrated in its consistency certification that this NPDES permit authorizes discharges of fracking fluids in Platform Gilda’s produced water.

As described in the project EIS, the proposed fracking operation is projected to result in the extraction of approximately 9 million barrels of oil and 13 million cubic feet of natural gas over 20 years. This production is proposed to flow through Platform Gilda and be transported to shore through its associated system of seafloor pipelines for processing onshore. The proposed project is expected to extend the operating life of the Platform Gilda facility by enhancing its production levels. DCOR’s supplemental DPP states that “[w]ithout the Program, production at Gilda is expected to cease sooner than under the proposed action, as production continues to naturally decline …”

## B. Other Agency Approvals and Consultations

**Bureau of Ocean Energy Management (BOEM) – Federal Environmental Review**
BOEM issued a Notice of Intent to prepare an Environmental Impact Statement for DCOR's proposed supplemental DPP on March 17, 2026, published in the Federal Register. BOEM conducted a 10-day public scoping comment period that closed March 30, 2026, and held a virtual public scoping meeting on March 24, 2026. BOEM published its Final EIS on April 17, 2026, under Docket No. BOEM-2025-0714. The EIS was prepared on a truncated 28-day timeline under the Department of the Interior's expedited Alternative Arrangements for NEPA Compliance During a National Energy Emergency, pursuant to Executive Order 14156. DCOR requested consideration of the alternative NEPA arrangements on January 15, 2026, and BOEM approved the request on January 22, 2026. The Commission's federal consistency review under the CZMA and the CCMP is different than BOEM's NEPA process, although the record developed through that process, including the EIS itself, informs the Commission's analysis where relevant.

**Bureau of Safety and Environmental Enforcement (BSEE)**
BSEE has regulatory authority over offshore oil and gas operations on the OCS, including well integrity, blowout prevention, and spill prevention requirements applicable to the proposed operations. BOEM's consistency determination identifies DCOR's compliance with 30 C.F.R. Part 254 Subpart B as the basis for its spill response demonstration.

**National Marine Fisheries Service (NMFS)**
BOEM consulted with NMFS under Section 7 of the Endangered Species Act in connection with routine, ongoing oil and gas development and production activities conducted across all 23 platforms in the Southern California Planning Area, including Platform Gilda. The consultation was programmatic in scope, addressing four categories of day-to-day production and development activities generally, including, in general terms, approval of well stimulation treatments.

NMFS issued a Biological and Conference Opinion on February 27, 2024 (Consultation No. 2023-02183), addressing effects on fin whale, blue whale, the Mexico and Central America Distinct Population Segments of humpback whale, the East Pacific DPS of green sea turtle, and black abalone, as well as green sea turtle and black abalone critical habitat. NMFS concluded that the proposed programmatic activities are not likely to jeopardize the continued existence of any of these species or destroy or adversely modify designated critical habitat. The accompanying incidental take statement's sole measure addresses vessel-strike monitoring and reporting. It imposes no measures specific to well stimulation treatments. A revised Santa Clara Unit DPP incorporating these Terms and Conditions was approved in December 2024.

**United States Fish and Wildlife Services (USFWS)**
USFWS issued a Biological Opinion on August 29, 2025 (No. 2025-0129931-S7-001), based on BOEM's July 16, 2025, biological assessment, addressing effects on

California least tern, light-footed Ridgway's rail, salt marsh bird's-beak, tidewater goby, western snowy plover, marbled murrelet, and southern sea otter, and critical habitat of the tidewater goby and western snowy plover. USFWS likewise concluded that the proposed programmatic activities are not likely to jeopardize any of these species or destroy or adversely modify designated critical habitat. The incidental take statement sets reinitiation thresholds of two California least terns, two light-footed Ridgway's rails, twenty tidewater gobies, two western snowy plovers, or two marbled murrelets found dead or injured. It does not exempt any incidental take associated with oil spills.

**Tribal Outreach and Consultations**
As part of the NEPA process, BOEM invited the Santa Ynez Band of Chumash Indians to participate in government-to-government consultation on the DCOR fracking proposal via a letter emailed on February 26, 2026, and invited government-to-government consultation and as a Cooperating Agency on the project EIS via email sent on March 17, 2026.

To help ensure notice was provided to interested parties, Commission staff received a list of Tribes with potential cultural connections to the project area from the Native American Heritage Commission and completed outreach to those Tribes. Consultation invitations were sent on June 16, 2026, and again on July 23, 2026, to the Barbareño/Ventureño Band of Mission Indians, Coastal Band of the Chumash Nation, Northern Chumash Tribal Council, and Santa Ynez Band of Chumash Indians. Consultation with the Northern Chumash Tribal Council occurred on July 28, 2026. During the consultation, the Tribal Chair expressed opposition to the project, raising concerns regarding the age of the infrastructure and its contribution to increased spill risk as well as the consequences to marine life and Tribal cultural values should there be a hazardous material spill. These issues have been considered in the Commission's project analysis. Consultation with the Santa Ynez Band of Chumash Indians is pending but was not able to be scheduled prior to the posting of this report. Information received through that consultation will be considered by Commission staff and an addendum to this report will be prepared to provide a summary for Commission review and to make any necessary adjustments to the report's analysis and recommendation.

## C. Oil and Hazardous Substance Spills

Section 30232 of the Coastal Act states:

> Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Coastal Act Policy 30232 establishes two independent requirements applicable to offshore oil and gas development. First, an applicant must demonstrate that the proposed project provides protection against accidental spills associated with the production and transportation of petroleum products. Second, because the possibility of

an accidental release can exist even with protections in place, an applicant must also demonstrate that effective containment and cleanup facilities and procedures have been provided should a spill occur. The Commission evaluates these two requirements independently.

The proposed project would authorize DCOR to carry out hydraulic fracturing or "fracking" on up to 16 existing wells at Platform Gilda over a five-year Well Stimulation Treatment (WST) Program. DCOR specifically proposes to carry out a type of fracking called "frac packing." The proposed project would take place at an existing offshore oil and gas production facility and make use of its existing production wells, production equipment, subsea flow lines, processing facilities, and seafloor oil, gas, and produced water pipelines. The project would not involve construction of new offshore platforms, installation of new offshore export pipelines, or build-out or expansion of an existing offshore production facility itself. Rather, the proposed project would rely on new and intensified uses of the existing offshore production, processing, and transportation system to both increase and extend the duration of hydrocarbon recovery from the Santa Clara Unit. The intensified and extended use of this aging infrastructure is an integral and reasonably foreseeable part of the proposed project and must be considered in the evaluation of the proposed project's consistency with the CCMP's spill policy.[29] Furthermore, coastal effects include "any reasonably foreseeable effect on any coastal use or resource resulting from a Federal agency activity or federal license permit activity." Moreover, "[e]ffects include both direct effects which result from the activity and occur at the same time and place as the activity, and indirect (cumulative and secondary) effects which result from the activity and are later in time or farther removed in distance, but are still reasonably foreseeable."[30] Thus, the effects of the proposed project include those resulting from the intensified and extended use of the infrastructure.

Implementation of the proposed project would involve the increased production, handling, and transportation of crude oil together with numerous other hazardous materials associated with offshore hydraulic well stimulation and oil production. Spills could potentially occur from production wells, well heads, pressure control equipment, flowlines, pipelines, pumps, valves, as well as transfer operations and vessels supporting the project. Depending on the nature of the failure, spills could result from equipment malfunction, loss of well control, pipeline failure, operator error, maintenance activities, vessel incidents, severe weather, or other unforeseen events affecting the offshore facility.

**Production Increases and Extended Operations**

DCOR's supplemental development and production plan (DPP) and the Environmental Impact Statement (EIS) for DCOR's proposed fracking activities at Platform Gilda explain that the purpose of the project is to increase oil extraction from existing wells.

[29] 15 C.F.R. § 930.11 (defining coastal effects to include any reasonably foreseeable effect on any coastal use or resource resulting from a Federal agency activity or federal license permit activity).
[30] 15 C.F.R. § 930.11.

DCOR projects that implementation of the proposed program would increase production from approximately 1,100 barrels of oil per day to approximately 4,000 barrels of oil per day. The EIS further estimates that the proposed program could result in recovery of approximately 14 million barrels of oil and 13 million cubic feet of natural gas over the next 20 years. For context, Platform Gilda's wells have produced nearly 43 million barrels of oil and 51 billion cubic feet of natural gas since 1981, already exceeding the initially estimated total amount of oil and gas available for extraction from the Santa Clara Unit. DCOR has not identified a foreseeable end date for production from the Santa Clara Unit if the project proceeds and has stated that it expects to continue until operations are no longer economically or operationally viable. Multiple factors influence the viability of continuing operations, including oil and gas prices, production levels, and operating costs.

Both the project EIS and supplemental DPP make it clear that the primary purpose of the proposed project is to increase the productivity of Platform Gilda wells, and in so doing, extend the economic life of the platform and associated infrastructure. For example, Section 2.2 of DCOR's supplemental DPP states that, due to existing geologic conditions in the reservoir, "well stimulation via frac packing is required to achieve economic production rates and well longevity"; elsewhere, in evaluating alternatives to the proposed WST program, (Sec. 3.1.2) the supplemental DPP states that "[w]ithout the Program, production at Gilda is expected to cease sooner than under the proposed action, as production continues to naturally decline …" Similarly, DCOR's supplemental DPP states that without the proposed program, production at Gilda is expected to "cease sooner than under the proposed action."[31] With the proposed program, the EIS projects that production at Platform Gilda would go out to 2033.[32] As explained in the Ninth Circuit decision (provided in **Exhibit 2** "[w]ell stimulation treatments include oil extraction techniques that allow oil production to continue from wells with declining reservoirs. These practices prolong drilling operations, and expand total production, by enabling oil companies to extract oil otherwise unreachable using conventional drilling methods."[33] Thus, the two reasonably foreseeable operational consequences of the proposed project are to both extend and intensify the use of the existing offshore oil and gas production facility and its associated pipeline and processing system, much of which is over 45 years old and has been in use for decades beyond the 18-year expected operating life described in the original consistency certification for Platform Gilda's initial installation and operation (consistency certification no. CC-6-80).

As discussed below, the proposed continued and intensified use of aging infrastructure, including but not limited to wells, pipelines, and the platform itself, contributes to the

[31] Platform Gilda Well Stimulation Program Update to Development and Production Plan and Environmental Report (Padre Associates 2026), p. 3-2.
[32] EIS, p. 2-14.
[33] *Environmental Defense Center v. Bureau of Ocean Energy Mgmt*, 36 F.4th 850, 865 (9th Cir. 2022).

uncertainties about the project's ability to provide adequate protection against spills of oil and other hazardous substances.

**Protection Against Spills**

In its consistency determination, BOEM referenced technical information describing the engineering, operational, and management measures intended to minimize the likelihood of accidental releases associated with the proposed project. Commission staff reviewed information documenting Platform Gilda's structural integrity management program, including routine structural inspections, periodic engineering evaluations, and continuing inspection and maintenance activities conducted pursuant to Bureau of Safety and Environmental Enforcement (BSEE) requirements. These materials do not identify structural deficiencies that would indicate a heightened spill risk or preclude continued operation of Platform Gilda for the proposed fracking operations.

Commission staff also reviewed information provided by DCOR and BOEM regarding the integrity management program for the oil and natural gas pipelines serving Platform Gilda. The submitted materials describe a comprehensive inspection and maintenance program that includes corrosion monitoring and mitigation, leak detection systems, routine maintenance, engineering assessments, and continuing regulatory oversight by BSEE, the California State Lands Commission (SLC), and the Pipeline and Hazardous Materials Safety Administration (PHMSA). The on-going implementation of this pipeline integrity management program would reduce the likelihood of accidental releases associated with the proposed project and resulting continued operation of the offshore platform and associated pipelines.

Materials provided by DCOR and BOEM further describe numerous operation controls intended to minimize the potential for accidental releases during well stimulation activities. These include standardized operating procedures, personnel training requirements, closed-loop handling of stimulation fluids and flowback monitoring during stimulation operations, emergency shutdown procedures, and other operational safeguards incorporated into the proposed project. Commission staff has reviewed these operational measures and finds that they represent appropriate operational controls for the proposed fracking activities.

Commission staff also considered the DCOR's description of well integrity requirements that would apply before any individual stimulation treatment is performed. According to DCOR, each proposed stimulation treatment would require approval of a future Application for Permit to Modify (APM) from BSEE with BOEM concurrence before operations could commence. While it is not clear how the pending reorganization of these two agencies into the Marine Minerals Administration would affect this process, DCOR states that as part of the current process, individual wells would undergo casing and liner pressure testing, verification of mechanical integrity, confirmation of well barrier isolation, and other integrity evaluations required under applicable federal

regulations and subject to BSEE and BOEM approval.[34] The Commission recognizes that these well specific integrity requirements provide an important layer of regulatory oversight before stimulation activities may occur. While these controls provide protection against spillage under the first test of Section 30232, they do not eliminate that risk, as discussed below.

Residual Spill Risk

The Commission also considers the residual risk of accidental releases associated with continued offshore oil production and transportation, and in particular, the intensified and extended use of aging infrastructure. The Commission recognizes that comprehensive structural integrity programs, corrosion management, inspection requirements, and operational controls substantially reduce the likelihood of accidental releases. At the same time, the Commission also recognizes that these measures cannot eliminate the possibility of equipment failure, pipeline rupture, unaddressed corrosion, operational error, or external events that may result in a spill.

The high likelihood of a spill was recognized in both the original federal environmental review for Platform Gilda's installation and operation and, more recently, BOEM's 2025 Biological Assessment ("2025 BA") of offshore oil and gas activities in the Southern California Planning Area.[35] The 1980 Environmental Impact Report-Environmental Assessment for the construction and operation of Platforms Gina and Gilda estimated an average rate of one spill per production platform per 10.6 years, projecting that Platform Gilda would have 1.9 spills over its anticipated 20-year production lifetime.[36] The 2025 BA included a historical inventory of oil spill incidents in the Pacific OCS, reporting 1,451 oil spills between 1963 and 2022 (average of 28 per year).[37] BOEM's 2025 analysis concluded that accidental oil spills remain a reasonably foreseeable consequence of continued offshore production activities and estimated a 63% probability that one or more spills of between 50 and 1000 barrels (2,100 and 42,000 gallons) could occur, while concluding that spills exceeding 1000 barrels are "not reasonably certain to occur."[38] To put this conclusion in context, BOEM estimated a 7% probability of a spill in excess of 1,000 barrels, based on historical spill rates for oil and gas facilities on the Outer Continental Shelf nationwide. The Commission recognizes that these estimates are regional planning estimates and are not predictions of releases from Platform Gilda specifically. Nevertheless, they demonstrate that federal environmental review likewise recognizes that accidental oil spills remain a foreseeable

[34] *See* 30 C.F.R. Part 250 Subpart G.

[35] BOEM/BSEE 2025 Biological Assessment for Southern California Planning Area Oil and Gas Activities.

[36] Dames and Moore, Environmental Impact Report-Environmental Assessment for the Platform Gina and Gilda Development (1980), as cited in BOEM/BSEE 2025 Biological Assessment for Southern California Planning Area Oil and Gas Activities.

[37] The majority of these historical spills were small, with 49 spills (3.4 percent) larger than 1 bbl, and 8 (0.5 percent) larger than 50 bbl.; The largest on record is the 80,900 bbl Platform A spill in 1969.

[38] BOEM calculated spill occurrence as a time-independent function of the total amount of oil that could be economically produced in the Southern California Planning Area and the historical frequency of spills in (a) the Pacific OCS and (b) nationally. BOEM estimated a 95% probability of one or more spills between 50 - 1000 bbls based on nationwide OCS spill rates.

consequence of offshore oil production despite modern engineering controls and regulatory oversight.

The potential for an accidental spill associated with the proposed project is exacerbated by its reliance on aging infrastructure, in particular Platform Gilda's existing seafloor oil and gas pipelines that transport these products to shore. While the information provided by DCOR indicates that Platform Gilda's pipelines have undergone regular inspection and maintenance, the pipelines are nonetheless nearly 45 years old, and in general, pipeline age is a key risk factor for undetected damage or defects (e.g., from corrosion) that can lead to ruptures and spills. The empirical relationship between pipeline age and spill probability is well-established. For example, probabilistic modeling carried out as part of the Alaska Department of Environmental Conservation's North Slope Spill Analysis estimated that a five-year-old pipeline carried a 3.3 percent spill probability, while a 30-year-old pipeline carried a 31 percent spill probability, a nearly tenfold increase over 25 years of service.[39] A study of Gulf of Mexico offshore pipeline failures, based on the Department of the Interior Minerals Management Service's Master Database of Offshore Pipeline Reportable Leaks (1967–1999), found a similar relationship: internal corrosion leak frequency increased more than tenfold across three decades of fleet aging, from 35 leaks in the first decade to 92 in the second to 391 in the third, with the final decade alone accounting for more than three-quarters of all internal-corrosion leaks reported over the full 30-year period.[40]

California's recent offshore oil spill experience further illustrates the limitations of even comprehensive integrity management programs. In particular, significant pipeline releases have occurred despite the same types of regulatory oversight, inspection requirements, corrosion management programs, and routine maintenance activities that would be implemented as part of the proposed project. For example, in September 1997, an undetected weld defect on the subsea pipeline serving Platform Irene off Point Arguello, Santa Barbara County, resulted in an oil spill of nearly 7,000 gallons.[41] The 2015 Refugio oil spill (described below) resulted from external corrosion that was not identified before pipeline failure despite frequent inspections and oversight by federal agencies. Similarly, DCOR's own December 2021 Line 0919 oil spill offshore of Huntington Beach was attributed to internal corrosion that likewise was not detected prior to failure despite implementation of an inspection regime and oversight nearly identical to that carried out as part of the operation of Platform Gilda and its pipelines.

Following the 2021 DCOR pipeline spill, the Commission reviewed and approved emergency repairs associated with DCOR's damaged pipeline, providing the

[39] Robertson TL, DeCola E, Pearson L. 2010. Alaska North Slope spills analysis: Final report on North Slope Spills analysis and expert panel recommendations on mitigation measures. Report to Alaska Department of Environmental Conservation.

[40] Garber, J.D., Alvarado, A., & Winters, R.H., "Study Tracks Internal-Corrosion Trends in Aging Gulf Pipelines," Oil & Gas Journal (Mar. 27, 2000).

[41] Torch/Platform Irene Oil Spill, Final Restoration Plan and Environmental Assessment, Torch/Platform Irene Trustee Council: United States Fish and Wildlife Service California Department of Fish and Game United States Department of Air Force, Vandenberg Air Force Base California State Lands Commission with assistance from Santa Barbara County Planning and Development Department, October 24, 2007.

Commission with direct experience regarding the environmental consequences and infrastructure failures that can occur despite ongoing integrity management programs.[42] On May 11, 2026, in a separate incident, DCOR reported a release of natural gas that caught fire in a well on Platform Habitat located off the coast of Carpinteria.[43,44] The U.S. Coast Guard reported that the platform was being prepared for decommissioning before the fire started. Platform Habitat was installed in 1981 (the same year as Platform Gilda) and produced mostly natural gas while in operation. These examples demonstrate that inspection, maintenance, and corrosion control programs substantially reduce, but cannot eliminate, the possibility of accidental releases resulting from undetected defects, infrastructure failures or human error.

Similarly, engineering literature and regulatory studies recognize that integrity management programs, structural inspections, corrosion monitoring, maintenance, and operational controls substantially reduce – but do not eliminate – the potential for accidental releases associated with offshore oil production and transportation systems. As recognized in BOEM's 2025 BA, residual spill risk remains an inherent characteristic of offshore oil production and transportation at Platform Gilda and across the southern California Outer Continental Shelf at large, notwithstanding comprehensive inspection, maintenance, integrity management, and spill prevention measures. Further, as discussed in Section IV.F, below, natural hazards including strong seismic ground shaking and tsunamis pose potential threats to project infrastructure that compound the residual spill risk.

In addition, although the Applicant has committed to, and will be required to, conduct well-specific integrity testing and obtain approval from BSEE (or its successor agency) as part of the APM process before well stimulation occurs,[45] that testing has not been conducted at this time. Even with regulatory well integrity standards and federal approval of the APM, however, the risk of integrity failure remains, particularly given the age of the well infrastructure proposed to be used for the project. Furthermore, prior studies have documented that well barrier and integrity failure is a reasonably common problem for oil and gas wells.[46] Therefore, the potential for well integrity failure at Platform Gilda contributes to the cumulative spill risk associated with the proposed project.

Other aspects of the proposed project may also contribute to elevated spill risks. For example, the fracking process involves the high-pressure injection of fluids into existing wells and well infrastructure in order to fracture underground geologic formations. While project documents indicate that pressure tests would be run prior to fracking operations and that proposed pressure levels during

[42] CDP 9-22-0219 (DCOR)
[43] U.S. Coast Guard National Response Center (NRC) Report No. 1462089, https://nrc.uscg.mil/.
[44] U.S. Coast Guard News press release, May 11, 2026, https://www.news.uscg.mil/Press-Releases/Article/4483988/coast-guard-partners-respond-to-fire-on-non-operational-natural-gas-platform/
[45] 30 C.F.R. § 250.721.
[46] For example, a review of data from over 22,000 offshore wells from the Gulf of Mexico, Norway, and United Kingdom continental shelf found that offshore well barrier and integrity failure rates have historically ranged from 10 – 43%. (Davies et al, 2014, *Marine and Petroleum Geology* 56, pp. 239-254.)

fracking would be well within the structural integrity tolerances for the wells and associated pipelines that would be used, the fact remains that the proposed fracking will subject this aged equipment to additional strain. Such strain may work to exacerbate or expand corrosion or defect related structural issues that may already be present in these wells and pipelines given their age and prolonged use, thus increasing the risk of failure. Similarly, the four-fold increase in oil throughput anticipated to result from the project also has the potential to hasten corrosion and wear-related infrastructure degradation. As such, the intensification of use that would result from the project has the potential to further contribute to its associated spill risks.

Based on the record, the Commission finds that the project materials include substantial engineering, operational, and management measures intended to provide protection against the spillage of crude oil, gas, petroleum products, and hazardous substances associated with the proposed fracking operation. DCOR has established comprehensive structural integrity, pipeline integrity, and operational control programs designed to support the continued safe operation of the existing platform and pipelines. The Commission also recognizes that the existing facility has historically accommodated production levels greater than those anticipated under the proposed project. Nevertheless, the proposed action is intended to substantially increase hydrocarbon recovery and daily oil and gas production relative to existing conditions and to extend the economic and operational life of the existing infrastructure, resulting in increased production and transportation of crude oil through the existing facility during and following implementation of the project.

The Commission further finds that, while the prevention measures that DCOR proposes and already implements as part of existing operations reduce the likelihood of accidental releases, neither DCOR's prevention program nor applicable regulatory oversight can eliminate the possibility of a spill. To the contrary, the data collected by BOEM and BSEE over the past 63 years demonstrates that small spills are a relatively common and unavoidable occurrence at offshore facilities, and that occasional, larger spills remain an on-going threat. Further, both previous studies and the documented causes of recent oil spills in California suggest that this risk is exacerbated by the age of the project infrastructure. Coastal Act Section 30232 expressly recognizes this reality by separately requiring that effective containment and cleanup facilities and procedures be provided should an accidental release occur. Accordingly, having concluded that the project includes substantial spill prevention measures, the Commission next evaluates whether the project has also demonstrated consistency with the second, independent requirement of section 30232 by providing effective containment and cleanup facilities and procedures for accidental spills.

**Effective Containment and Cleanup of Accidental Spills**

Section 30232's second clause requires effective containment and cleanup facilities and procedures for accidental spills that do occur. To be effective, containment and cleanup

must be achievable under the realistic conditions of the open ocean and coastal setting under consideration. In this case, that means the currents, wind, visibility, and sea states of the Santa Barbara Channel must be considered along with response timing limitations (e.g., activation delays, transit times), the complications of nighttime operations and other limitations on aerial observation (e.g., low visibility due to weather), spill trajectories toward sensitive resources, and the well-documented limits of mechanical oil recovery in open ocean conditions.

Unlike the prevention analysis discussed above, the second clause of Section 30232 recognizes that accidental spills may occur despite engineering controls and operational safeguards. The issue therefore is not whether an accidental spill is likely to occur, but whether the project has demonstrated that effective containment and cleanup facilities and procedures would be available to minimize damage to coastal resources when such a spill occurs.

DCOR's regional Oil Spill Response Plan (OSRP), including its Appendix H, describes the existing oil spill response program for Platform Gilda. It provides a comprehensive oil spill response program that incorporates trained response organizations, pre-positioned response equipment, offshore containment boom, skimming systems, shoreline protection strategies, aerial surveillance, and additional response techniques including dispersant application and in-situ burning where authorized. The response program is intended to provide a coordinated framework for responding to accidental spills associated with Platform Gilda and the Gilda-to-shore oil pipeline. Response operations are designed to expand over time as additional personnel, vessels, equipment, and logistical support arrive at the accident, with response priorities adapting to the size, location, and behavior of the spill.

Because BOEM's consistency determination acknowledges that DCOR relies on this plan as its primary approach to spill cleanup and containment, an analysis of it provides the principal framework for evaluating whether effective containment and cleanup facilities and procedures would be available as part of the project for accidental spills associated with Platform Gilda and its connected pipelines. The OSRP identifies the response organization, contractors, equipment, procedures, and strategies that could be used following an oil spill from DCOR's facility, including the use of containment booms, skimming systems, shoreline protection strategies, aerial surveillance and additional response techniques such as dispersant application and in-situ burning where authorized. Appendix H also establishes the scale and geographic scope of the required response through worst-case discharge scenarios, trajectory analyses, as well as descriptions of available response resources and capabilities. The OSRP does not, however, provide a complete demonstration that effective containment and cleanup would be achieved. As discussed below, the plan contains notable gaps concerning oil spill scenarios and worst-case discharges, spills of well stimulation fluids, spill trajectory modeling, response timing and whether current mechanical response equipment can protect coastal resources in challenging Santa Barbara Channel conditions. These gaps and deficiencies in DCOR's spill response planning and capabilities prevent the project

from demonstrating effective containment and cleanup and therefore achieving consistency with the second test of Section 30232.

Oil Spill Scenarios and Worst-Case Discharges

As a part of demonstrating that effective containment and cleanup facilities and procedures are available, DCOR relies on worst-case discharge (WCD) planning scenarios developed as part of its OSRP. Appendix H of DCOR's OSRP establishes the planning basis for responding to accidental spills associated with the proposed project by evaluating multiple WCD scenarios representing the principal release mechanisms that could occur during offshore production operations. The WCD analyses are intended to establish the magnitude of releases for which response resources must be planned and demonstrate the response capabilities necessary to address significant offshore spills. The OSRP recognizes that adverse weather conditions, including high winds, reduced visibility wave conditions, ocean currents, and limited daylight, may restrict response operations and influence the effectiveness of spill response activities.

For Platform Gilda, the OSRP identifies separate spill "planning volumes" for federal and California regulatory purposes and for several spill scenarios involving different infrastructure and spill origins. These scenarios are intended to account for the fact that releases originating from wells, production equipment, or offshore pipelines present different operational challenges and may require different response strategies. By evaluating multiple spill scenarios, DCOR has established the range of spill conditions that its response program is intended to address. The federal (BSEE) planning scenarios evaluated in Appendix H include the following:

- Platform Equipment Release: The estimated quantity of oil that could be released from Platform Gilda's production equipment, holding tanks, and associated piping. The analysis first identifies the total storage capacity and then estimates the quantity of hydrocarbon "oil cut", separate from water, actually present within those facilities under normal operating conditions, resulting in a total estimated oil inventory of **855** barrels (H-11). This 855-barrel volume represents the estimated quantity of recoverable petroleum contained with the platform's process equipment and piping that is incorporated in the Bureau of Safety and Environmental Enforcement (BSEE) facility WCD calculation.

- Pipeline Release: Worst-case release of **586** barrels of oil (H-6) for the pipeline segment connecting Platform Gilda to the Mandalay onshore facility. The planning volume is based on the quantity of oil that could be released before isolation of the affected pipeline in accordance with the specifications and assumptions described in the OSRP, including pipeline length, diameter, temperature, pump rate, water depth, back pressure, and an 11-minute shutdown time (assuming automatic shutdown). The pipeline scenario is evaluated independently from the platform WCD because it represents a different release mechanism requiring separate planning assumptions and response considerations.

- Production Well Blowout: Several Platform Gilda wells are capable of flowing without artificial lift, and the highest producing well has an estimated production rate of approximately **60** barrels of oil per day (H-19). The Applicant indicates that the proposed stimulation activity does not change Platform Gilda's existing production well blowout scenario of 60 bbl. because "the flow of actively pumped stimulation fluid, which is a seawater-based fluid in this application, does not have a realistic pathway for environmental contact nor does it contain hydrocarbons." The Applicant also states, "[t]he stimulated wells under the proposed project are expected to have a flow capability that is similar to or lower than 60 barrels per day. As with other components of the WCD calculation, should outcomes or parameters become unexpectedly higher than what is in the OSRP, then the plan would be updated, and response capabilities would be reassessed for adequacy."
- Drilling Well Blowout: Pursuant to BSEE planning requirements, the drilling blowout planning volume for Platform Gilda is **1,800** barrels of oil based on a 30-day uncontrolled flow scenario for the highest-capacity well (60 barrels per day). California regulations use a seven-day uncontrolled blowout planning assumption, resulting in a planning volume of 420 barrels. The larger BSEE planning volume is used when evaluating the adequacy of response capabilities.

The BSEE Worst Case Discharge in the Applicant's current Oil Spill Response Plan is **1,501** barrels (OSRP H-29). This planning volume is derived by combining the total oil contained within the platform's relevant tanks and piping (855 bbls, H-11), the total amount of oil in the pipeline that would be released in the event of a leak (586 bbls, H-6), and one day of uncontrolled flow from the highest-capacity free-flowing production well (60 bbls, H-19). DCOR explains that this WCD represents a conservatively high planning scenario in that it assumes all three components contribute to the worst-case spill at the same time.

The WCD scenarios presented above were calculated using the methodology required by BSEE, which imposes a particular set of assumptions regarding key determinants of the worst case discharge volumes, in particular the "oil cut" (the percentage of oil versus water) contained tanks, piping and pipelines, and the time it would take to regain control of a blowout during production. The WCD methodology required by the State of California uses more conservative assumptions – specifically, the calculations are based on total fluid, with no allowance for oil cut (i.e., it is assumed that all the fluid is oil), and a production blowout time-to-control of seven days. This second assumption in particular provides a more precautionary basis for calculating the blowout WCD, accounting for factors (e.g., fire, injuries, equipment malfunction, human errors, etc.) that could plausibly delay the control of a blowout for more than a day. Thus, the California calculations result in substantially greater worst case discharge volumes than the BSEE calculations for a platform release (1,844 bbls vs. 855 bbls), a production blowout (420 bbls vs. 60 bbls) and a pipeline discharge (2,928 bbls vs. 586 bbls). Using the California methodology, the combined WCD is 5,192 barrels, over three times greater than the federal estimate. These differences highlight the importance of starting

assumptions in estimating worst case discharge scenarios, as well as the uncertainties in projecting the actual spill volumes that could occur in relation to the proposed project. Nonetheless, under both sets of calculations, the worst case discharge scenarios involve major oil spills and indicate a need for a commensurately robust response capability.

These worst-case discharge planning volumes are not predictions of future spill events or estimates of the most probable spill associated with the proposed project. Rather, they define maximum planning scenarios used to evaluate whether sufficient response capability exists to effectively contain and clean up a significant spill.

Spills of Well Stimulation Fluids

In addition to crude oil, the project involves the handling and use of fracking fluids, chemical additives used in the frac-pack process, flowback fluids, produced water, diesel fuel, lubricants, hydraulic oils, corrosion inhibitors, biocides, and other hazardous substances routinely associated with offshore oil production. Fracking fluids are considered a hazardous substance mixture: DCOR's own manufacturer safety data sheet classifies at least one constituent, the Biocide (M275), as GHS Category 1, the most severe available classification, for both acute and chronic aquatic hazard, with the hazard statement "very toxic to aquatic life with long lasting effects." Due to the relatively high pumping rates and pressures – 12 to 25 barrels per minute, at up to 10,000 psi – a release during active pumping is likely to involve the largest volumes and have the greatest potential for adverse effects. While these materials are generally handled in smaller quantities than crude oil, accidental releases could nevertheless adversely impact marine water quality and marine organisms depending on the toxicity, persistence, and quantity released. Consequently, evaluation under Section 30232 encompasses both petroleum products and other hazardous substances associated with the proposed project.

DCOR has supplemented the project's OSRP with a project-specific Spill Prevention, Control, and Countermeasure Plan (SPCC) addressing non-oil spills associated with the proposed fracking operations. The SPCC describes operational procedures intended to prevent accidental releases of hydraulic stimulation fluids and other hazardous materials, identifies personnel responsibilities, establishes notification procedures, describes available spill response equipment, and provides measures for spill containment, recovery, cleanup, waste management, and reporting should an accidental release occur.

Implementation of these operational controls would likely reduce both the likelihood and magnitude of spills associated with fracking activities. Immediate response actions, source control procedures, and readily available containment materials would likely address many small operational releases before they expand beyond the immediate work area. Consequently, the SPCC represents an important component of the Applicant's overall spill prevention and response program and would likely reduce, but not eliminate, the potential for releases associated with the proposed fracking operations.

However, the SPCC does not address the potential magnitudes of accidental releases of well stimulation fluids, evaluate the probability of a spill, or identify a worst-case discharge, despite the fact that during active fracking, a wellbore would contain approximately 1,400 barrels (58,800 gallons) of chemical-laden slurry, pumped at high pressure at a rate of 12 to 25 barrels per minute. DCOR's Consistency Certification and Supplemental DPP also fail to provide an adequate spill risk analysis despite including well stimulation fluid spills in their discussion. Those documents largely rely on engineering designs (such as the closed loops system) and procedures, but those are not a substitute for a risk-based analysis of accidental spills. The Consistency Certification also asserts that there has been "no record of any spillage" of well stimulation fluids at Platform Gilda.[43] This has not been independently verified and is not sufficient to assess the future risk of a spill of well stimulation fluids under this specific project. DCOR's Supplemental DPP also fails to provide any risk analysis based on data, and asserts that the engineering and procedural controls reduce the probability of a spill to a "low level."[44] In addition, the EIS applies a quantitative risk assessment for oil spills,[45] but it does not provide this analysis (or any comparable analysis) for well stimulation fluid spills specifically.[46] Finally, BOEM's Consistency Determination does not provide a scenario-specific assessment of a spill of well stimulation fluids and refers to the EIS "for a detailed discussion on potential impacts related to oil and hazardous substances."[47] However, as noted above, the EIS does provide a risk analysis for a spill of well stimulation fluids.

The SPCC also fails to evaluate whether the proposed countermeasures and available cleanup equipment and materials would be adequate to mount an effective response of a large spill of fracking fluids. Rather, DCOR's consistency certification and supplemental response letter provided to Commission staff rely on assumption of rapid dilution and dispersal of fracking fluid spills in the ocean to limit impacts to the marine environment. DCOR states that marine organisms would be expected to experience relatively low exposure concentrations within the water column as contaminants are diluted over time and distance, thereby reducing the potential for adverse biological effects. While dilution, dispersion, and ocean mixing are natural physical processes that influence the fate and transport of contaminants in the marine environment and are expected to reduce contaminant concentrations following a release, absent additional information about the volume and chemical concentrations of a spill, the size of the expected mixing zone, and toxicity thresholds, they do not guarantee that adverse effects would be avoided. Further, these naturally occurring processes do not meet the requirement under Section 30232 for effective containment and cleanup to be provided. Rather than recovering or removing spilled materials from the marine environment, dilution and dispersion redistribute hazardous substances over a broader area and volume of ocean, while reducing concentrations.

In the absence of data or analysis addressing the size or probability of a spill and the potential scope and scale of associated adverse effects, neither BOEM nor DCOR have demonstrated that reliance on natural processes to address a spill constitutes a valid

[47] BOEM, Consistency Determination, p. 15.

approach for minimizing the impacts to marine resources of a fracking fluid spill or justifies the lack of a spill response plan. Accordingly, while the SPCC would likely reduce the frequency and severity of localized non-oil spills, and while natural dilution may reduce hazardous substance concentrations, neither the operational controls nor the natural processes described by DCOR demonstrate that accidental releases of fracking fluids or hazardous substances can be effectively contained and cleaned up under all operating conditions.

Oil Spill Trajectory Modeling

To evaluate the potential consequences of significant oil releases and inform spill response planning, Appendix H of DCOR's OSRP includes oil spill trajectory simulations using both deterministic and probabilistic modeling approaches. The deterministic spill trajectory simulation is based on BSEE's worst-case release scenario of 1,501 barrels of heavy crude oil and is described as "a single oil trajectory run using the time period and ambient conditions that resulted in the greatest area of shoreline oiling." Importantly, Appendix H states that the impact values associated with the deterministic simulation are calculated considering no response measures are taken to secure the source of the spill or to contain, remove, or disperse oil at the scene. The simulation therefore represents an uncontrolled spill and establishes the environmental consequences that the proposed response program is intended to prevent or substantially reduce.

Under these assumptions, DCOR estimates that floating oil could affect approximately 895 square miles of ocean surface before weathering and natural dispersion reduce the extent of surface oiling. The simulation further estimates potential oiling along approximately 134 miles of shoreline and predicts dissolved hydrocarbon concentrations above ecological thresholds within approximately 24,018 cubic meters of water column. Shoreline contact is estimated to occur approximately 73 hours following the initiation of the release. These results demonstrate that, absent successful response actions, a significant spill originating from Platform Gilda has the potential to affect a substantial portion of the Santa Barbara Channel and southern California coastline (**Exhibit 3**).

Appendix H of the OSRP also presents the results of a previous probabilistic analysis of oil spill trajectories published by the federal Minerals Management Service in 2000,[48] including scenarios for spills originating from both Platform Gilda and the Gilda-to-shore oil pipeline. Unlike the deterministic modeling discussed above, these simulations do not provide direct estimates of the geographic area that would be affected by a worst case discharge, but instead estimate the probabilities of near-term (3-day and 10-day) shoreline contact resulting from spills occurring across the winter, spring, summer and autumn, accounting for a range of seasonal weather and oceanographic conditions. As

[48]Minerals Management Service Oil-Spill Risk Analysis: Pacific Outer Continental Shelf Program. https://www.boem.gov/sites/default/files/uploadedFiles/BOEM/Environmental_Stewardship/Environmental_Assessment/Oil_Spill_Modeling/2000-057.pdf).

reported in Appendix H, the probabilistic modeling indicates that the coastal areas at the highest risk of relatively rapid shoreline contact following a spill at Platform Gilda or along its oil pipeline route are the Ventura County shoreline (all seasons, highest risk in summer), Anacapa Island (summer and winter), and Santa Catalina Island (spring), with lower shoreline contact probabilities during certain seasons projected for Santa Barbara County and Santa Cruz and Santa Rosa Islands.

Because the simulations intentionally exclude all response activities, these results are not interpreted as accurate predictions of the environmental consequences that would necessarily occur following an actual oil spill.[49] Rather, the simulations establish the environmental benchmark against which the benefit of DCOR's containment and cleanup program can be evaluated. In other words, the simulations illustrate the potential consequences that the proposed response system is intended to avoid. It should be noted, however, that Section 30232 of the CCMP establishes an absolute standard that effective cleanup and containment be provided, and not a relative standard that cleanup and containment be better than no response at all.

Oil Pipeline Spill Scenario

Among the various oil spills scenarios examined in DCOR's OSRP, the export pipeline spill scenario requires additional scrutiny. The worst case discharge estimates associated with the pipeline (586 bbls per BSEE calculation, 2,928 bbls per California) place this scenario on a similar order of magnitude as the worst-case platform discharge, yet it has not received the same degree of analysis or planning consideration in DCOR's consistency certification or BOEM's consistency determination. As discussed elsewhere in this report, pipeline failures due to both material failure and human error account for most of the major oil spills that have occurred offshore Southern California, and a pipeline incident is perhaps the most likely failure mode associated with the proposed project. The pipeline is roughly 45 years old, has exceeded its original operating-life projection by more than two decades, and is susceptible to the same corrosion-driven failure mechanism responsible for DCOR's own 2021 Pipeline 0919 failure and spill, discussed above. The oil pipeline extends approximately 9 miles from Platform Gilda to the Mandalay Onshore Facility in coastal Oxnard and a rupture could occur at any point along that route, including locations substantially closer to shore than the platform itself. A release nearer to shore would be expected to reduce the time available for response before shoreline contact relative to the 73-hour minimum time-to-shore the OSRP calculates for a platform-origin release[50] and could expose a different or expanded set of the shoreline and nearshore resources than that identified in the OSRP's resources-at-risk inventory.[51] Such resources could include the ecologically critical Mugu Lagoon wetland complex, the economically important harbors of Ventura,

[49] Interestingly, the simulated spread of the 1,501 barrel worst case discharge along 134 miles of shoreline is roughly comparable to what was observed during the 2015 Refugio spill (1,262 barrels reaching the ocean), where oil was detected in Long Beach approximately 120 miles southeast of the spill location.
[50] Id. at H-22.
[51] Id. at H-48 to H-50.

Channel Islands and Port Hueneme, and the military installations at Naval Base Ventura County.

Despite these important factors differentiating a pipeline spill from a release from the platform, no deterministic analyses of a pipeline spill – including trajectory simulations, mass-balance modeling or resources-at-risk modeling (OSRP Figs. H-4a through H-5a) -- have been performed, nor has the potential geographic impact of such a worst-case spill been presented in BOEM's consistency determination or DCOR's consistency certification. The probabilistic analyses presented in Appendix H are not based on DCOR's pipeline specific WCD scenario, and while these simulations do hint at a wide geographic distribution of potential impacts, they do not provide specific aerial or shoreline length estimates for that worst-case incident. Similarly, the probabilistic analyses for a pipeline spill also do not provide the minimum time-to-shore projections needed to inform effective spill response.

In summary, several key parameters of the project's oil pipeline worst-case discharge scenario calculated in DCOR's OSRP have not been assessed, and as a result, have not be carried forward into the response-effectiveness analysis. More broadly, neither DCOR nor BOEM have provided information addressing if and how effective cleanup and containment would be achieved for this distinct spill scenario, which, as noted previously, may represent the most likely spill pathway associated with the project. The proposed fracking operation compounds the importance of fully evaluating a pipeline spill scenario, as the fourfold increase in oil production the project is designed to achieve would necessarily be transported to shore via the roughly 45-year-old pipeline. As such, BOEM's consistency analysis cannot support a finding that effective containment and cleanup have been demonstrated for a pipeline spill incident.

Initial Response Capability: Response Timing

DCOR's OSRP identifies specific response assets and their estimated activation times for a Platform Gilda spill, allowing for an initial assessment of response timing against the realistic conditions of the project area. The closest staged asset, a fast response vessel (FRV) at the Cojo Mooring near Point Concepcion off western Santa Barbara County, has an estimated total time to arrival on scene of 0.75 hours. Several additional Santa Barbara and Ventura area assets, offshore containment systems, skimming vessels, and shoreline protection equipment staged in Santa Barbara, Ventura, and Port Hueneme, have estimated activation times ranging from approximately 3.5 to 12 hours.[52] The OSRP's own equipment tables show, however, that the bulk of the region's aggregate skimming and containment capacity is staged well outside the Santa Barbara Channel, with total estimated times to arrival ranging from approximately 14 hours (Long Beach-based assets) to more than 200 hours (Pacific Northwest and Hawaii-based assets).[53] The OSRP's stated derated recovery rate for the combined offshore fleet,182,071 barrels per day of nameplate capacity across all listed assets, reflects

[52] DCOR OSRP, Appendix H, Figs. H-8a et seq.
[53] Id.

capacity that arrives incrementally over this multi-day window, not capacity available at the outset of a response.[54]

In July of 2013, Commission Oil Spill Program staff developed a guidance document for oil and gas projects intended to provide applicants an explanation of the oil spill prevention and response information that is required for oil and gas exploration, development, and transportation development applications submitted to the Commission for review and approval, including a discussion around implementation of the best achievable oil spill prevention and response measures in all new or modified oil and gas projects in or affecting California's coastal zone.[55] To ensure that a proposed project meets Coastal Act standards, oil spill response timeframes and equipment has been evaluated based on a three-tiered response strategy for containment and cleanup of marine oil spills. The Commission's three-tiered response strategy for offshore oil and gas facilities, developed jointly with the former U.S. Minerals Management Service and the U.S. Coast Guard during the Commission's federal consistency review of 11 Santa Barbara Channel and Santa Maria Basin platforms, sets primary-response benchmarks of boom deployment within 15 to 60 minutes and skimmer deployment within 2 hours of spill discovery (with a minimum derated recovery rate of 1,000 barrels per day), a secondary-response benchmark of 2 to 6 hours for OSRO vessels and equipment, and a tertiary tier of cascaded regional resources for a prolonged response.[56]

Applying that framework to the timing data above, the closest staged asset (Cojo Mooring, 0.75-hour total estimated time to arrival) is consistent with the primary tier's boom and skimmer deployment benchmarks. Several Santa Barbara- and Ventura-area assets, arriving in an estimated 3.5 to 12 hours, could potentially arrive within or well beyond the secondary tier's 2-to-6-hour benchmark.[57] However, the bulk of the region's aggregate recovery capacity, the assets needed to address a spill of any meaningful duration or volume, would arrive well outside even the tertiary tier's cascaded-resource framework, with total estimated times ranging from approximately 14 hours to more than 200 hours.[58] The OSRP's own deterministic trajectory simulation found that a worst-case oil spill at Platform Gilda could reach shore in as little as 73 hours under the modeled scenario[59], meaning only the primary- and secondary-tier assets, not the greater part of the fleet, would be positioned to respond before shoreline contact begins.

Meeting or approximating these response-time benchmarks is a necessary component of the second clause of Section 30232's effectiveness standard, but it is not by itself sufficient. The 2013 guidance document described above frames the Commission's

[54] Id.
[55] California Coastal Commission, Oil Spill Prevention and Response Guidance Document for Oil and Gas Project Applications (July 2013).
[56] Cal. Coastal Comm'n, Oil Spill Prevention and Response Guidance Document for Oil and Gas Project Applications 14–16 (July 2013).
[57] Cal. Coastal Comm'n, Oil Spill Prevention and Response Guidance Document for Oil and Gas Project Applications (July 2013) (describing Apr. 27, 2008 unannounced drill).
[58] Id.
[59] DCOR OSRP, Appendix H, at H-25.

response capability analysis as extending beyond arrival time to the recovery-rate and equipment showing needed to demonstrate that a response can be sustained for the duration of a worst-case spill, not merely that some asset can reach the scene quickly.[60] Timely arrival addresses only where equipment is positioned. It does not by itself demonstrate the effectiveness of the response once deployed.

Sustained Response Capability: Limits of Mechanical Recovery

Even if it could be demonstrated that DCOR's OSRP would assure a timely spill response at a scale sufficient to contain a major spill and avoid shoreline impacts, BOEM would still need to demonstrate in its consistency determination that the response assets committed to this project would be effective under the realistic physical and logistical conditions of the project area's marine setting. Both previous assessments and the historical experience with ocean spill events indicate that effective spill response and clean-up, in terms of a high rate of oil recovery, is seldom, if ever, achieved under real-world conditions with the measures and equipment typically deployed.

The International Tanker Owners Pollution Federation (ITOPF), an independent, non-vendor technical authority not affiliated with equipment manufacturers, reports that using typical equipment similar to that proposed by the Applicant as part of this project, the interrelated challenges of locating spilled oil, achieving an effective boom and skimmer arrangement, and operating in variable sea states "commonly combine to limit the proportion of spilled oil that can be recovered to 10-15%," and that a review of past spills shows "rarely is more than 10% of spilled oil recovered from the sea surface."[61] This gap between certified capacity and real-world performance is corroborated by the state's own oil spill response authority. The California Department of Fish and Wildlife Office of Spill Prevention and Response, in a 2016 report to the California State Legislature on best achievable mechanical response technology, found that in open ocean and shoreline settings oil spill recovery efforts similar to those described in the Applicant's OSPR typically recover less than 20 percent of the total spilled volume.[62]

The information contained in DCOR's OSRP generally echoes these well-documented limitations on mechanical recovery and containment methods, and the similar set of practical limitations on other methods, such as the use of in-situ burning or chemical dispersants. For example, in several tables summarizing the available responses, protection methods and clean-up and containment procedures, the options are described, variously, as "[s]uccessful in removing oil in sea states of 0-4 ft", "limited by weather conditions", limited to "[w]ave heights less than 1 ft", or otherwise limited by the physical conditions and/or characteristics of the spilled oil.[63] Despite this clear acknowledgement of the limitations of the recommended spill response and containment approaches, neither the OSRP nor BOEM's consistency determination

[60] Cal. Coastal Comm'n, Oil Spill Prevention and Response Guidance Document for Oil and Gas Project Applications, supra, at 13–14.
[61] ITOPF, Containment & Recovery of Oil Spills at Sea: Methods and Limitations (1995).
[62] OSPR, Report on Best Achievable Technology — Mechanical Response (Cal. Legislature, Dec. 2016).
[63] OSRP Sections 13 and 15.

evaluate their expected performance in the real-world conditions of the Santa Barbara Channel, or how these shortcomings could be overcome in order to meet the CCMP requirement that effective containment and clean-up be provided in response to a project-related oil spill.

Challenges to Achieving Effective Containment and Cleanup in the Santa Barbara Channel Area

As illustrated by the low oil recovery efficiencies documented for past spill events, the effectiveness of response operations in the event of a project-related spill depends in large part upon numerous environmental and operational factors that cannot be controlled by DCOR or response agencies. Weather conditions, wind speed and direction, wave height, sea state, ocean currents, visibility, vessel availability, and equipment performance all influence both the movement of spilled oil and the ability to safely deploy containment and recovery resources. The mobilization times presented in DCOR's OSRP assume that environmental and operational conditions allow personnel and equipment to safely reach the spill site and begin response activities, and do not account for delays that could result from adverse conditions.

These operational limitations are particularly significant in the Santa Barbara Channel. Unlike spills occurring within enclosed harbors or sheltered waters, a release from Platform Gilda or its associated oil pipeline would occur within an energetic offshore environment characterized by seasonally changing winds, complex coastal circulation patterns, variable wave conditions, periodic fog, and rapidly changing weather. Once released, oil would immediately begin spreading under these combined influences while simultaneously undergoing evaporation, emulsification, natural dispersion, and other weathering processes. As the spill evolves, the geographic area requiring response would expand while opportunities for successful mechanical containment would likely diminish.

As described previously, the deterministic spill modeling in Appendix H of the DCOR's OSRP illustrates the scale of response that could be required following a significant offshore release. For the representative Platform Gilda spill scenario, approximately 1,501 barrels of crude oil would be estimated to spread across 895 square miles of ocean surface, potentially affecting 134 miles of shoreline, and reaching the shoreline in approximately 73 hours following the initiation of the release. The modeled spill demonstrates that a significant release could require simultaneous offshore containment, mechanical recovery, shoreline protection, wildlife response, and protection of coastal resources over a broad geographic area within a relatively short amount of time.

Appendix H further demonstrates that spill behavior in the Santa Barbara Channel cannot be represented by a single trajectory. Rather than relying exclusively on deterministic modeling, DCOR's OSRP includes seasonal conditional probability analyses evaluating shoreline contact resulting from releases originating at both Platform Gilda and the Gilda-to-shore oil export pipeline. Separate analyses are

presented for winter, spring, summer, and autumn conditions, estimating the probability that spilled oil will contact individual mainland and Channel Island shoreline segments within both three-day and ten-day periods following a release (H-37 through H-44).

These analyses do not estimate the probability that a spill will occur. Instead, they illustrate how spill behavior changes once a release has occurred. Depending on seasonal wind patterns, ocean currents, and the location of the release, different portions of the coastline and Channel Islands may become vulnerable within the first three days, with additional shoreline segments becoming susceptible over the following ten days. The analyses also demonstrate that shoreline exposure differs between releases originating from Platform Gilda and releases originating from the Gilda-to-shore pipeline, reflecting the influence of release location on spill transport throughout the Santa Barbara Channel.

The seasonal variability documented in Appendix H has important implications for spill response. Because potential shoreline impact locations vary throughout the year, response operations cannot rely on a single anticipated spill trajectory or a fixed shoreline protection strategy. As the planning horizon extends from the initial three-day response period to the broader ten-day period, the geographic area requiring protection may expand substantially, increasing the complexity of response operations and the resources necessary to sustain them.

Anacapa Island illustrates the direct relationship between seasonal trajectory uncertainty and the ability to achieve effective containment and cleanup. Appendix H of DCOR's OSRP identifies Anacapa Island as shoreline segment 51. Under winter conditions, the conditional probability that oil released from Platform Gilda would contact Anacapa Island is estimated at 14 percent within 3 days and 31 percent within 10 days. A release from the Gilda-to-shore oil pipeline has a 7 percent probability of contacting the island within 3 days and a 15 percent probability within 10 days. By contrast, the modeled probabilities of Anacapa contact during spring and summer are below 0.5 percent, while the autumn probabilities are substantially lower than winter values.

The challenges associated with achieving effective containment and cleanup extend beyond the availability of response equipment. They reflect the interaction between spill behavior, environmental conditions, response timing, and the geographic scale over which response operations must occur. DCOR's own analyses demonstrate that spill movement depends upon season, release location, wind, waves, currents, and other changing oceanographic conditions, while response effectiveness depends on the timely mobilization and sustained deployment of personnel, vessels, and recovery equipment under those same conditions These factors introduce inherent operational uncertainty into every significant offshore spill response.

Although the response program described in DCOR's OSRP and Appendix H would be expected to improve response capability and reduce the consequences of many spill

events, the analyses also illustrate the practical limitations of containing and recovering oil using the proposed equipment and methods in the dynamic offshore environment of the Santa Barbara Channel before substantial impacts occur. The deterministic trajectory modeling, the seasonal shoreline contact analysis, and the operational assumptions underlying the response program collectively demonstrate that effective containment and cleanup remain dependent on factors that cannot be fully controlled once oil is released into the ocean environment. As a result, the record does not demonstrate that the spill scenarios evaluated in Appendix H can be effectively contained and cleaned up before significant impacts occur to the coastal waters and marine resources protected by Coastal Act Section 30232.

This evidence establishes that effective containment and cleanup for the proposed project is not attainable with the methods and equipment included in DCOR's OSRP. BOEM's consistency determination also does not engage with these documented, realistic constraints, and therefore does not meet the requirement under CCMP Section 30232 for the Applicant to demonstrate that effective containment and cleanup would in fact be achieved for the specific risks this project creates.

Response Effectiveness in Practice: Refugio State Beach, Huntington Beach, DCOR Pipeline 0919, and Platform Irene Oil Spills

The 2015 oil pipeline spill at Refugio State Beach released approximately 2,934 barrels of oil from the failure of Plains All American Pipeline Line 901 due to external corrosion, of which an estimated 1,262 barrels reached the coast and ocean. Although the Line 901 pipeline has a different construction and design than the Platform Gilda oil pipeline, it nevertheless provides several important lessons to consider for the current project. The investigation carried out following the Line 901 spill found that its federally approved inspection program had failed to detect extensive corrosion throughout the pipeline before its failure. Additionally, despite a certified OSRP and a contracted Oil Spill Response Organization activated promptly after the spill was detected, including deployment of 21 skimmer vessels, more than 6,000 feet of boom on open water, and more than 1,100 field personnel, shoreline cleanup of the affected coastline took approximately 45 days, and the outcome included shoreline oiling across more than 25 miles of Santa Barbara County coastline as well additional oiling in Ventura and Los Angeles Counties, fisheries closures affecting sea urchin, spiny lobster, and finfish across a substantial portion of the Channel, and documented mortality of marine mammals and seabirds.[64]

The Refugio spill's Natural Resource Damage Assessment, finalized in June 2021, quantifies damages to coastal resources resulting from the spill. The Trustees, including NOAA, the U.S. Fish and Wildlife Service, the California Department of Fish and Wildlife, California Department of Parks and Recreation, and California State Lands Commission, among others, found that the spill injured approximately 2,200 acres of

[64] Cal. Governor's Office of Emergency Services, 2015 Refugio Oil Spill After Action/Corrective Action Report 3 (Nov. 2019).

subtidal and fish habitat and 1,500 acres of shoreline habitat, injured or killed more than 230 marine mammals, killed more than 550 birds across 28 species, and cost the public more than 140,000 user-days of lost recreational access. Oil was documented as far south as Long Beach, over 100 miles from the release point, well beyond the containment perimeter of the initial response.[65] The Trustees ultimately reached a $22.3 million settlement with the responsible party to fund restoration. This is not evidence that the response was mismanaged; rather, it is evidence that even a prompt, well-resourced, certified response in this oceanographic setting is likely to be ineffective in preventing significant and widespread coastal resource impacts once a spill of this size occurs.

The proposed project would occur in a similar environmental setting and could introduce a similar category and magnitude of risk as the 2015 Refugio spill event. The volume of oil (1,262 barrels) estimated to have reached the ocean during the Refugio spill is of a similar magnitude to the worst-case discharges calculated in the Applicant's OSRP; as a first-order estimate, it is reasonable to expect that the effects of a large spill from Platform Gilda or its oil pipeline could rival or exceed the 2015 spill event. Moreover, it is notable that the Refugio spill originated onshore and flowed to the nearshore, providing a significantly more controlled and accessible setting for conducting containment and clean-up operations than would occur in the case of a spill originating miles offshore and/or on the seafloor.

The October 2021 Huntington Beach spill released approximately 588 barrels from the Amplify Energy San Pedro Bay pipeline offshore of Long Beach. The spill was caused by a cargo ship anchor dragging across and displacing the seafloor pipeline. While this incident was not related to pipeline corrosion and occurred in a different geographic setting than Platform Gilda, it nonetheless further illustrates the difficulties of effective spill response. Even with response systems activated, and a certified Oil Spill Response Organization in place, weather, the uncertainty of human observations and nighttime conditions constrained the effectiveness of the spill response effort. The Office of Spill Prevention and Response (OSPR) concluded that the reported sheen could not be confirmed because of nighttime visibility conditions.[66] A storm on October 5, 2021, separately forced the response to suspend active cleanup operations altogether due to unsafe conditions. The spill produced beach closures, wildlife and fisheries impacts, and significant cleanup challenges. The California State Senate Natural Resources and Water Committee held an oversight hearing on the incident on October 28, 2021, at which testimony was given regarding notification and detection delays. Recognizing that delayed detection can impede the effectiveness of spill response, OSPR convened a workshop in April 2022 to evaluate technologies capable of improving the timely detection of oil spills under nighttime and low-visibility conditions and to identify sensor systems suitable for operational deployment.

[65] NOAA, U.S. Fish and Wildlife Service, Cal. Dep't of Fish and Wildlife, Cal. Dep't of Parks and Recreation, Cal. State Lands Comm'n, and the Regents of the Univ. of Cal., Refugio Beach Oil Spill Final Damage Assessment and Restoration Plan/Environmental Assessment (June 2021).
[66] California Department of Fish and Wildlife, Office of Spill Prevention and Response (OSPR), Pipeline P00547 Incident After Action Report (2022), p. 6.

In December 2021, DCOR Pipeline 0919, a seafloor oil pipeline connecting the offshore Platform Eva to DCOR's Fort Apache onshore facility in Huntington Beach, failed due to undetected internal corrosion.[67] The pipeline breach was located approximately one-mile offshore Bolsa Chica State Beach near Huntington Beach; with Platform Eva located approximately two miles offshore. The incident occurred in the same general area as the Amplify Energy spill discussed above and is geographically distinct from the Santa Barbara Channel. As such, it is not offered as a direct corollary to the potential consequences of a spill from one of the proposed project's facilities. Pipeline 0919 is nonetheless significant to this analysis on a narrower and more direct basis than Refugio as it involves the same operator as Platform Gilda and a failure mechanism, internal corrosion of an aging seafloor oil pipeline, that is relevant to Platform Gilda's roughly 45-year-old export pipeline. Despite inspections and measures in place to protect against the spillage of oil, the corrosion in the pipeline was not detected before the failure and spill occurred. Response divers mobilized on December 28, 2021, to locate the pipeline breach but adverse weather conditions prevented completion of that inspection for several additional days, delaying confirmation of the leak source until January 1, 2022. This illustrates a similar pattern of weather-related limitation of the spill response effort as was documented in the Amplify pipeline response described above.[68]

Investigations carried out by DCOR, with direction from the State Lands Commission (SLC) and the Office of the State Fire Marshal (OSFM), determined that the cause of the Line 0919 failure was internal corrosion that thinned the pipe wall, leading to the development of a 3/16-inch diameter hole in the pipeline; this finding was adopted by the Commission in approving DCOR's after-the-fact coastal development permit application for the emergency repair of the pipeline. Based on this investigation, the Commission separately found that the breach had developed undetected behind a deposit of paraffin-like material inside the pipeline that masked it from DCOR's inspection and monitoring equipment. The Commission's findings also cite the California Office of Spill Prevention and Response's finding that oil spill recovery efforts in open ocean and shoreline settings typically recover less than 20 percent of the total spilled volume. This example demonstrates that DCOR's existing pipeline inspection and maintenance programs have in the past failed to protect against the spillage of oil, and in this instance failed to detect corrosion-induced failure of seafloor infrastructure elsewhere in the operator's California holdings. Platform Gilda's oil pipeline, at roughly 45 years of age, managed by the same operator and subject to a comparable inspection regime, presents a comparable failure risk profile. Notably, the BOEM Final EIS does not discuss either the 2015 Refugio Beach spill or the December 2021 Pipeline 0919 failure in its spill risk analysis, despite the direct relevance of both events to the corrosion risk profile of aging California offshore pipeline infrastructure.

Historically, even lesser spill incidents, such as the 1997 Torch Platform Irene release, have had significant adverse effects to California coastal resources. On September 28,

[67] The pipeline was initially installed prior to the Coastal Act. Replacement of the pipeline was authorized in 1984 by the Commission (CDP# E-84-002).
[68] Cal. Coastal Commission, Staff Report, Application No. 9-22-0219 (Mar. 9, 2023).

1997, a discharge of approximately 163 barrels of crude oil occurred from a rupture originating from a weld defect near a flange in the 20-inch pipeline serving Platform Irene off the western Santa Barbara County coast. Despite an immediate response and the deployment of skimming vessels from multiple responders, the spill caused the fouling of approximately 17 miles of beach and rocky shoreline, impacts to an estimated 635 – 815 seabirds and shorebirds, including federally-listed western snowy plover, and resulted in public beach closures and/or diminished use lasting over a month.[69] Daily situation updates in the aftermath of the spill indicated that clean-up efforts were hampered by sea state and fog, and by curtailed operations at night.[70]

These events are relevant to the Commission's analysis. The 2015 Refugio Beach, Huntington Beach, Pipeline 0919, and Platform Irene incidents all occurred at facilities with certified OSRPs and each triggered an Oil Spill Response Operator response, yet each was characterized by some combination of delayed containment and significant cleanup constraints related to environmental conditions, with the end result of extensive shoreline oiling, wildlife and habitat impacts, fisheries and public access closures and other residual resource impacts. These events demonstrate that offshore pipeline failures in settings comparable to the proposed project produce significant adverse effects to coastal resources and uses, and that in at least one prior case, DCOR's own inspection and maintenance programs have failed to detect corrosion before pipeline failure.

**Conclusion**

In conclusion, the proposed fracking program would materially increase the risk of a spill of crude oil and other hazardous substances by extending and intensifying the use of aging infrastructure, including Platform Gilda and its associated wells and oil pipeline. Specifically, the project would extend the operating life of these facilities, exert new high pressure demands on structural integrity during active fracking, and increase the throughput of oil, gas and produced water above the current baseline. The proposed project has not demonstrated effective containment and cleanup as required by the second clause of Section 30232. The existing OSRP covers crude oil only and does not address spill response and cleanup for the additional hazardous substances that could be released as a result of the project. The OSRP's trajectory and resources-at-risk analyses do not fully address a release from the oil export pipeline, despite the relative likelihood of this spill pathway.

Additionally, and crucially, recent experience with several significant oil spills off of the southern California coast as well as evidence from the scientific literature demonstrate that the effectiveness of responses to significant spills using the same types of methods and equipment as those proposed by DCOR as part of its project can be profoundly

[69] Torch/Platform Irene Oil Spill, Final Restoration Plan and Environmental Assessment.
[70] NOAA Incident News, Platform Irene, Vandenberg Air Force Base, California. https://incidentnews.noaa.gov/incident/7229#!

constrained by environmental conditions (e.g., weather, lighting, waves/currents), detection and response times and other practical barriers, and that ineffective spill responses have often resulted in substantial adverse effects to coastal resources.

DCOR's OSRP does not effectively address these constraints or the realistic conditions of the Santa Barbara channel setting under which any response would have to operate**.** Further, it does not include techniques and equipment that have been sufficiently enhanced and improved beyond those that proved ineffective during other recent offshore spills. While effective cleanup and containment equipment and methods may exist, those proposed to be used by DCOR as part of the current project have not been demonstrated to meet that standard. For these reasons, the Commission finds that the proposed hydraulic fracturing well stimulation treatment program at Platform Gilda is not consistent with Section 30232 of the Coastal Act.

## D. Marine Resources and Coastal Waters

Section 30230 of the Coastal Act states:

> Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

> The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Coastal Act Sections 30230 and 30231 establish complementary policies requiring the protection of marine biological resources and maintenance of coastal water quality. Section 30230 requires that marine resources be maintained, enhanced where feasible, and restored. It further provides that special protection shall be afforded to areas and species of special biological or economic significance such as National Marine Sanctuaries, National Parks, State Marine Protected Areas, Biologically Important Areas for marine mammals, and important fishing grounds. It further provides that uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and maintain healthy populations of marine organisms

adequate for long term commercial, recreational, scientific, and educational purposes. Section 30231 requires that the biological productivity and quality of coastal waters be maintained and, where feasible, restored through, among other measures, minimizing adverse effects of wastewater discharges and preventing the degradation of marine waters.

Because protection of marine productivity and biological resources depends on the maintenance of water quality, the Commission evaluates these policies together in reviewing the proposed project and considers both DCOR's measures intended to avoid routine impacts to marine resources and water quality and the potential consequences of accidental spills of oil and other hazardous materials associated with the proposed continued and expanded offshore oil production and transportation.

**Sensitive and Protected Marine Resources of the Project Area**

Platform Gilda is located within one of the most heavily protected and important marine regions of the entire west coast of the United States. The biologically productive waters of the Santa Barbara Channel area support diverse marine habitats and species protected under Chapter 3 of the Coastal Act. These waters provide habitat for marine mammals, sea turtles, sea birds, fishes, kelp forests, benthic communities, and numerous commercially and recreationally important fisheries. The surrounding marine environment also includes coastal habitats and shoreline resources that provide important ecological, economic, recreational, scientific, and educational values.

The Channel Islands National Marine Sanctuary and Channel Islands National Park and their adjacent network of state and federal marine reserves and marine conservation areas have been established over the past several decades in recognition of the area's significant ecological and cultural value. The Sanctuary encompasses approximately 1,470 square miles surrounding the Channel Islands, including 13 state designated marine protected areas covering approximately 240 square nautical miles within its boundaries. Anacapa Island State Marine Reserve and State Marine Conservation Area are located approximately seven miles from Platform Gilda. An additional five State marine protected areas are located along the mainland coast between Point Concepcion and Point Dume.

State marine protected areas designated under the Marine Life Protection Act are established specifically because the areas they protect are of exceptional biological significance and especially vulnerable to disturbance. The BOEM EIS confirms that NOAA has also designated multiple Biologically Important Areas for marine mammal feeding, breeding, and migration in the Santa Barbara Channel and project vicinity, and identifies California gray whales as present in the affected environment with seasonal migration through the Channel. More than 20,000 Pacific gray whales migrate through the Santa Barbara Channel annually. In addition to gray whales, the Santa Barbara Channels supports six other whale species on a seasonal or permanent basis, including populations of blue whale, humpback whale, fin whale, sperm whale, sei whale and North Pacific right whale designated as threatened or endangered and protected under the Endangered Species Act.

Platform Gilda and its seafloor oil pipeline are also located within designated Critical Habitat for the humpback whale, protected as threatened under the Endangered Species Act. Both the mainland and Channel Island coasts support multiple pinniped haul-out, breeding and rearing areas that are critical to the life-cycles of species including California sea lion, harbor seal, Northern elephant seal, and Northern fur seal, and provide nesting habitat and foraging habitat for numerous seabirds including the federally-listed western snowy plover, California least tern and Scripp's murrelet. The Commission finds that these marine resources constitute areas and species of special biological and economic significance within the meaning of Section 30230 and are therefore required to be provided with special protection.

**Marine Resource Protection Measures**

As part of its project, DCOR proposes to implement numerous measures intended to minimize adverse impacts to marine resources and water quality during implementation of the proposed hydraulic fracking well stimulation project. The project would use a closed-loop handling system for fracking fluids and recovered flowback, thereby avoiding their direct discharge into the marine environment. However, the water extracted from the oil wells proposed to be used in the project (also known as "produced water") may contain fracking fluids and would be discharged into the ocean from Platform Gilda following processing onshore. DCOR would further implement operational procedures governing chemical handling, spill prevention, waste management, personnel training, and environmental compliance during fracking operations. Implementation of these measures and procedures would reduce, though not eliminate, the potential for releases of fracking fluids to the marine environment.

**Spill Risk and Effect of Spills on Marine Resources**

The Commission's review under CCMP Sections 30230 and 30231, however, is not limited to routine project operations, but rather encompasses the reasonably foreseeable effects of the proposed project on marine resources and coastal waters, including the "downstream" consequences of accidental oil and hazardous material spills associated with the proposed continued and expanded use of the project's offshore production facility and its wells and pipelines. As discussed in the Commission's findings under Section 30232 (Section IV.C, above), BOEM and DCOR have not demonstrated that effective containment and clean up can be provided for accidental spills that occur. Accordingly, the Commission must evaluate the potential effects that such spills could have on the marine resources, biological productivity, and coastal water quality protected by Sections 30230 and 30231 and determine if consistency with those policies can be achieved.

The proposed continued and expanded oil production involves the continued extraction, processing, storage, and transportation of crude oil, natural gas, and other hazardous materials through existing offshore and onshore production facilities and infrastructure. As discussed under Section 30232 above, although DCOR has proposed substantial prevention measures, accidental spills remain a reasonably foreseeable consequence

of the proposed offshore oil production activities despite modern engineering controls and regulatory oversight. This has been directly demonstrated in recent years through the involvement of DCOR offshore oil and gas facilities in two of the three most significant spill incidents that have occurred off of California in the past five years (the rupture and spill of oil from DCOR's pipeline 0919 in 2021 and the uncontrolled release of natural gas and resulting fire on DCOR's Platform Habitat in 2026.

Effects of Oil Spills

The administrative record demonstrates that the waters surrounding platform Gilda support marine mammals, sea birds, sea turtles, fishes, kelp forest communities, and Essential Fish Habitat for numerous federally managed fisheries. These resources are particularly susceptible to oil contamination because they depend on clean marine waters, good water quality and productive habitats for feeding, spawning, migration, reproduction, and growth. Commercial and recreational fisheries similarly depend upon the long-term health and biological productivity of these marine ecosystems. An accidental oil spill has the potential to have adverse effects on these resources through direct exposure to oil and the resulting degradation of habitat, reduced water quality, disruption of ecological functions, injury and mortality.

Depending on the location, volume, timing, and prevailing environmental conditions, spilled oil could expose marine mammals, sea turtles, sea birds, fish, benthic communities, kelp forests, coastal habitats, and commercially and recreationally important fisheries to adverse effects including injury and death. Large oil spills have the potential to cause widespread, persistent ecological injury by contaminating water, shorelines, seafloor sediments, and the full water column, resulting in acute mortality and long-term sublethal effects across multiple trophic levels. Oil reaching the marine environment degrades water quality through surface contamination, dissolved and dispersed hydrocarbons, shoreline contamination, and associated spill cleanup activities. A review of oil spill effects concluded that oil commonly reaches sediment following a spill; oil trapped in oxygen-poor sediments remains for long periods; zooplankton and benthic invertebrates are frequently exposed to contamination; and oil pollution reduces both the abundance and diversity of benthic communities.[71]

Marine ecosystems in the project area exhibit tight biological coupling between planktonic productivity, forage species, predatory fishes, marine mammals, and seabirds. A significant spill could therefore disrupt food-web relationships, leading to cascading ecological effects that extend well beyond the initial contamination footprint. Oil contamination of kelp forests, soft-bottom habitats, rocky reefs, and estuarine areas can lead to long-term habitat degradation, including smothering of benthic organisms, reduction of oxygen exchange, impaired photosynthesis, behavior alteration and

[71] Teal, J. M., and Howarth, R. W. (1984). Oil spill studies: A review of ecological effects. *Environmental Management*, 8(1), 27–44.

suppressed growth, reduced immunity to disease and chronic mortality.[72,73] A major spill could introduce chronic hydrocarbon exposure into sediments and nearshore environments, where lingering oil residues may persist for months or years, potentially causing long-term effects such as reproductive impairment, reduced growth, and altered species composition.

Several species groups in the region — including marine mammals, seabirds, pinnipeds, sea turtles, and benthic invertebrates — are highly vulnerable to surface and subsurface oil exposure. These impacts may result from ingestion, inhalation of volatile compounds, dermal contact, loss of thermoregulation, or contamination of prey resources (NOAA 2026). Oil destroys the insulating and water-proofing properties of feathers of birds and fur of mammals, which reduces their buoyancy and ability to thermoregulate.[74] As stated on the Commission's Oil Spills webpage, when a bird becomes coated in oil, it can lose its ability to stay afloat or to fly. Marine mammals exposed to oil can experience dangerous drops in body temperature. Fish may develop reproductive issues and genetic defects when contaminated. These pollutants can move through the food web, leading to seafood that is unsafe for people to consume.

As discussed in Section IV.C above, significant and sustained impacts to a broad array of biologically and economically significant species and habitats have been well-documented during prior oil spills, including the 2015 Refugio spill event which degraded thousands of acres of shoreline and marine habitat along over 100 miles of the Southern California coastline. A release of oil and other hazardous materials from the proposed project would result in impacts with the potential to reduce marine biological productivity, degrade the quality of coastal waters and adversely affect areas and species of special biological or economic significance protected under Sections 30230 and 30231. Such areas include state and federal Marine Protected Areas, Essential Fish Habitat, and critical habitat and BIAs of species listed under the Endangered Species and Marine Mammal Protection Acts. A large spill affecting these areas could compromise legally protected conservation objectives and undermine long-term habitat restoration goals.

The BOEM EIS and consistency determination recognize that accidental oil spills have the potential to adversely affect marine biological resources and water quality but contain only a limited analysis of potential releases from project vessels and equipment. The assessments of potential effects to marine resources in BOEM's consistency determination and supplemental materials are similarly circumscribed, with no analysis of oil spill effects in the consistency determination. Neither BOEM nor DCOR evaluate

[72] Holdway, D. A. (2002). The acute and chronic effects of wastes associated with offshore oil and gas production on temperate and tropical marine ecological processes. *Marine Pollution Bulletin*, 44, 185-203.
[73] Kawade, Sanket Sunil, Chetana Manohar Mestry, Panchakarla Sedyaaw, Sravani Kalluri, Apurva Nikhil Sawant, V.R Sadawarte, Supriya D Meshre, and Pothula Sindhuja. 2025. "Effect, Impact and Causes of Oil Spills on Marine Organisms". *International Journal of Environment and Climate Change* 15 (12):923-38. https://doi.org/10.9734/ijecc/2025/v15i125207.
[74] Peterson, C. H., Rice, S. D., Short, J. W., Esler, D., Bodkin, J. L., Ballachey, B. E., & Irons, D. B. (2003). Long-term ecosystem response to the Exxon Valdez oil spill. *Science*, 302(5653), 2082–2086.

the broader impacts to marine resources from a significant release from Platform Gilda and its associated infrastructure related to the proposed project.

The Commission recognizes that DCOR has incorporated numerous operational controls intended to reduce the likelihood of an accidental oil spill and has proposed measures intended to minimize routine operational effects on the marine environment. However, as discussed in the Commission's findings under Coastal Act Section 30232 (Section IV.C, above), spill prevention measures, while important, cannot eliminate the residual risk of accidental releases associated with the proposed continued operation and intensified use of offshore wells, production facilities, and subsea pipelines. The Commission further concludes that BOEM has not demonstrated that the project can provide effective containment and cleanup facilities and procedures that would prevent significant damage to marine resources following a major accidental oil spill. Consequently, the impacts of any such spills on biological productivity, coastal water quality and species and areas of special biological and economic significance could not be effectively avoided or contained, inconsistent with the marine resources policies of the CCMP (Sections 30230 and 30231).

Effects of Well Stimulation Fluid Spills

DCOR's Material Safety Data Sheets for the fracking fluid chemical additives listed in Table 2.4-1 of its modified Development and Production Plan and included in Appendix B of that plan document severe hazard classifications for several of the additives that bear directly on Sections 30230 and 30231. The Biocide constituent of the fracking fluids is classified under the Globally Harmonized System as Category 1, the most severe available classification, for both short-term (acute) and long-term (chronic) aquatic hazard, with the hazard statement "very toxic to aquatic life with long lasting effects." The Emulsion Preventer constituent (W054) is separately classified as Category 2 for chronic aquatic toxicity and Category 2 for carcinogenicity. Releases of these chemical additives, either due to an accidental spill during well stimulation activities or through the routine discharge of produced water, could, depending on the magnitude of the release, result in at least localized losses of marine life and degradation of marine biological productivity.

Extended Duration of Spill Risk

As discussed previously, the primary purpose of the proposed hydraulic fracking well stimulation project is to increase oil production and extend the economic and operational life of the Platform Gilda facility. The proposed four-fold increase in production and export rates, along with the extended operating lives of the wells, platform and export pipelines, would increase the potential magnitude of accidental releases and extend the duration of heightened spill risk, and thus potential for marine resource impacts, in comparison to a "no action" alternative where the proposed fracking is not carried out. As noted previously, the BOEM EIS indicates that not implementing the proposed project would hasten the closure and decommissioning of Platform Gilda and its associated infrastructure, an outcome that would remove aging offshore infrastructure from the marine environment, eliminate ongoing spill risk, and allow for the restoration of seafloor habitats. The proposed well stimulation program

would defer those benefits for an indeterminate additional period while extending the exposure of the marine environment to the elevated spill risk of aging infrastructure operating at increased production levels.

### Conclusion

The Commission finds that the project includes numerous measures intended to minimize routine operational impacts associated with the proposed well stimulation program. However, the proposed project would extend offshore oil production using existing wells, production facilities, and pipelines while also substantially increasing the amount of oil and other hazardous materials that could be spilled. As discussed in the Commission's findings under Coastal Act Section 30232, BOEM has not demonstrated that oil spills would be effectively contained and cleaned up before causing significant adverse impacts to the marine biological resources and water quality of the project area. Accidental oil spills stemming from the proposed well stimulation program have the potential to adversely affect a wide array of sensitive and economically-important marine species and habitats, including state and federal marine protected areas, species and habitats protected under the Endangered Species Act and Essential Fish Habitat, and more generally, the water quality and biological productivity of the Santa Barbara Channel marine ecosystem. Thus, BOEM has not demonstrated that the project would maintain and protect marine biological resources and productivity, provide special protection for areas of special species of biological or economic significance in the project area, or maintain and enhance the biological productivity and quality of coastal waters. Accordingly, the Commission finds that the proposed project is inconsistent with Sections 30230 and 30231 of the CCMP.

## E. Commercial and Recreational Fishing

Section 30234.5 of the Coastal Act states:

> The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

Section 30234.5 protects the value of the harvest, the livelihoods of fishing communities, and the recreational and tourism economy that depends on productive fishing grounds, and it is not satisfied simply by avoiding direct physical interference with fishing gear, vessels, or harbor facilities. The proposed program would not physically alter the existing 1,640-foot safety closure zone established around Platform Gilda or significantly add to the amount of vessel traffic that services it. Further, the longstanding Joint Oil/Fisheries Liaison Office (JO/FLO) that has helped reduce work disruptions and minimize conflict between fishing and oil operations for more than 40 years would also not be modified. However, despite these established coordination measures, the proposed project may adversely affect fishing activities because it increases the probability and potential severity of oil spills and would not provide for effective response and clean up in the event a spill occurs (see Section IV.C). Oil spills create significant adverse effects on the economic, commercial, and recreational

components of fishing activities. Further, the project would extend the duration of Platform Gilda's use and thus the amount of time its safety closure zone would be in place and its vessel traffic would continue.

The consistency determination provided by DCOR does not include a thorough analysis or discussion of how the project would be consistent with Section 30234.5 of the CCMP. However, DCOR's supplemental Development and Production Plan (DPP) does identify the commercial species harvested in the project area and quantify their economic value. Neither the supplemental DPP nor the consistency determination, however, connects this baseline economic data to any assessment of the economic consequences a spill event would have on those fisheries.

**Effect of Oil Spills on Commercial and Recreational Fisheries**

Oil spills harm fisheries through a sequence of mechanisms that extend well beyond the initial release. The resulting economic consequences to a fishing economy are not limited to the volume of oil spilled or the footprint of the visible slick. Direct contact with crude oil causes acute mortality and injury to fish, shellfish, and marine habitat which can cause reductions in catch rates over both the short and long term. The more consequential issue for a fishing economy resulting from an oil spill is often the public health driven closure that follows, however. Polycyclic aromatic hydrocarbons (PAHs) in crude oil accumulate readily in aquatic organisms, particularly crustaceans and mollusks, which have a reduced capacity to metabolize and clear these compounds, and federal and state agencies require a multi-stage testing protocol, before any closed fishery may reopen. That testing and closure process operates on its own timeline, independent of the pace of physical spill cleanup and can outlast the visible presence of oil in the water by weeks or months. Even after testing confirms safety and an area reopens, market confidence in the affected region's seafood does not necessarily recover on the same schedule. The record for previous California spills that are potential analogs for a major project-related spill in potential size, severity and affected region (See Section IV.C for detailed information about these previous oil spills), discussed below, reflects continuing consumer hesitancy toward affected-area seafood well after closures were lifted. A spill's effect on a fishing economy is a function of closure scope, closure duration, testing protocol, and market and ecological effects that can persist for years, not simply the volume of oil released.

**Santa Barbara Channel Fishing Economy**

The Santa Barbara Channel commercial fishing economy generates tens of millions of dollars in documented landings each year. Data collected by the California Department of Fish and Game between 1980 and 2026 documents that the fishing grounds of the Santa Barbara Channel and surrounding the Channel Islands have among the highest landings of any waters offshore California. Fish Block 665 (the area encompassing Platform Gilda) alone accounting for approximately $11.9 million in documented landings between 2015 and 2024. California spiny lobster was the highest-value species during this period, at $3.76 million. Santa Barbara's harbor alone supports over

100 small-boat commercial fishermen harvesting more than 50 species, generating approximately $30 million in annual economic benefit. The Santa Barbara Channel's sea urchin fishery is internationally recognized with significant export to Asian markets. Recreational and charter fishing out of Santa Barbara, Ventura, and Oxnard harbors contributes to the region's economy further through charter revenues, equipment sales, fuel, and visitor expenditures. The economic significance extends to the full shore-based fishing complex, including processing facilities, wholesale and retail markets, cold storage, vessel repair, fuel docks, and to the identity and character of the working waterfront communities of Santa Barbara, Ventura, and Oxnard. Commercial and recreational fisheries in the Channel Islands area more broadly target more than 100 fish species and more than 20 invertebrate species, underscoring the substantial economic base Section 30234.5 protects.

While aquaculture is not considered commercial fishing, it is worth noting that the Santa Barbara Channel also includes commercial shellfish aquaculture, emerging kelp aquaculture, and land-based abalone aquaculture that draws seawater into its facilities from the Santa Barbara Channel. These operations also depend on clean water quality, access to cultivation areas, and predictable harvest windows.

**Spill Risk to Fishing Grounds, Fishery-Specific Vulnerabilities, and Economic Consequences of Closures**

A release from any of the potential spill scenarios associated with the proposed fracking program would threaten fishing resources through mandatory grounds closure, sublethal contamination of harvested species, and long-term habitat degradation.

Different fishing sectors face different exposure pathways. Following the Refugio Beach Oil Spill, finfish fisheries recovered more readily after the fishing closure was lifted while the spiny lobster fishery took longer to recover, likely because of sustained direct impacts from the oil to hard rock reef habitats on which lobster depend. The sea urchin dive fishery is potentially acutely vulnerable to a spill of the fracking fluids and chemicals proposed to be used. Sea urchins are slow moving and cannot readily avoid contamination, live urchin quality standards are immediately compromised by chemical exposure, and dive operations require direct water column entry. The safety data sheets for the chemicals in the proposed fracking fluids classify the Biocide constituent of the fluids as GHS Category 1, the most severe available classification, for both acute and chronic aquatic hazard, and the Emulsion Preventer constituent as Category 2 for chronic aquatic toxicity. Groundfish designated as essential fish habitat are long-lived and slow-recovering, meaning the damage from contamination can persist for years.

The increased spill probability and severity of an oil spill associated with the proposed project directly threaten this fishing economy. Platform Gilda and its export pipeline corridor traverse active commercial and recreational fishing grounds and a spill in these waters could trigger mandatory closures with direct economic loss to fishing operations, contamination of harvested species, and harm to the shore-based fishing complex.

DCOR's supplemental DPP's discussion of accidental release impacts to commercial and recreational fishing is limited to a qualitative assurance that engineering controls and DCOR's Oil Spill Response Plan will minimize adverse impacts. It provides no analysis of closure scope, closure duration, or economic losses, however. Neither DCOR's supplemental DPP nor BOEM's consistency determination connects the economic baseline data the supplemental DPP provides to an assessment of what a spill would actually cost this fishing economy.

The likely long duration and broad scope of a fishery closure resulting from a spill would compound its adverse economic impacts. The record from past spills demonstrates that such closures are neither brief nor predictable in scale relative to the volume of oil released and show that their economic consequences extend well beyond the closure period itself. Following the 2015 Refugio Beach spill's release of approximately 2,934 barrels of oil, of which an estimated 1,262 barrels reached the ocean, the California Department of Fish and Wildlife closed approximately 138 square miles of commercial and recreational fishing grounds, encompassing the lobster, crab, shrimp, halibut, urchin, squid, whelk, and sea cucumber fisheries described above. The closure remained in effect from May 21 to June 29, 2015, approximately six weeks.[75] In 2022, $184 million settlement was established to compensate for economic harm to the 'Fisher Class' from this closure and spill.[76]

Following the 2021 Huntington Beach spill's release of approximately 588 barrels, roughly one-fifth the volume that reached the ocean at Refugio, CDFW's fishery closure ultimately covered approximately 650 square miles and 45 miles of shoreline and remained in effect for approximately eight weeks, longer than the Refugio closure despite the smaller release.[77] Fishermen affected by the closure pursued litigation over its economic effects, and press accounts reported that fishermen described lingering consumer stigma toward Orange County-area seafood long after the fishery reopened.

Notably, the volumes of oil reaching the ocean from the Refugio and Huntington Beach spill events are comparable to the worst-case discharge (WCD) range assumed for Platform Gilda (see Section IV.C, above); as a first-order estimate, it would be reasonable to expect that a project-related spill of this magnitude could have a similar scale of adverse impacts to fisheries as these prior spill events. However, it is important to note that in neither case did the closure's scope, duration, nor economic consequence correlate predictably with the volume of oil released. The seafood-contaminant testing protocol California requires before any fishery reopening operates

[75] Refugio Beach Oil Spill Final Damage Assessment and Restoration Plan/Environmental Assessment. Refugio Beach Oil Spill Trustees (June 2021).
[76] ANDREWS ET AL. V. PLAINS ALL AMERICAN PIPELINE, L.P. ET AL., NO. 2:15-CV-04113 (PSG:JEM) (C.D. CAL.).
[77] California Department of Fish and Wildlife Lifting of Fisheries Closure Due to Public Health Hazards Caused by an Oil Spill Affecting Marine Waters (Nov. 2021).

independently of how much oil is ultimately recovered from the water.[78] This record demonstrates that even a spill within the 50-to-1,000-barrel range (acknowledged in BOEM's EIS as reasonably likely to occur in the Southern California Planning Area) could foreseeably close some portion of the Santa Barbara Channel's commercial and recreational fishing grounds for a period of weeks to months, with direct and substantial economic consequences, potentially extending years beyond the closure itself.

The duration of the production increase that would be enabled by the proposed project would compound the exposure of fisheries to the risk of oil spills. The project EIS projects that the proposed actions at Platform Gilda will produce approximately 14 million barrels of oil over the next 20 years, with no foreseeable end date to overall production. Extending offshore production by that duration would extend the period during which the fishing grounds, vessels, and harbor infrastructure would remain exposed to the risk of spill-related effects, including direct effects (e.g., fish mortality), as well as closures and exclusion-zones. A fishery closure of the scope, duration, and economic consequence documented above for the Refugio and Huntington Beach spills is not simply a one-time cost measured against a single spill's probability, it is a recurring risk of exposure that the Channel's fishing economy would bear for as long as the project infrastructure remains in service.

**Conclusion**

Accidental spills of oil and other hazardous substances stemming from the proposed well stimulation program have the potential to adversely affect commercial and recreational fishing in the project area through direct effects to fish stocks and via the establishment of prolonged closures and exclusion zones in the aftermath of a spill. Because the risk of significant project-related spills cannot be fully avoided, and because any spills that do occur cannot be effectively contained and remediated through response measures, the proposed project has the potential to result in significant harm to fisheries and would not protect the economic, commercial and recreational importance of fishing activities. For these reasons, the Commission finds that the proposed hydraulic fracturing well stimulation treatment program at Platform Gilda is not consistent with Section 30234.5 of the CCMP.

## F. Hazards

Section 30253 of the Coastal Act states, in relevant part:

New development shall do all of the following:

> (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

[78] California Office of Environmental Health Hazard Assessment and Office of Spill Prevention and Response, Protocol for Seafood Sampling and Analysis to Support Fisheries Re-Opening Decisions Following Aquatic Oil Spills in California, March 2020.

(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The proposed project would carry out a new well stimulation program on previously-completed wells and intensify the use of existing infrastructure, including Platform Gilda and its export pipelines, in an area of significant geologic and coastal hazards, including seismic activity, storms and high waves, and tsunamis. In addition, because the project involves the injection of fracking fluids into the sub-surface at pressures strong enough to fracture the formation rock, and reinjection of flowback fluids and produced water into the formation via injection well, the potential for project activities to exacerbate geologic hazards, including through induced seismicity and subsidence or other ground motion, must be evaluated. Finally, the project involves the increased production and processing of crude oil and natural gas and thus carries a risk of accidental fires at Platform Gilda. Section 30235(a) and (b) require that these hazards be minimized over the course of the project, and that the stability and structural integrity of project elements and infrastructure be assured.

**Seismic & Geologic Hazards**

Geologic Setting

Platform Gilda is located in the Santa Barbara Channel approximately 9 miles offshore of Oxnard, Ventura County, and is served by oil, gas, and water pipelines running along the seafloor between the platform and the Mandalay Onshore Facility (MOSF) in coastal Oxnard. In the regional geologic context, the Santa Barbara Channel occupies a partially-submerged, fault-controlled structural and topographic depression, or “basin”, within the Transverse Range geomorphic province, generally bounded by the Santa Ynez Mountains (and associated Santa Ynez fault zone) to the north and the Northern Channel Islands (and the Santa Rosa Island and Santa Cruz Island faults). Within these major structural features are numerous sub-basins associated with a complex network of faults created by the tectonic compression occurring in this geologic province. Over geologic time, marine and terrigenous sediments deposited in these basins have formed thick layers of sedimentary rock - sandstones, siltstones and shale - including organic-rich deposits that are the source of the oil and gas resources extracted from modern-day oil fields. These strata have been intensely folded and deformed by tectonic forces. Platform Gilda is situated above an “anticline” of downward-folded strata, bounded by the active Oak Ridge Fault to the north and the presumed inactive World’s End Fault system to the south, that together create a “structural trap” in which hydrocarbons have accumulated.

A 2024 Seismic Risk Evaluation for DCOR’s onshore and offshore pipelines[79] summarizes the seismic hazards in the project vicinity as follows:

[79] Kendrick Consulting, LLC, “DCOR, LLC Seismic Risk Evaluation, Hazardous Liquid and Natural Gas Pipeline Systems”, Rev. 1, July 31, 2024.

> *The Santa Barbara Channel lies within a seismically active region of coastal California, where ongoing transpression associated with the Pacific–North American plate boundary produces active folding, uplift, and faulting. Geologic and geophysical studies indicate that these structures remain active and are capable of generating significant earthquakes.*
>
> *Generically for offshore oil and gas infrastructure, the principal seismic hazards include strong ground shaking, fault displacement, seabed deformation, submarine landslides, and potential tsunami generation. Active folding and fault movement can alter seafloor topography and impose stresses on fixed platforms, subsea pipelines, risers, and shore-crossing facilities. Areas with steep slopes and thick unconsolidated sediments may be susceptible to earthquake-triggered slope failures that could affect buried or exposed pipelines.*
>
> *For DCOR and other operators, seismic risk management therefore focuses on maintaining infrastructure capable of withstanding ground motion, monitoring geotechnical hazards along pipeline corridors, and incorporating fault, seafloor stability, and tsunami considerations into inspection, maintenance, and integrity management programs.*

The subsequent discussion draws on the geologic hazards analyses contained in BOEM's consistency determination, DCOR's consistency certification, the April 2026 BOEM EIS for well stimulation at Platform Gilda, several supplemental hazards reports provided by DCOR, and other relevant information.

Fault Displacement and Rupture

Platform Gilda is located near several faults considered active by the U.S. Geological survey, including the nearby Oak Ridge, Mid-Channel and Montalvo Faults, each approximately two to three miles from the platform to the north, west and east, respectively. The BOEM EIS reports that the Oak Ridge Fault is capable of producing an earthquake of up to magnitude 7.1. Other active faults in the vicinity include the Pitas Point, Ventura, Red Mountain and Santa Ynez Faults, all within four to 20 miles of the platform. None of these mapped faults intersect the Platform Gilda footprint, the subsurface zones proposed for stimulation, or the pipeline corridors serving the platform. The BOEM EIS further notes the existence of an additional fault system, the World's End Fault, located very near Platform Gilda and approximately 2,500 feet from the closest planned well stimulation zone, that does not appear in the USGS database. However, geophysical data indicate that this fault does not displace shallow (and therefore recent) sedimentary units or the seafloor and thus is not considered active. For these reasons, both the BOEM EIS and DCOR's 2024 Seismic Risk Evaluation conclude that there is a very low risk from direct fault and displacement to the existing infrastructure that would be used to conduct the proposed project.

Project-related Hazards – Fluid Migration, Induced Seismicity and Ground Motion

As discussed in the BOEM EIS, BOEM consistency determination, DCOR consistency certification and supplemental materials, Platform Gilda and its export pipelines are located on a gently-sloping continental shelf underlain by stable sediments, with no

known submarine landslide or instability hazards. Thus, the geologic hazards analyses contained in these documents focus on the potential for project activities, especially the injection of fluids into subsurface geologic formations during fracking and wastewater disposal, to induce or exacerbate geologic hazards, including hydrocarbon seepage, migration of fracking fluids, fault movement ("induced seismicity") and seafloor deformation.

The migration of hydrocarbons or fracking fluids outside the target formation would require the existence flow pathways, such as natural or created fractures, between the well stimulation zone, surrounding strata, and the surface. Both the BOEM EIS and consistency determination indicate that such fluid migration outside the well stimulation zones is very unlikely due to the depth of the target formations (>4,950 feet below the seafloor) and the presence of both stratigraphic and structural "seals" – overlying impermeable shale layers and the several faults which help trap hydrocarbons within the reservoir formations. The proposed hydraulic fracturing is designed to create vertical fracture heights of 100 – 200 feet that are expected remain confined within the target formations, with significant buffers against breakthrough of the sealing shale layers above the Upper Repetto formation. Further, the proposed fracturing zones would be located at least 2,500 feet from the nearest fault, the World's End Fault, which itself does not extend through the upper strata to the seafloor, and thus is not expected to provide a vertical migration pathway to the surface. The EIS concludes that without such pathways "there is no mechanism by which stimulation fluids or hydrocarbons could migrate along fault planes to shallow sediments or the seabed", and notes that the absence of documented natural oil or gas seeps in the vicinity of Platform Gilda is indicative of a lack of natural flow pathways.

In recent years, high-volume hydraulic fracturing and wastewater reinjection during onshore shale gas extraction has been linked to earthquakes and structure damage in a number of locations worldwide.[80] Many of these induced seismic events have been linked to ground deformation caused by the withdrawal and/or reinjection of very large volumes of fluid from or into the subsurface, or to hydraulic fracturing performed adjacent to stressed faults. As described in the BOEM EIS and consistency determination and supplemental Geologic Hazards and Induced Seismicity Analysis[81], the proposed well stimulation program at Platform Gilda has been designed to minimize this hazard. The planned treatment zones are all located more than 2,500 feet from the nearest fault, the World's End Fault, which is not considered active, and more than two miles from the nearest active faults (Oak Ridge and Mid-Channel Faults). These distances serve to minimize the potential that the hydraulic fractures, with modeled half-lengths of 150 – 300 feet, would intersect an active fault. Although independent monitoring data is not available to confirm it, DCOR and BOEM note that prior well stimulations conducted at Platform Gilda between 1986 – 2014 did not trigger

[80] California Council on Science and Technology (CCST), Lawrence Berkeley National Laboratory, & Pacific Institute. (2016). Advanced well stimulation technologies in California: An independent review of scientific and technical information. California Council on Science and Technology.

[81] "Geologic Hazards and Induced Seismicity Analysis – Platform Gilda WST Program, Addressing Point 22 in Information Request No. CC-0001-26", undated, unsigned report submitted by DCOR, LLC to Commission staff on July 9, 2026.

detectable earthquakes, consistent with past studies of similar hydraulic fracturing operations comparable similar geologic settlings. Additionally, the relatively small injection volumes (both stimulation and wastewater) and short-duration treatments proposed as part of the well stimulation program would result in localized pressure increases and fracture growth, which, along with the large depth of the treatment zones, would limit any potential for surface ground motion.

In summary, these project characteristics differentiate the proposed hydraulic fracturing program from unconventional shale gas projects and would minimize hazards from fluid migration, induced seismicity or ground motion.

Strong Ground Shaking During Earthquakes

As described above, Platform Gilda and its associated wells and pipelines are located in close proximity to several active faults capable of producing significant earthquakes, and within a highly active regional tectonic setting characterized by dozens of faults within a few tens of miles of the project area. The largest of these regional faults, the San Andreas Fault, is located approximately 50 miles northeast of the platform and can generate earthquakes exceeding magnitude 8.0. Notable historical earthquakes in the project vicinity include the 1925 Santa Barbara earthquake (M 6.8), the 1927 Lompoc earthquake (M 6.9), and several more recent events with magnitudes ranging from $M_W$ 4.5 – 5.5. As such, the most significant geologic hazard affecting the project is the potential for strong ground shaking related to earthquakes on nearby faults.

Despite the clear potential for strong ground shaking to affect project infrastructure, neither the BOEM EIS and consistency determination, DCOR consistency certification and Supplemental DPP, nor the several supplemental analyses provided by DCOR offer more than a cursory or incomplete analysis of the ground shaking hazard. The consistency certification states, inaccurately, that “Platform Gilda is not located in areas of high geologic hazard”, and with regard to seismic hazards notes only that “[w]ell stimulation activities will occur at considerable distances from mapped Quaternary faults. The World’s End Fault lies approximately 2,500 feet from the closest planned treatment zone, while other regional faults, such as the Oakridge and Mid Channel Faults are located more than two miles from the Platform.” In assessing ground shaking hazards, faults on the order of thousands of feet to a few miles from a structure are generally considered to be in close proximity, and depending on the size of an earthquake, could expose structures to intense ground shaking due to the minimal distance available for seismic wave attenuation.

DCOR’s 2024 Seismic Risk Evaluation provides an expanded, though general, discussion of ground shaking hazards, but stops short of a project- or site-specific analysis:

> *Strong ground shaking from large earthquakes results in transient wave propagation that can damage above-ground and buried pipelines. Damage to facilities is caused by the sudden lateral and vertical ground accelerations. The potential hazard from earthquake wave propagation is commonly measured by the ground shaking parameter of peak horizontal ground acceleration (PGA),*

*expressed as a percentage of the Earth's gravitational acceleration (g) [g = 9.8 meters per second squared ($m/s^2$)]. Strong ground shaking may also cause liquefaction and lateral spreading of saturated, loose soil and may trigger landslides. These earth movements can result of liquefaction and landslides which can in turn damage pipelines and associated facilities.*

*Empirical correlations developed by the University of Washington (2001) of potential damage related to PGAs indicate the following hazard categories to surface structures based on PGA values:*

- *Low Damage Hazard: PGA less than 0.18 g (i.e. 18% g)*
- *Moderate Damage Hazard: PGA between 0.18 and 0.34 g*
- *High Damage Hazard: PGA greater than 0.34 g*

*It is important to note that these PGA values were developed for engineered surface structures, and would be considered extremely conservative for modern buried pipelines. Therefore, damage to modern steel pipelines is much less likely to occur than damage to aboveground structures. This is the typical outcome after significant earthquakes, including the 1925 earthquake, where aboveground assets and brittle subsurface assets (e.g. sewer lines) were significantly damaged but buried steel pipelines were not.*

In spite of identifying a suite of mechanisms by which strong ground-shaking could affect project infrastructure, as well as several general damage thresholds, the Seismic Risk Evaluation provides little analysis addressing the ground-shaking intensities that could occur in the project area, or whether Platform Gilda and its wells and pipelines are designed (and have been maintained) to withstand the ground shaking that could occur. The summary assessment that is provided in fact suggests a significant hazard, and, importantly, that Platform Gilda was likely designed to accommodate a level of ground-shaking (PGA of 0.10 g – 0.25 g) that, as discussed below, is much lower than is expected to occur during a major earthquake in the immediate project vicinity:

*The resulting threat-specific risk of seismic damage to the subject pipelines and facilities in the Santa Barbara Channel area is as follows:*

- *Ground Shaking: High in the asset area due to the magnitude of historic earthquakes and the moderate to high PGA values in the area. Most modern ductile steel pipelines perform well under expected ground shaking conditions, but high ground shaking conditions are possible. Original platforms in the Santa Barbara Channel were generally designed using a Peak Ground Acceleration (PGA) in the range of 0.10 g to 0.25 g. These structures were built to the standards of the American Petroleum Institute (API RP 2A), which historically categorized offshore California as a high-seismicity zone (Zone 4). In addition, significant ground shaking is associated with the development of geotechnical threats such as liquefaction, lateral spreading, and landslides that are a real and significant threat to above ground assets in applicable impact areas.*

The description of Platform Gilda's ground shaking design basis is supported by an undated engineering analysis for Platform Gilda[82] provided by DCOR, which describes a seismic strength level loading analysis using a ground acceleration design spectrum with a PGA of 0.25 g. The historical American Petroleum Institute (API) design standards referenced in the report used a "strength level earthquake" with a 200-year recurrence interval (22% in 50-year probability of exceedance) and were intended to ensure that an offshore platform can withstand moderate earthquakes without significant structural damage. As discussed below, this design-level ground shaking intensity is significantly lower than modern standards for critical or high risk facilities, and well below the ground shaking that could foreseeably occur at the project location.

In the absence of an adequate seismic ground shaking hazard analysis or complete information about the design basis of the key project structures, Commission staff has estimated the ground shaking hazard at the project location using the USGS Dynamic Hazard Curves tool.[83] This web application, drawing on the USGS fault motion database (updated through 2023), allows users to compute location-specific probabilistic seismic hazard curves and estimate the likelihood of various ground-shaking intensities over a specific time horizon. Staff generated ground-shaking estimates for earthquake events at different probability levels (recurrence intervals) corresponding to other commonly-used seismic design standards, allowing for a comparison between these more conservative standards and the design basis for Platform Gilda (**Table 1**, below). The earthquake probability levels considered are used in building codes and the structural design standards of the American Society of Civil Engineers (ASCE) and National Fire Protection Association (NFPA), and are commonly used in determining the design bases for critical or high risk structures or facilities, including those with high fire risk and/or containing or storing large quantities of hazardous materials.

**Table 1: Projected Seismic Ground Shaking Intensity at Platform Gilda for Various Recurrence-Interval Events (USGS Dynamic Hazard Curve Tool)**

| **Recurrence Interval** (probability of exceedance) | **Design Standard** | **Horizontal Peak Ground Acceleration (PGA)** |
|---|---|---|
| 2,475-year (2% in 50 yrs) | ASCE 7/IBC "maximum considered earthquake" for Critical Facilities (Risk Category IV) | **0.93 g** |
| 975-year (5% in 50 years) | ASCE 41-13, Risk Category III (high-occupancy structures, public utilities, storage of hazardous materials) | **0.64 g** |
| 475-year (10% in 50 years) | NFPA Operating Basis Earthquake (high-risk facilities) | **0.45 g** |
| 200-year (22% in 50 years) | Platform Gilda Design Basis | **0.25 g** |

[82] Santa Fe Engineering Services Company, "Method of Analysis & Summary of Results for Platform Gilda, OCS P-216, Santa Barbara Channel, California", report to Union Oil Company of California, undated.
[83] U.S. Geological Survey Earthquake Hazard Toolbox, Dynamic Hazard Curves, Coterminous U.S. 2023 model, Rev. 2. https://earthquake.usgs.gov/ws/nshmp/conus-2023.R2/dynamic

| | | |
|---|---|---|
| | (Sources: 2024 Pipeline Risk Assessment, Platform Engineering Analysis) | |

The USGS tool's disaggregation function indicates that the primary faults contributing to the very significant ground shaking hazard at these probability levels are the Oak Ridge and Channel Islands Faults, located just two miles and seven miles from the platform, respectively.

Based on this analysis, Platform Gilda appears to have been designed to withstand significantly less ground shaking than could occur at the project location during a large earthquake event, and less than would be required for other critical or high risk facilities under applicable design standards. Given the relatively high likelihood of occurrence of Platform Gilda's "design basis event" (2.5% probability of exceedance in the 5-year period of proposed active fracking operations), and the severe environmental and socioeconomic consequences that would result from even a moderate oil spill from the platform or the export pipeline (see Sections IV.C, D, E and G), BOEM has not demonstrated that the project's continued and intensified use of the existing platform would minimize hazards and assure stability and structural integrity consistent with Section 30253. Moreover, the Commission has no information about the design basis of the export pipelines or wells proposed for stimulation with which to assess their vulnerability to seismic ground shaking. Additionally, the proposed project's intended purpose of extending oil and gas production at Platform Gilda would extend the operational life of the project infrastructure and increase the probability of exposure to a damaging earthquake. Given the very high ground motions that could occur at the wellbore locations and along the pipeline routes, and the age of this infrastructure, BOEM has not demonstrated that the proposed project is consistent with Section 30253(a) and (b) of the CCMP with respect to seismic ground shaking.

**Coastal Hazards**

Like most of the Southern California coastline, the project area is subject to significant hazards from coastal storms, high waves, flooding, coastal erosion and tsunamis. Platform Gilda itself, with a drill deck elevation of 75 feet above mean lower low water (MLLW), is expected to be safe from wave overtopping, but its superstructure is subject to intense forces from high waves during storms. The platform engineering analysis provided by DCOR indicates that the platform was designed to withstand wave forces during a 100-year storm event (1% annual chance of exceedance); no updated assessment using modern storm and wave height frequencies and intensities over the last 45 years and accounting for the current condition of the platform structure was provided. Likewise, no analysis of the export pipelines' exposure to waves and coastal erosion at the onshoring location in Oxnard was provided.

DCOR's 2024 Pipeline Risk Evaluation contains a brief overview of tsunami hazards in relation to DCOR's pipeline network and the following conclusion:

> *Tsunamis: The potential for tsunami impacts to the Santa Barbara Channel pipeline system is largely limited to those aboveground assets located in close proximity and at low elevations around the coast. DCOR's MOSF facility is located*

> *near the coast and lies within the mapped hazard zones for coastal flooding and tsunamis. Tsunami risk depends on many factors such as the location, depth, and strength of a triggering earthquake; distance from the earthquake in a water body; water body's size and depth; and topography and elevation of the area. Though the threat cannot be ruled out, no documented earthquakes have generated tsunamis in the Santa Barbara Channel that impacted hard assets or would have impacted the MOSF facility.*

The analysis provided does not consider the potential for damage from far-field tsunami events originating outside the local area or high magnitude, long recurrence interval events far larger than any in the observed historical record. Nor does the analysis explore the implications of a major tsunami for either the export pipelines or the Mandalay Onshore Facility within coastal flooding and hazard zones. Recent probabilistic tsunami hazard projections from the California Geological Survey for the Mandalay area in which the Platform Gilda oil and gas pipelines come ashore indicate that an evacuation-scale event (slightly modified from the modeled 975-year recurrence interval event) could cause wave runup to approximately +35 feet above sea level and extend approximately 2,000 feet inland of the shoreline.[84] An event of this magnitude would have significant flow depths and velocities, cause substantial coastal erosion, and exert powerful forces on any structures in its path. Absent any analysis of coastal hazards in relation to the infrastructure integral to the project, including the export pipelines and the Mandalay onshore processing facility, BOEM has not demonstrated that the proposed project is consistent with Section 30253(a) and (b) of the CCMP with respect to coastal flooding, erosion and tsunamis.

**Fire and Explosion Hazards**

The proposed project involves increasing the production, processing and handling of crude oil and natural gas on an offshore platform that also uses and stores quantities of numerous other flammable or explosive materials. As such, Platform Gilda, like most other oil and gas facilities, can be considered an area of elevated fire and explosion hazard. This was demonstrated recently through the uncontrolled release of natural gas at DCOR's Platform Habitat and the resulting fire at that facility that required the evacuation of 26 workers.[85] Despite this, neither the BOEM EIS nor its consistency determination and supporting information provided any analysis of fire and explosion hazards in relation to the proposed project. Only a brief discussion of these hazards was provided in DCOR's July 9, 2026, response to Commission staff's request for information:

> *There is low fire or explosion hazard associated with the proposed high pressure frac pack pumping operations for the following reasons:*

[84] State of California, 2021. Tsunami Hazard Area Map, Ventura County; produced by the California Geological Survey and the California Governor's Office of Emergency Services. https://www.conservation.ca.gov/cgs/tsunami/maps

[85] U.S. Coast Guard News press release, May 11, 2026, https://www.news.uscg.mil/Press-Releases/Article/4483988/coast-guard-partners-respond-to-fire-on-non-operational-natural-gas-platform/

*a. The stimulation fluid being pumped at high pressure consists of non-flammable water and proppant.*

*b. The stimulation fluid is pumped by diesel powered IC engines located in a nonhazardous area classification.*

*c. The IC engines used for pumping high pressure stimulation fluid contain standard safety features to prevent run away or continued operations in event of fire. This includes some combination of air shutdown valves, overspeed governors, fuel shutoff valves, gas detection interlocks, temperature monitoring and manual emergency stops.*

*d. The platform and drill deck contain numerous gas detection devices and fire eyes that alarm in the event of explosive gases or flames being detected. If these platform wide alarms are triggered then this leads to a facility wide emergency shutdown and a cessation of stimulation pumping.*

While this cursory assessment provides some indication that the proposed project would include measures to reduce the risk of fires and explosions, without a more detailed analysis of the existing hazard at the platform (including plausible pathways and worst-case scenarios), how the proposed project would contribute to the cumulative risk, and the efficacy of the available prevention and response equipment, procedures and capabilities, it is impossible to determine if these hazards would be minimized.

Data collected by BSEE indicate that fires have been the most commonly reported incident at OCS oil and gas facilities since 2007, with a total of 2,244 fires over the 19-year record.[86] Explosions, though far less common (46 reported incidents), can trigger fires and spills and are a leading cause of oil and gas worker deaths. BSEE data and other studies indicate that major incidents involving fire have involved a wide variety of equipment and causes, including flammable gas and leaks from different equipment types (e.g., tanks, pressure vessels, pumps and compressors, pipework, flanges and valves), mud circulation system and blowout preventer failures, and faulty well cementing.[87,88] The root causes of these equipment failures may include corrosion, material fatigue or failure, pressure, temperature or structural overloads, fabrication and installation errors, human error, ship collisions and natural hazards such as earthquakes, extreme weather and tsunami.[89] The proposed project shares or is exposed to some of these causative factors, including the operation of high-horsepower diesel pumps and stimulation equipment on the platform deck in proximity to gas-handling equipment, and can be expected to increase natural gas production in parallel with the projected four-fold increase in oil production. The Commission is not aware of

[86] Bureau of Safety and Environmental Enforcement (BSEE) Offshore Incident Statistics, https://www.bsee.gov/stats-facts/offshore-incident-statistics.
[87] Brkic, D. Fire Hazards Caused by Equipment Used in Offshore Oil and Gas Operations: Prescriptive vs. Goal-Oriented Legislation. Fire 2025, 8, 29. https://doi.org/10.3390/fire 8010029
[88] Brkic, D.; Praks, P. Probability Analysis and Prevention of Offshore Oil and Gas Accidents: Fire as a Cause and a Consequence. Fire 2021, 4, 71. https://doi.org/ 10.3390/fire4040071
[89] Id.

previous fire or explosion incidents at Platform Gilda but notes the recent fire incident on DCOR's Platform Habitat offshore of Summerland in May 2026.

On its face, the project would appear to contribute to, or at least modify, the fire and explosion hazard at Platform Gilda, but the available information is insufficient for the Commission to determine if this contribution is significant, or if the available prevention and response capacity is adequate to contain potential fires and explosions and avoid potential adverse effects, such as loss of life and environmental harm (e.g., spills). Thus, BOEM has not demonstrated that the proposed project would minimize hazards to with respect to fire, as required by Section 30253(a).

**Conclusion**

As discussed above, the proposed project, including the aged existing infrastructure integral to the proposed hydraulic fracking program, is exposed to significant geologic and coastal hazards, and is likely to contribute to existing fire and explosion hazards on the platform. While the information and analysis provided by BOEM and DCOR demonstrates that the project is unlikely to trigger or exacerbate hazards associated with subsurface fluid migration and induced seismicity, it is not sufficient to demonstrate that the project's reliance on and intensified use of aged existing infrastructure – including the platform, export pipelines and onshore processing facility – would minimize hazards from seismic ground shaking, coastal storms and erosion, tsunamis and fire, and thus assure stability and structural integrity over the life of the project. The Commission therefore finds the project inconsistent with Sections 30253(a) and (b) of the CCMP.

## G. Public Access and Recreation

Section 30210 of the Coastal Act states:

> In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30213 of the Coastal Act states (in relevant part):

> Lower cost visitor and recreational facilities shall be protected…

Section 30220 of the Coastal Act states:

> Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Sections 30210, 30213, and 30220 together establish the CCMP's protection for public access to, and recreational use of, the shoreline. Section 30210 requires that maximum access and recreational opportunities be provided for all the people, consistent with

public safety and resource protection. Section 30213 requires the protection of lower cost visitor and recreational facilities, such as public beaches and campgrounds. Section 30220 requires that coastal areas suited for water-oriented recreational activities be protected for those uses. These provisions protect the public's ability to reach and use the region's beaches, state parks, harbors, and nearshore waters for swimming, surfing, diving, boating, fishing, whale watching, and coastal recreation generally, including public access to Channel Islands National Park.

These obligations are not met simply by avoiding physical construction on the seafloor, in the water, or on the beach that would have the effect of preventing or inhibiting public access. The proposed hydraulic fracturing program does not add any onshore or beachfront structures and does not itself occupy any public access corridor. Rather, the primary threat posed by the project to public access and recreation is the increased and extended risk of oil spills, as discussed in Section IV. C of this report (Coastal Act Section 30232).

As detailed in the Oil Spill Response Plan (OSRP) and discussed in Section IV.C (above), DCOR's spill trajectory modeling of a worst case discharge projects that a spill could result in the oiling of 134 miles of coastline. Depending on the season of the year and weather conditions at the time of a spill, in conjunction with spill response times and the effectiveness of countermeasures, it is possible that oil released from the platform or its pipeline could affect public access and recreational use of the coast from the Gaviota region in Santa Barbara County to the Palos Verdes Peninsula in southern Los Angeles County.

**Coastal Access and Recreational Resources of the Santa Barbara Channel Area**

The mainland coast of Santa Barbara Channel and the Channel Islands offer hundreds of public coastal access points and a wide variety of recreational resources and activities that would be adversely affected by an oil spill. The Santa Barbara, Ventura and Los Angeles County coasts support over a hundred miles of sandy beach and provide numerous coastal recreational opportunities, including swimming, parasailing, surfing, bodyboarding, sailing, canoeing and kayaking, diving, recreational fishing, spear fishing, wildlife viewing from shore or boats, and photography. Sunning and beach strolling are equally popular. Numerous State and local beaches, parks and harbors provide varied recreational facilities, such as marinas, campgrounds, volleyball nets and tennis courts, and beach restaurants.

There are also a multitude of opportunities for recreational boating including the boat launch at Goleta Beach Park, Santa Barbara Harbor, Ventura Harbor, Channel Islands Harbor, Marina Del Rey and Redondo Beach.

The Channel Islands National Park (Park) and the Channel Islands National Marine Sanctuary consist of five islands (Santa Cruz, Santa Rosa, San Miguel, Anacapa, and Santa Barbara) and their associated marine environments. Visitors to the islands can swim, snorkel, hike, camp, watch wildlife, kayak, sail and explore tidepools, beaches,

and rugged canyons[90]. In 2024, the Park hosted over 263,000 visitors which added approximately $25 million to local economies[91].

Collectively, these areas support a dense concentration of public beaches, state parks, harbors, visitor serving amenities, and coastal access points that draw local residents and visitors from throughout Southern California, the United States and the world. This concentration of public access points and recreational resources is precisely what Sections 30210, 30213, and 30220 protect, and which are threatened by a project-related oil spill.

**Adverse Impacts to Public Access and Recreation from a Spill**

An oil spill from the platform, its wells and/or its seafloor oil pipeline could result in immediate and prolonged closures of public beaches, parks, campgrounds and nearshore waters to protect public health and accommodate response and cleanup operations. This would immediately restrict the public access and recreational opportunities that Sections 30210, 30213, and 30220 require be protected. The record of comparable California spills described below demonstrates that such closures are a likely consequence of a spill reaching the shore.

The 2015 Refugio Beach spill closed Refugio State Beach and El Capitán State Beach immediately upon the spill's discovery. El Capitán State Beach, the more lightly oiled of the two, remained closed for approximately five weeks before reopening on June 26, 2015. Refugio State Beach, more heavily oiled and serving as the operations hub for cleanup activities, remained closed for approximately nine weeks, until July 17, 2015. Both parks' campgrounds and day-use areas were closed for the duration of cleanup activities, displacing the regular Memorial Day and early-summer visitor traffic the parks otherwise host. Access to the various small pocket beaches along the Gaviota Coast was restricted through August 28, 2015 (Refugio Beach Oil Spill Trustees. 2021). While there were no mandatory closures of the beaches along the sections of Santa Barbara and Ventura County coastline to the south, spill-related oiling and advisories significantly reduced visitation and recreation at these locations in the weeks and months following the spill. In Los Angeles County, dozens of miles downcoast of the spill, two separate beach closures were required after an unusual amount of tar balls washed up in southern Santa Monica Bay from May 27, 2015, through May 29, 2015, and in Long Beach from June 3, 2015, through June 5, 2015. These events triggered cleanup operations and closures of the beach within the areas between lifeguard towers and the shoreline (Refugio Beach Oil Spill Trustees. 2021).

As a result of the spill, popular campgrounds at Refugio State Beach, El Capitan State Beach, and Gaviota State Parks were either closed or saw reductions in use. The Refugio Beach Oil Spill Trustees (Trustees) calculated that a total of 49,188 camping nights were lost across all three sites. The Trustees further estimated that a total of 89,380 shoreline recreation user days were lost across Santa Barbara and Ventura

[90] https://npshistory.com/publications/chis/index.htm
[91] https://www.nps.gov/chis/learn/news/2025-09-25-visitor-spending.htm

Counties as a result of the spill, while in Los Angeles County the spill and associated closures resulted in a total of almost $600,000 of lost recreation value. Businesses that provide boat transport for recreational users and transport to Channel Islands National Park reported a loss of 2,379 client trips. However, these data on boating do not include trips from non-motorized boats such as personal canoes, kayaks and stand-up paddle boards, and thus likely underestimate the impact to recreational boating. The Trustees' final settlement with the pipeline operator included $3.9 million specifically allocated to restore recreational opportunities lost because of the spill.

The October 2021 Huntington Beach spill produced a similar, though shorter, public access closure. Oil reached the shore within approximately one day of the spill event, and beach and water closures extended along approximately six miles of Orange County coastline from the Santa Ana River jetty to the Huntington Beach Pier, encompassing Huntington State Beach and Huntington City Beach. Precautionary closures extended further to Bolsa Chica State Beach, Newport Beach, and Laguna Beach's city and county beaches. City and state beaches in Huntington Beach did not reopen until October 11, 2021, approximately nine days after the spill, after water-quality testing confirmed non-detectable levels of oil-associated toxins. The spill forced cancellation of visitor-serving events during the closure period, and health officials warned the public against swimming, surfing, and other water contact for the duration. Although the Huntington Beach public access closure was shorter in duration than Refugio's, it occurred on a densely visited stretch of urban coastline, illustrating that the recreational and public access consequences of a spill depend in part on the character of the affected shoreline and not solely on the volume of oil released or the length of the closure.

As discussed in prior sections of this report, the proposed hydraulic fracturing program is expected to roughly quadruple oil production from Platform Gilda above the current level, and extend its use and that of its associated infrastructure and pipeline. The project EIS projects that Platform Gilda will produce approximately 14 million barrels of oil over the next 20 years as a result of the project and states that without it, production would continue to decline and eventually cease. In combination, the intensification and extension of oil production at the platform would increase the risk of a major spill that cannot be effectively contained or remediated, and thus the potential for adverse effects to coastal access and recreation, including extended closures of the many beaches, parks, coastal access points in the region.

**Conclusion**

The public access and recreation policies of the CCMP require that maximum access and recreational opportunities be provided and protected. The project would be inconsistent with this standard because it would introduce a threat and risk to these resources in the form of a potential oil spill that would generate closures and lost recreational opportunities, resulting in adverse effects on access and recreation. The documented experience of the 2015 Refugio Beach spill and the October 2021 Huntington Beach spill demonstrates that a spill would foreseeably result in closures for sections of coastline from Gaviota to Palos Verdes to public access and recreational

use for a period of days to weeks, with direct consequences to beachgoers, campers, boaters, and the broader coastal recreation and tourism economy.

For these reasons, the Commission finds that the proposed hydraulic fracturing program at Platform Gilda is inconsistent with Sections 30210, 30213, and 30220 of the CCMP.

## H. Cultural Resources

Section 30244 of the Coastal Act states:

> Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Section 30244 requires reasonable mitigation for a proposed development would adversely impact archaeological or paleontological resources.

BOEM's consistency determination states that no shipwrecks or cultural resources are known to occur beneath Platform Gilda, and that program activities are not anticipated to result in any impacts to archaeological or paleontological resources because the proposed fracking operations would not involve any physical changes to the marine environment. BOEM states that all fracking activities would occur from Platform Gilda, with no anchoring, trenching, or seabed contact required for construction, and no direct or indirect seafloor disturbance expected. BOEM's consistency determination concludes that the proposed project is consistent with Section 30244 because Platform Gilda is not located in an area containing known cultural or archaeological resources and does not involve activities that would disturb the sea floor.

The absence of direct ground disturbance does not eliminate every pathway by which this project could affect cultural resources. The Santa Barbara Channel coast and Channel Islands are within the traditional territory of the Chumash people. The 2015 Refugio beach spill discussed in Section IV.C above, demonstrates that an oil spill reaching the shoreline can affect a broad range of coastal and nearshore resources over a sustained period. The[92] [93] These resource sites included archeological deposits and artifacts exposed at the shoreline and in the intertidal zone, and thus potentially at risk of oiling. At the time, some tribal representatives expressed concern that cultural resource values associated with intertidal artifacts observed in the response envelope could be damaged by oiling or disturbance during response activities.

[93] NOAA, U.S. Fish and Wildlife Service, Cal. Dep't of Fish and Wildlife, Cal. Dep't of Parks and Recreation, Cal. State Lands Comm'n, and the Regents of the Univ. of Cal., Refugio Beach Oil Spill Final Damage Assessment and Restoration Plan/Environmental Assessment (June 2021).

Although the Refugio spill damage assessment report concluded that in that case neither the oil spill nor clean-up activities resulted in significant adverse impacts to archeological resources, the potential for adverse impacts stemming from the proposed project exists, for the reasons discussed at length in the prior coastal resource findings above. The proposed project would prolong and intensify oil production and the use of aging infrastructure, extending and increasing the risk of a major oil spill that would not be effectively contained or remediated. As such, the proposed development would increase the potential for adverse impacts to the rich and irreplaceable archaeological and paleontological resources present along the shorelines of the mainland coast and Channel Islands. Despite this, neither DCOR's consistency certification nor the BOEM consistency determination included or proposed measures specifically focused on avoiding, minimizing or mitigating adverse impacts to these resources. However, the proposed measures discussed in previous sections of this report focused on avoiding oil spills and minimizing their negative effects would indirectly benefit acheological and paleontological resources.

The Commission has often heard that its consideration of and protection of indigenous cultural resources should not be limited in focus to archeological sites and artifacts. Many Native American Tribes consider the natural environment and its various components and attributes (wildlife, plants and habitats as well as wind, water and earth) to be vital cultural resources as well. While such resources and values do not fit squarely within the scope of Section 30244, they are considered and protected by other sections of the CCMP discussed previously in this report, including Sections 30230, 30231, and 30234.5. In addition, implementation of the Commission Tribal Consultation Policy provides a further opportunity for Tribal input and guidance on the protection of these resources to be provided to the Commission.

Federal agencies also carry out Tribal consultation. As part of the NEPA process, BOEM invited the Santa Ynez Band of Chumash Indians to participate in government-to-government consultation by letter emailed February 26, 2026, and separately invited the Santa Ynez Band of Chumash Indians to participate as a Cooperating Agency on the EIS by e-mail sent March 17th, 2026.

Consistent with the Commission's Tribal Consultation policy, Commission staff received a list of Tribes with potential cultural connections to the project area from the Native American Heritage Commission and completed outreach to those Tribes. Consultation invitations were mailed on June 16, 2026, to the Barbareño/Ventureño Band of Mission Indians, the Coastal Band of the Chumash Nation, the Northern Chumash Tribal Council, and the Santa Ynez Band of Chumash Indians. Consultation with the Northern Chumash Tribal Council occurred on July 28, 2026. During the consultation, the Tribal Chair expressed opposition to the proposed project and expressed concern that continued operation of the aging offshore infrastructure would increase the risk of a hazardous material spill, with potentially significant consequences for marine life, coastal resources, and Tribal cultural values associated with the marine environment.

Based on these considerations, the Commission finds that while the proposed project is consistent with the cultural and archaeological resources policy of the California Coastal Management Program (Section 30244 of the Coastal Act), it remains inconsistent with the CCMP's natural resource protection policies, as discussed in prior sections of this report.

# V. SUBSTANTIVE FILE DOCUMENTS

1. California Coastal Commission, Consistency Certification No. CC-6-80.

2. DCOR, LLC, Consistency Certification CC-0001-26, entitled “Coastal Zone Management Act Consistency Analysis & Findings,” Padre Associates for DCOR (March 2026), submitted April 1, 2026 [original version submitted Feb. 26, 2026].

3. Platform Gilda Well Stimulation Program Update to Development and Production Plan and Environmental Report, Padre Associates, Jan. 2026.

4. BOEM, Final Environmental Impact Statement, Docket No. BOEM-2025-0714 (April 17, 2026).

5. Department of the Interior’s Alternative Arrangements for NEPA Compliance During a National Energy Emergency, developed pursuant to Executive Order 14156.

6. National Marine Fisheries Service, Biological and Conference Opinion, No. 2023-02183 (February 27, 2024)

7. USFWS, Biological Opinion, No. 2025-0129931-S7-001 (August 29, 2025)

8. California Coastal Commission, Coastal Development Permit No. 9-22-0219 (DCOR Pipeline 0919 repair clamps)

9. California Coastal Commission, Oil Spill Prevention and Response Guidance Document for Oil and Gas Project Applications (July 2013).

10. Refugio Beach Oil Spill Final Damage Assessment and Restoration Plan/Environmental Assessment. Refugio Beach Oil Spill Trustees (June 2021).

11. Cal. Governor’s Office of Emergency Services, 2015 Refugio Oil Spill After Action/Corrective Action Report (Nov. 2019).

12. Office of Environmental Health Hazard Assessment, Oil Spill Sampling and Analysis Guidance for Fisheries Closures.

13. California Department of Fish and Wildlife, Fisheries Closure Notices, Southern California (Huntington Beach) Oil Spill (Oct. - Nov. 2021).

14. California State Senate Natural Resources and Water Committee, Oversight hearing on the 2021 Huntington Beach Oil Spill (P00547) (Oct. 28, 2021).

15. California Department of Fish and Wildlife, Office of Spill Prevention and Response (OSPR), Pipeline P00547 Incident After Action Report (2022).

16. California Office of Spill Prevention and Response on Best Achievable Technology – Mechanical Response, submitted to the California Legislature (Jan. 2017).

18. NPDES General Permit No. CAG280000; most recently concurred with by the Commission under consistency determination No. CD-001-13.

19. Dames and Moore, Environmental Impact Report-Environmental Assessment for the Platform Gina and Gilda Development (1980), as cited in BOEM/BSEE 2025 Biological Assessment for Southern California Planning Area Oil and Gas Activities.

20. Robertson TL, DeCola E, Pearson L. 2010. Alaska North Slope spills analysis: Final report on North Slope Spills analysis and expert panel recommendations on mitigation measures. Report to Alaska Department of Environmental Conservation.

21. Garber, J.D., Alvarado, A., & Winters, R.H., “Study Tracks Internal-Corrosion Trends in Aging Gulf Pipelines,” Oil & Gas Journal (Mar. 27, 2000).

22. Torch/Platform Irene Oil Spill, Final Restoration Plan and Environmental Assessment, Torch/Platform Irene Trustee Council: United States Fish and Wildlife Service California Department of Fish and Game United States Department of Air Force, Vandenberg Air Force Base California State Lands Commission with assistance from Santa Barbara County Planning and Development Department, October 24, 2007.

23. U.S. Coast Guard National Response Center (NRC) Report No. 1462089, https://nrc.uscg.mil/.

24. U.S. Coast Guard News press release, May 11, 2026, https://www.news.uscg.mil/Press-Releases/Article/4483988/coast-guard-partners-respond-to-fire-on-non-operational-natural-gas-platform/.

25. Cal. Governor’s Office of Emergency Services, Warning Center Control No. 21-7170.