UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

June 23, 2020 Refer to NMFS No: WCRO-2019-03765

Richard Yarde
Regional Supervisor, Office of Environment
BOEM, DOI Regions 8, 9, 10, 12
760 Paseo Camarillo, Suite 102
Camarillo, California 93010

Re: Endangered Species Act Section 7(a)(2) Concurrence for the Point Arguello Field Platforms Well Conductor Casing Removal Project

Dear Mr. Yarde:

On the 17th of December, 2019, NOAA's National Marine Fisheries Service (NMFS) received your request for a written concurrence that the approval of an Application for Permit to Modify (APM) by the Bureau of Ocean Energy Management (BOEM) is not likely to adversely affect (NLAA) species listed as threatened or endangered or critical habitats designated under the Endangered Species Act (ESA). This response to your request was prepared by NMFS pursuant to section 7(a)(2) of the ESA, implementing regulations at 50 CFR 402, and agency guidance for preparation of letters of concurrence. This letter supersedes the letter sent on June 15th 2020 due to the need to make a technical correction to the inspection time window.

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). A complete record of this consultation is on file at Long Beach Office

Proposed Action and Action Area
The applicant (Freport-McMoRan Oil & Gas) is removing 62 24-inch in diameter Well Conductor Casings from three off-shore oil platforms known as The Point Arguello Unit located on the outer continental shelf of the Santa Barbara Channel (Figure 1). Support vessels for the action will come from Port Hueneme. The cut conductor casings are going back to shore via barge to the Port of Long Beach. Fourteen conductors have been identified for removal from the Hidalgo Platform at 430ft deep, 19 conductors from the Harvest Platform at 675ft deep, and 29 conductors from the Hermosa Platform at 603ft deep.

The proposed action will occur in two phases over a period of approximately 6 months. The first phase will use a precision high pressure water and garnet abrasive grain stream to cut through the conductors. This initial cut will be performed 15ft below the mudline. It will take approximately 15 hours to get the equipment in place however, the actual cutting during this initial phase will take up to approximately 1.5 hours. Phase two will involve pulling the conductor pipe onto the platform using a well extraction tower and cutting the pipe out of the water into 45ft sections

with either a diamond wire or guillotine saw. The 45ft sections of pipe will be brought to Long Beach, 60 round trips total for all three platforms.

These activities are set to occur in an action area that includes the Point Arguello facilities on the outer continental shelf of the Santa Barbara Channel as well as support vessels coming from Port Hueneme and the route to the Port of Long Beach from the Point Arguello Facilities for the cut pipe sections.

In order to mitigate the potential impact to listed species from acoustic impacts BOEM submitted the following monitoring plan.

1. Specific crewmembers will be assigned to conduct visual clearance for ESA-listed whales (blue, fin, sei or humpback whales).
2. These crewmembers will:
    a. be trained with the Wildlife and Fisheries Training video generated by Pacific Offshore Operators, LLC.
    b. have visual acuity in both eyes (correction is permissible) sufficient to discern moving targets at the water's surface with ability to estimate target size and distance. Use of binoculars or spotting scope may be necessary.
    c. the ability to communicate orally, by radio or in person, with project personnel to provide real time information on marine mammals observed in the area, as needed.
    d. complete the form provided, as detailed as possible, describing conditions prior to, and after, the initial cut for each conductor, including any sighting event, during periods of visual clearance/inspection.
3. Visual clearance includes:
    a. 30-minute inspection of a 200 m clearance zone, made from the cutting site on the platform, seaward, to ensure no ESA-listed whales are within the clearance zone before initial cutting starts.
    b. 30-minute inspection of a 200 m clearance zone, after initial cutting has been completed, made from the cutting site on the platform, in a seaward arc, to detect if any ESA-listed whales were exposed to cutting activities.
4. Clarification of various possible scenarios:
    a. If the 200 m zone is clear of ESA-listed whales for 30 minutes but initial cutting is delayed, for any reason, another 30 minute visual inspection/clearance of the 200 m clearance zone must be done.
    b. If no ESA-listed whales are seen within the 200 m clearance zone, cutting can be started immediately, and continue until completion.
    c. If an ESA-listed whale is sighted within the 200 m clearance zone, cutting will be delayed until the whale has moved more than 200 m away from the cutting site, at which time cutting may commence.
    d. If an ESA-listed whale is seen subsequent to the start of cutting, the crewmember assigned to visual duties must note the occurrence using the form provided, but cutting may continue.
5. Reporting requirements:
    a. All forms will be submitted to the BSEE compliance officer within 30 days after completion of all conductor removal activities.

b. Any observations of injured or dead marine mammals, related or unrelated to the activities, will be immediately reported to NOAA's West Coast Region Stranding Hotline at 1-866-767-6114.
c. Any observations of entangled marine mammals will be reported to the Entanglement Reporting Hotline at 1-877-767-9425 and/or the USCG: VHF Ch. 16.

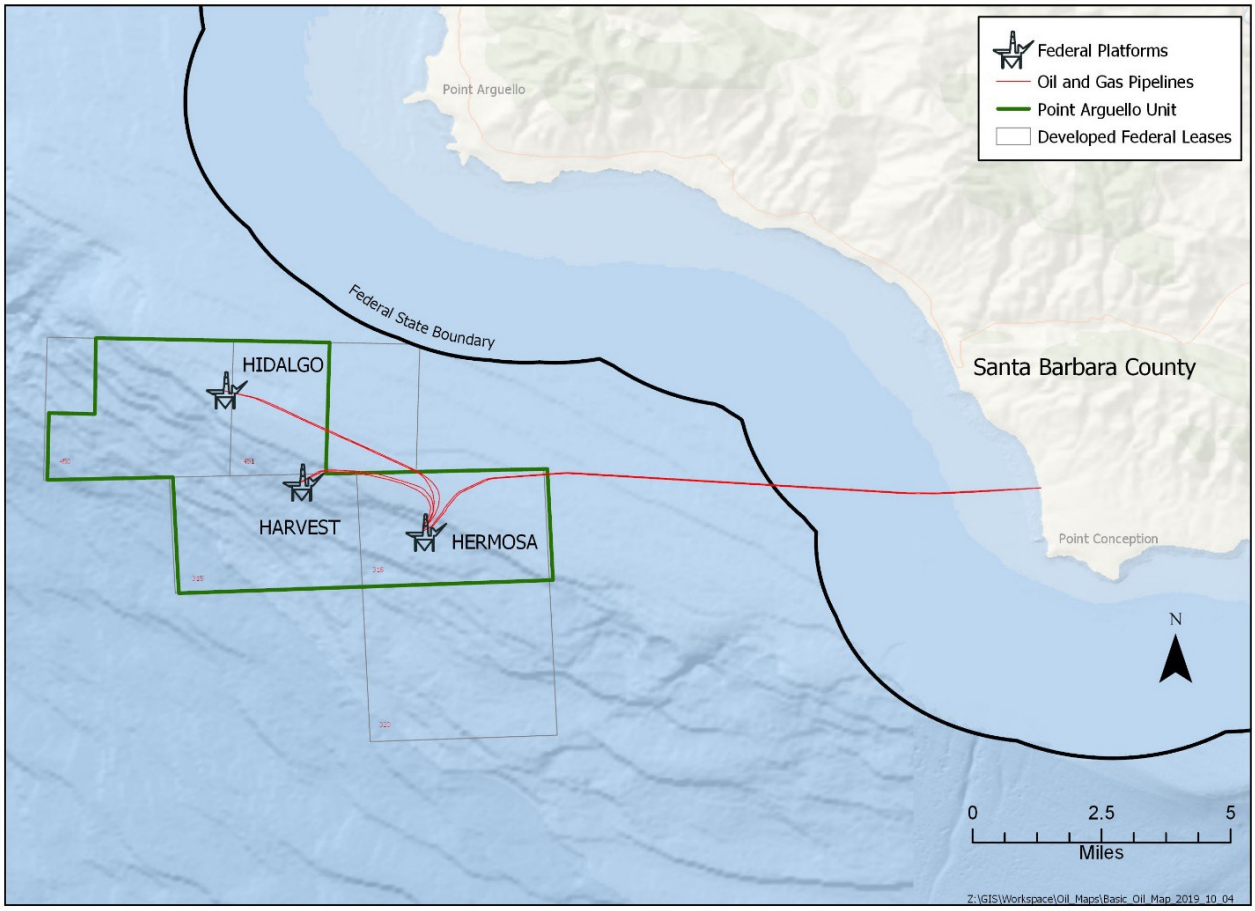

Figure 1. Location of Point Arguello Field wells

Action Agency's Effects Determination

BOEM has determined that noise and vessel strikes are the only potential impacting factors associated with the action and provided the following analysis

Noise impacts

The only sound source provided that has the potential to cause adverse effects to listed species for this project is a high pressure abrasive grain cutting tool that will be lowered inside the conductor pipe to cut it 15 feet below the mudline. This continuous sound source has a sound level in air of 92dBA re 20µPa. For in water acoustics a conversion factor of 26 dB [20×log(20/1)] plus an addition of 35.5 dB, to account for water density and sound speed in water, results in a point sound source of 154 dB re 1 µPa @1m. Given that the cutting will occur 15ft below the mudline there is an additional correction due to the attenuation of sound through the sediment. Studies of this attenuation for explosive removal techniques, which have a similar

frequency content (Dzwilewski, et al., 2003; Argo and Dzwilewski, 2019), show that the coupling efficiency of about 44% is expected for 24 inch diameter pipes. This is equivalent to an approximately -7 dB and results in a point sound source of (154-7, or) 147 dB re 1 µPa @1m. Assuming spherical spreading the sound should reduce to 120 dB, the current threshold for level B harassment of marine mammals, at 22.3 meters[1]. Given that this point source will be approximately 5 m below the mudline the isopleth will only extend 17.3 m above the sea floor

Vessel strike
Vessel operations will follow the normal operating procedures already in place for platform support vessels. Vessels will be limited in speed to 10 knots and the crews have been trained with the Wildlife and Fisheries training video generated by Pacific Offshore Operators. Vessels will use the National Traffic Separation Scheme routes. BOEM concluded that using these routes and practicing standard avoidance procedures with the additional reduced spatial and temporal overlap of the species minimizes the potential impacts.

BOEM concluded that the potential impacting factors from the action may affect but are not likely to adversely affect (NLAA): blue whale (Balenoptera musculus), fin whales (B. physalua), humpback whale (Megaptera novaeangliae), sei whale (B. botealis), sperm whale (Physeter microcephalus), Guadalupe fur seals (Arctocephalus townsendi). Additionally for the following species BOEM determined that there is little temporal and spatial overlap of the project action area with these species and therefore the actions are NLAA for leatherback sea turtles (Dermochelys coriacea, loggerhead sea turtle (Caretta caretta), scalloped hammerhed shark (Sphyrna lewini), steelhead trout (Oncorhynchus mykiss), and green sturgeon (Acipenser medirostris) BOEM determined no effect to any associated designated critical habitat.

The following are listed species that BOEM has made a determination of NLAA for the associated activities.

Common name	***Scientific Name***	***Potential Impacting Factors***	***ESA listing***	***Critical Habitat determination***	***Citation(s) for listing determinations***
Blue whale	*Balaenoptera musculus*	*Vessel strike and sound*	*Endangered*	*N/A*	*35 FR 18319; December 2, 1970*
Fin whale	*Balaenoptera physalus*	*Vessel strike and sound*	*Endangered*	*N/A*	*35 FR 8491; June 2, 1970*
Humpback whale - Central America distinct population segment (DPS)	*Megaptera novaeangliae*	*Vessel strike and sound*	*Endangered*	*N/A*	*81 FR 62260; September 8, 2016*

[1] Under the Marine Mammal Protection Act level B acoustic thresholds are used to determine when behavioral disturbance of a marine mammal has occurred. In the ESA context, these thresholds are informative as the thresholds at which we might expect either behavioral changes or physical injury to an animal to occur, but the actual anticipated effects would be the result of the specific circumstances of the action.

Humpback whale - Mexico DPS	*Megaptera novaeangliae*	*Vessel strike and sound*	*Threatened*	*N/A*	*81 FR 62260; September 8, 2016*
Sei whale	*Balaenoptera borealis*	*Vessel strike and sound*	*Endangered*	*N/A*	*35 FR 12024; December 2, 1970*
Sperm whale	*Physeter macrocephalus*	*Vessel strike and sound*	*Endangered*	*N/A*	*35 FR 18319; December 2, 1970*
Guadalupe fur seal	*Arctocephalus townsendi*	*Vessel strike and sound*	*Threatened*	*N/A*	*50 FR 51252; December 16, 1985*
Leatherback sea turtle	*Dermochelys coriacea*	*Vessel strike and sound*	*Endangered*	*No effect*	*35 FR 8491 June 2, 1970*
Loggerhead sea turtle	*Caretta caretta*	*Vessel strike and sound*	*Endangered*	*N/A*	*76 FR 58868 September 22, 2011*
Scalloped hammerhead shark	*Sphyrna lewini*	*Sound*	*Endangered*	*N/A*	*79 FR 38213;*
Steelhead trout - Southern California ESU	*Oncorhynchus mykiss*	*Sound*	*Endangered*	*No effect*	*71 FR43937 August 18, 1997*
Steelhead trout - South-Central California ESU	*Oncorhynchus mykiss*	*Sound*	*Threatened*	*No effect*	*62 FR 43937 August 18, 1997*
Green sturgeon	*Acipenser medirostris*	*Sound*	*Threatened*	*No effect*	*71 FR 17757 April 7, 2006*

Consultation History

An Essential Fish Habitat consultation was conducted between NMFS and BOEM and a response was sent from NMFS on 11/25/2019. NMFS received BOEM's request for ESA consultation on December 17th 2019. Additional information was requested through email in December and a response was received in early January. BOEM submitted a monitoring plan in March for the observation of ESA listed cetaceans. The original schedule was updated by BOEM via email on May 29th 2020 due to the adjusted timing due to the COVID-19 evacutations

ENDANGERED SPECIES ACT

Effects of the Action

Under the ESA, "effects of the action" are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action (50 CFR 402.02). In our analysis, which describes the effects of the proposed action, we considered 50 CFR 402.17(a) and (b). When evaluating whether the proposed action is not likely to adversely affect listed species or critical habitat, NMFS considers whether the effects are expected to be completely beneficial, insignificant, or discountable. Completely beneficial effects are contemporaneous positive effects without any adverse effects to the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Effects are considered discountable if they are extremely unlikely to occur.

This analysis considers vessels strikes and noise as possible effects of the proposed action.

Effects to Large Whales

Large whales that may be commonly found within the action area include blue whales, fin whales, and humpback whales. Both blue whales and fin whales are listed globally as endangered under the ESA, while both the endangered Central America distinct population segment (DPS) and the threatened Mexico DPS of humpbacks forage in the area, generally in the spring and summer before they migrate south to their breeding grounds.

The Eastern North Pacific Stock of blue whales ranges from the northern Gulf of Alaska to the eastern tropical Pacific (Carretta et al. 2016). Nine biologically important areas for blue whale feeding are identified off the California coast (Calambokidis et al. 2016). Most of this stock is believed to migrate south to spend the winter and spring in high productivity areas off Baja California, in the Gulf of California, and on the Costa Rica Dome. Therefore, we would anticipate that during the late spring, summer, and early fall, blue whales may be found within the action area. Blue whales occur primarily in offshore deep waters (but sometimes near shore, e.g. the deep waters in Monterey Canyon, CA) and feed almost exclusively on euphausiids.

The North Pacific population of fin whales summers from the Chukchi Sea to California, and winters from California southward. Fin whales occur year-round off California, Oregon, and Washington in the California Current, with aggregations in southern and central California (Carretta et al. 2017). Association with the continental slope is common (Schorr et al. 2010). Fin whales feed on planktonic crustaceans, including Thysanoessa sp. euphausiids and Calanus sp. copepods, and schooling fish, including herring, capelin and mackerel (Aguilar 2009).

Humpback whales are found in all oceans of the world and migrate from high latitude feeding grounds to low latitude calving areas. They are typically found in coastal or shelf waters in summer and close to islands and reef systems in winter (Clapham 2009). Humpbacks primarily occur near the edge of the continental slope and deep submarine canyons, where upwelling concentrates zooplankton near the surface for feeding.

As mentioned above, the two DPSs that forage off California include the endangered Central America DPS and the threatened Mexico DPS. There is still some mixing between these populations on the feeding grounds although they are still considered distinct populations.

Sei whales are rarely seen during NMFS ship-board surveys and there has only been one stranding (ship strike) in the action area over the last 30 years; therefore, we do not anticipate there to be an effect to this species. Sperm whales are typically found foraging in deep water, canyons and escarpments and would therefore rarely be found in the action area (particularly within the routes used to transport personnel from the mainland to the platforms); therefore we do not anticipate there to be an effect of this action on sperm whales.

Vessel Strikes

Large whales are at risk of vessel strikes. Based on documented reports over the last 30 years (1986-2019), within the action area (San Luis Obispo County south to San Diego County), a total of 52 large whales have been struck by vessels and stranded (l .7/year). Of this total, there were 14 blue whales, 18 fin whales, 1 sei whale, 6 humpback whales, 25 gray whales, and 17 unidentified whales, some of which were likely gray whales, given that 25 ship-struck whales within the defined action area were identified as gray whales. Apportioning the unidentified ship-struck whales to a particular ESA-listed whale species based on the proportion of identified species in the stranding records, a total of 17 blue whales (0.5/year), 22 fin whales (0.7/year) and 7 humpbacks (0.3/year) may have been struck by vessels over the last 33 years. In most cases, we have little to no information on the size, speed, and/or location of the vessel strikes, particularly since large oil tankers and cargo vessels have entered into ports carrying a dead whale on their bow with no knowledge of a strike. We are also aware that ship strikes determined due to reports and/or stranded animals are an underestimate of actual strikes based on previous studies (Rockwood et al, 2017).

The southern California Bight has been identified as an important foraging area for blue, fin, and humpback whales (Redfern et al. 2013; Calambokidis et al. 2015) and they can be found year-round, particularly humpback whales (Becker et al. 2017). Feeding hotspots for blue and humpback whales have been found in waters near the ports of Los Angeles and Long Beach, where they may intersect with vessels transiting to and from the ports, which could increase their vulnerability to being struck by a vessel.

There have been no reports of vessel strikes associated with oil and gas development and production in the 30 year record. Vessels will be limited to a maximum speed of 10 knots. The role of ship speed and impacts on large whales has been studied and found that the probability of serious injury or mortality increases with ship speeds (Conn and Silber 2013). Similarly, vessel speed may have some effect on the likelihood of a strike occurring where probability of a strike increases with vessel speed (Gende et al. 2011; McKenna et al. 2015). Further, vessel (and platform) operators are required to complete wildlife and fisheries awareness training, which should help minimize the risk of a whale strike by allowing vessels an opportunity to evade large whales detected in the area. The combination of observers and vessel speed limits is expected to minimize the chances of a vessel strike, including strikes that could cause serious injury or mortality. In addition, the number of vessel transits over the course of the proposed action, 60 round trips, compared to the Port of Long Beach, Draft Master Plan Air Emission Inventory (POLB, 2019) which states that 7000 vessel transits occur annually amounting to 19 transits per day, and the low numbers of blue whales, fin whales, and humpback that are struck by vessels in

the action area, we anticipate that the likelihood of a large whale (i.e., fin whales, blue whales, the Mexico humpback whale DPS, and the Central America humpback whale DPS) being struck by vessels for this project to be extremely low, and therefore discountable. While we do not expect strikes to occur, vessel speeds should also minimize the severity of impacts to large whales should a strike occur.

Noise Exposure
Given the monitoring plan described above and the small isopleth that will occur near the sea floor in 400 to 700 ft depth coupled with the fact that these large whales are not known to be benthic feeders reduces the chances of the whales entering the 120 dB isopleth. Therefore the potential for noise exposure is extremely low and therefore discountable.

Effects to Guadalupe fur seal
Guadalupe fur seals, an otariid species designated as threatened in 1985, may be found in the action area, although they are generally considered rare, particularly compared to the vast abundance of non-listed pinnipeds found in the area. Guadalupe fur seals pup and breed primarily at Guadalupe Island, Mexico. In 1997, a second rookery was discovered at Isla Benito del Este, Baja California, and a pup was born at San Miguel Island, California (Melin and DeLong 1999). Since 2008, individual adult females, subadult males, and between one and three pups have been observed annually on San Miguel Island and an adult male has regularly been found at San Nicolas Island (NMFS-AKFSC unpublished data).

Researchers know little about the whereabouts of Guadalupe fur seals during the non-breeding season, from September through May, but they are presumably solitary when at sea. Guadalupe fur seals may primarily extend their range approximately 20 km from the breeding areas to account for the main haulout and foraging areas. While distribution at sea is relatively unknown until recently, Guadalupe fur seals may migrate at least 600 km from the rookery sites, based on observations of individuals. Indeed, strandings of Guadalupe fur seals have occurred along the entire U.S. west coast, particularly in recent years, suggesting that the seal may be expanding its range (Hanni et al. 1997; NMFS-West Coast Region-stranding program unpublished data).

Vessel Strikes
Like all otariids, Guadalupe fur seals are fast and nimble swimmers and are very likely to move out of the way of vessels. Based on our review of 34 years of stranding records (1986-2019, there have been no reports of vessel strikes of Guadalupe fur seals. Therefore, the likelihood that a Guadalupe fur seal would be struck as a result of vessel activity associated with the proposed action is extremely low, and discountable.

Noise Exposure
Guadalupe fur seals are known to forage mostly at night at depths of around 65ft and are not anticipated to dive down to a depth where they would enter the 120dB isopleth additionally these initial cuts will only occur during the day, therefore effects from noise exposure is extremely unlikely and therefore, discountable.

Effects to Sea Turtles
Leatherback turtles lead a completely pelagic existence, foraging widely in temperate and tropical waters except during the nesting season, when gravid females return to tropical beaches to lay eggs. Leatherbacks are highly migratory, exploiting convergence zones and upwelling areas for foraging in the open ocean, along continental margins, and in archipelagic waters.

Satellite tracking of post-nesting females and foraging males and females, as well as genetic analyses of leatherback turtles caught in U.S. Pacific fisheries or stranded on the U.S. west coast indicate that leatherbacks found off the California are from the western Pacific nesting population (Benson et al. 2007, 2011), which is declining at an alarming rate (Talipatu et al. 2013). Leatherbacks rarely strand in southern California, although recently, a subadult leatherback stranded in Sunset Beach (October, 2017). Leatherback critical habitat was designated in 2012 and is located within the northern part of the action area, specifically from Point Arena to Point Arguello east of the 3,000 meter depth contour. The primary constituent element considered essential for the conservation of leatherbacks is "the occurrence of prey species, primarily scyphomedusae of the order Semaeostomeae (Chrysaora, Aurelia, Phacellophora, and Cynea, of sufficient condition, distribution, diversity, and density necessary to support individual as well as population growth, reproduction, and development of leatherbacks."

The endangered north Pacific loggerhead DPS documented off the U.S. west coast are primarily found south of Point Conception, California in the Southern California Bight (Bight), which is within the action area. These turtles originate from nesting beaches in Japan, where the number of females returning to nest has been increasing in recent years. Increases in loggerhead density are typically tied to warm water conditions in the Bight and density significantly decreases in other years. For example, NMFS conducted aerial surveys of the Bight in 2015 (a year when the sea surface temperatures were anomalously warm, and an El Niño was occurring) and documented thousands of loggerheads throughout the area (T. Eguchi, NMFS, personal communication, 2017), likely feeding on pelagic red crabs and pyrosomes, their preferred prey.

Vessel Strikes

Our west coast stranding program has collected records of vessel strikes and other human interaction-related (or undetermined) strandings of sea turtles since the late 1950s, although recorded strandings increased in the early 1980s. From 1958 through 2019 leatherbacks, and loggerheads have rarely been reported as likely struck by vessels in the action area, with 4 leatherbacks (0.07/year), and 3 loggerhead (0.05/year) reported over the last 61 years. Given the rarity of these events reported, and the generally low density of leatherbacks and loggerheads in the action area, we consider the probability of vessel strikes associated with the proposed activity to be extremely low, and discountable.

Noise Exposure

Given that the 120 dB isopleth is at the sea floor between 400ft to 700ft depths no turtles are anticipated to be in the vicinity during the initial cut and the effects of noise exposure are therefore discountable.

Scalloped Hammerhead Shark

Scalloped hammerhead sharks can be found in coastal warm temperate and tropical seas worldwide. They occur over continental and insular shelves, as well as adjacent deep waters, but are seldom found in waters cooler than 22° C (Compagno 1984; Schulze-Haugen and Kohler 2003). These sharks range from the intertidal and surface to depths of up to 450-512 m (Sanches 1991; Klimley 1993), with occasional dives to even deeper waters (Jorgensen *et al.*, 2009). They have also been documented entering enclosed bays and estuaries (Compagno 1984).

The Eastern Pacific DPs of scalloped hammerhead sharks have a core range from 32°N latitude south to northern Peru, around 4°S latitude. This is completely out of the action area, however

there have been 26 observations of scalloped hammerhead sharks in southern California waters since the first sighting in 1977 (Fusaro and Anderson 1980; Siegel 1985; Lea and Rosenblatt 2000; Shane 2001; Galante 2014). These observations have been sporadic and only associated with unusually warm water, as occurs during El Niño Southern Oscillation (ENSO) events.

Noise Exposure

Given the rarity of occurrence in southern California and the species preference for warm water, the chances of noise exposure near the sea floor during the initial cut are extremely unlikely and therefore discountable.

Vessel Strike

NMFS stranding network data has no reports of a scalloped hammerhead shark being struck by a vessel. These sharks can be found near the surface and they can be fast and agile swimmers and will likely move away from an approaching vessel to avoid a strike. Additionally the ships will be operating at reduced speeds and have crews trained to watch for marine animals therefore NMFS anticipates that a vessel strike of a scalloped hammerhead shark is extremely unlikely to occur and is therefore discountable.

Stealhead trout – South-Central and Southern California coastal ESUs

The South-Central California Coast steelhead ESU is listed as threatened and is comprised of a suite of steelhead populations that inhabit coastal stream networks from the Pajaro River (within Monterey Bay) south to, but not including the Santa Maria River NMFS conducted its most recent five-year status review for this ESU in 2016 (NMFS 2016a) and concluded that little had changed since the last status review in 2011, with declines attributed to agriculture, mining and urbanization activities that have resulted in the loss, degradation and fragmentation of riverine habitat. Little is known of the oceanic distribution of this ESU, although NMFS (2016a) noted that ocean harvest of steelhead is extremely rare (and prohibited by California Department of Fish and Wildlife) and is therefore likely an insignificant impact, although past exploitation rates likely contributed to its decline.

The Southern California Coast steelhead ESU is listed as endangered and is comprised of a suite of steelhead populations that inhabit coastal stream networks from the Santa Maria River system south to the U.S.-Mexico border. NMFS recently conducted a five-year status review for this ESU (NMFS 2016b). As with most U.S. west coast salmon and steelhead stocks, this ESU has declined substantially from their historic numbers. Multiple factors have contributed to the decline of individual populations, including the loss of freshwater and estuarine habitat, periodic poor ocean conditions, and a variety of land-use, flood control, and water management practices, which have impacted many watershed-wide processes. As with the South-Central California Coast steelhead ESU, little is known of threats to steelhead during their oceanic life stage.

Noise Exposure

The ocean going phase steelhead are epipelagic and seldom occur at depths greater than 10 meters (Light et al 1989). Additionally fish species generally have a higher threshold for behavioral responses to sound than marine mammals. It is very unlikely that steelhead would be present at depths between 400 to 700 feet where the initial cut will occur. It is unlikely that even if a fish was present, exposure to the sound would cause any behavioral response, therefore the effects of sound exposure are insignificant and discountable.

Green Sturgeon – southern DPS

The green sturgeon is an anadromous, long-lived, and bottom-oriented fish species in the family Acipenseridae. NMFS listed the Southern DPS of green sturgeon as threatened under the ESA in 2006 (71 FR 17757, April 7, 2006) and originates from coastal watersheds south of the Eel River, with spawning confirmed in the Sacramento River system. Critical habitat was designated in 2009 and included coastal marine areas (to a depth of 60 fathoms) and specified riverine, estuarine, and areas from Monterey Bay, California to the U.S.-Canadian border (outside of the SCPA). After migrating out of their natal rivers, subadult green sturgeon move between coastal waters and various estuaries along the U.S. West Coast. Relatively little is known about how green sturgeon use habitats in the coastal ocean and in estuaries, or the purpose of their episodic aggregations there at certain times (Lindley et al. 2011). While in the ocean, archival tagging indicates that green sturgeon occur between 0 and 200 m depths, but spend most of their time between 20—80 m in water temperatures of 9.5—16.0^{0}C (Huff et al. 2011). They are generally demersal but make occasional forays to surface waters, perhaps to assist their migration (Kelly et al. 2007).

Noise Exposure

Little is known of the southern DPS of green sturgeon's presence within the action area, but they are rarely found south of Monterey Bay, where incidental take of the southern DPS has been documented in bottom-set trawl fishery targeting halibut. Given their preference for deeper coastal habitat, and their rare documented presence in the action area, it is highly unlikely that individuals from the southern DPS of green sturgeon would be exposed to the sound from the initial cut and this effect is discountable.

Conclusion

Based on this analysis, NMFS concurs with BOEM that the proposed action is not likely to adversely affect the subject listed species.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by BOEM or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) the proposed action causes take; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the written concurrence; or (4) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA consultation.

Please direct questions regarding this letter to Thomas Coleman Thomas.coleman@noaa.gov (562) 980 3209

Sincerely,

Penny Ruvelas
Long Beach Office Branch Chief
Protected Resources Division

cc: Administrative File: 151422WCR2020PR00011

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