

4.0 OTHER MAJOR AREAS OF CONCERN

This Section provides discussion regarding other major areas of concern with respect to the proposed ExxonMobil Production Company (ExxonMobil or Applicant) Santa Ynez Unit (SYU) Offshore Power System Reliability-B Phase 2 Project (OPSR-B or Project). Based upon the nature of the Project, commercial fishing and environmental justice are identified as other areas of potential concern.

4.1 COMMERCIAL FISHING

4.1.1 Environmental Setting

The following setting is based upon discussions of commercial fishing activities offshore in proximity to the SYU and within the Santa Barbara Channel described in previous studies and environmental documents; as referenced in the Project Environmental Impact Analysis (EIA) (ExxonMobil 2013).

The Project area supports a diverse assemblage of valuable fishery resources. These resources, in turn, support important commercial and recreational fisheries. Major fisheries within or near the Project area include trapping for crab and lobster; purse seining that generally target anchovy, bonito, mackerel, squid, and other pelagic fish; trawling for spot prawn, ridgeback shrimp, sea cucumbers, and halibut; diving for urchins; and drift and set gillnetting for thresher shark, bonito shark, swordfish, white seabass, and barracuda.

The Project area traverses two California Department of Fish and Wildlife (CDFW) Fish Blocks (FB), 655 and 656. Table 4-1 summarizes the commercial catch as provided by CDFW over the most recent 5 years available (2007 through 2012). Table 4-2 provides catch (pounds) and value information for each of the two Project region FBs by year, for the most abundant species, and highest value taxa during that same period.

Table 4-1. Summary of CDFW Fish Block (FB) Data, FB 655 & 656 (2007-2012)

Year	FB 655		FB 656	
	Pounds	Value	Pounds	Value
2007	48,041	\$134,057	154,277	\$135,282
2008	103,584	\$195,221	377,600	\$248,786
2009	172,346	\$245,346	206,344	\$240,021
2010	1,247,534	\$400,846	1,117,450	\$455,339
2011	881,867	\$268,179	3,984,477	\$1,195,098
2012	2,853,255	\$1,111,407	873,967	\$540,138
Total	5,306,627	\$2,355,056	6,714,115	\$2,814,664
Year Avg.	884,438	\$392,509	1,119,019	\$469,111

Table 4-2. CDFW Commercial Catch and Value Information (2007-2011)

Year	Fish Block	Species	Pounds	Value	Gear Types
2007	655	Crab (all species)	22,036	\$24,153	Trap, trawl
		Kellet's whelk	7,707	\$5,634	Trap
		Sea cucumbers	6,730	\$8,076	Trawl, diving
		Lobster	3,538	\$40,505	Trap
		Spot prawn	3,511	\$42,017	Trap, trawl
	656	Pacific bonito	86,339	\$25,902	Purse seine
2008	655	Crab (all species)	61,135	\$73,024	Trap, trawl
		Urchins	3,000	\$1,068	Diving
		Lobster	2,917	\$32,100	Trap
		Hagfish	72,551	\$73,258	Trap
	656	Sea cucumbers	16,512	\$33,592	Trawl, diving
		Lobster	5,300	\$58,630	Trap
2009	655	White seabass	3,492	\$12,745	Drift/set gill net
		Pacific bonito	266,991	\$94,141	Purse seine
		Crab (all species)	84,723	\$104,839	Trap
		Ridgeback prawn	18,774	\$34,722	Trawl
		Urchins	5,096	\$1,544	Diving
	656	Pacific bonito	89,452	\$32,604	Purse seine, H&L
2010	655	Sea cucumbers	36,211	\$80,683	Trawl
		Hagfish	13,382	\$13,382	Trap
		White seabass	7,593	\$17,508	Drift/set gill net, H&L
		Lobster	3,808	\$41,248	Trap
		Crab (all species)	106,865	\$136,920	Trap
	656	Pacific bonito	67,570	\$23,650	Purse seine
2011	655	Ridgeback prawn	20,485	\$39,009	Trawl
		Hagfish	5,419	\$5,419	Trap
		Halibut	2,852	\$12,300	Trawl, H&L
		Market squid	1,217,345	\$304,336	Drum/purse seine
	656	Sea cucumbers	14,241	\$26,974	Trawl
		Pacific sardine	10,326	\$0	Drum/purse seine
2012	655	Lobster	3,379	\$56,750	Trap
		Market squid	978,517	\$244,629	Drum/purse seine
		Crab (all species)	130,075	\$168,371	Trap
		Lobster	21,471	\$27,331	Trap
		Hagfish	4,928	\$4,928	Trap
	656	Market squid	850,760	\$166,745	Drum/purse seine
2013	655	Sea cucumber	23,023	\$88,634	Trawl, diving
		Lobster	4,036	\$68,932	Trap
		Market squid	3,820,988	\$948,030	Drum/purse seine, lampara net
	656	Crab (all species)	156,626	\$206,762	Trap
		Red urchins	2,736	\$2,510	Diving
		Market squid	2,686,860	\$802,160	Drum/purse seine
2014	655	Crab (all species)	39,408	\$48,805	Trap
		Sea cucumber	26,134	\$100,057	Trawl/diving
	656	Market squid	678,302	\$202,648	Purse/drum seine
2015	655	Crab (all species)	181,038	\$269,987	Trap
		Rockfish (all species)	1,795	\$4,020	H&L

1 About 10 nautical miles (nm) (19 kilometer [km]) of FB 655 and approximately 5 nm (10
2 km) of FB 656 would be traversed by Project-related activities. The portion of FB 656
3 that could be impacted is the area along the cable route between platforms Harmony
4 and Heritage; an area that receives minimal fishing due to the extreme depths of over
5 1,100 feet (335 meter [m]) and the limited access to the area immediately around each
6 platform. Each CDFW FB encompasses approximately 100 nm² (1,900km²) except
7 when one of the FB boundaries is the shoreline. Commercial fishing operations occur
8 within the Project area throughout the year. Conflicts between fisheries and fishing and
9 oil and gas activities on the California Outer Continental Shelf (OCS) can generally be
10 separated into two categories: (1) potential effects on managed fish species and
11 Essential Fish Habitat (ESH), and (2) space-use, or operational conflicts (areal
12 preclusion) discussed below.

13 The following summarizes the commercial fishing activities that, based on CDFW FB
14 data, have occurred during the last 6 years within the Project region.

15 4.1.1.1 Purse Seining

16 As is shown in Table 4-2, the species targeted are primarily pelagic, such as anchovy,
17 mackerel, squid and bonito. Because purse seiners follow schools of these pelagics, it
18 is difficult, if not impossible, to predict how large or where the fleet will be at a given
19 time. When working an area, the purse seine fleet is made up of a group of vessels.
20 While searching, the vessels often move on erratic or zigzag courses, trying to spot
21 schools visually, with the help of aircraft, or with onboard sonar. Although there are no
22 “seasons” for most pelagic species (white seabass is an exception), the CDFW sets
23 catch quotas. When quotas are filled, the fishery is closed for that year unless an
24 extended quota is subsequently issued. Purse seining for pelagic species, particularly
25 mackerel, bonito, squid, sardine and anchovy, could be expected throughout the area.
26 The purse seine fishery contributed a substantial percentage of the total catch in both
27 FBs during the most recent 5 years with market squid and Pacific bonito being the
28 primary taxa (Table 4-2).

29 4.1.1.2 Trawling

30 Trawlers in the Santa Barbara Channel target Pacific Ocean shrimp, ridgeback prawns
31 (trawlers have been prohibited from targeting spot prawns since 2003), sea cucumbers,
32 rockfish, and various species of sole. They also fish seasonally in specified sections of
33 State waters for halibut. This is a mobile fishery in which a single rig is towed behind the
34 fishing vessel at slow speed, either in midwater or, more commonly in the Santa
35 Barbara Channel, along the bottom. The trawler deploys the net(s) in areas where fish
36 or shellfish are noted on the fathometer, or where trawling has been successful
37 previously. Trawl catches from FB 655 predominantly consisted of sea cucumbers;
38 trawling targeted ridgeback prawns in FB 656 for the reporting period (Table 4-2).

1 Ridgeback prawns are fished within the Project area from October 1 through May 30 in
2 water depths of 90 fathoms (fm) (165 m) and shallower (Mike McCorkle, pers. comm.,
3 2002). The peak season is in the spring from late February to June. Sea cucumbers are
4 trawled in the Project area between 60 and 90 fm (110 to 165 m) in winter, and from 1
5 mile (<2 km) offshore out to 40 fm (73 m) in summer (Mike McCorkle, pers. comm.,
6 2002). The peak season is from June through September.

7 4.1.1.3 Drift Gillnetting

8 Due to restrictions within State waters, all drift gillnetting occurs in Federal waters. The
9 target species are thresher and bonito shark, and swordfish. In the Santa Barbara
10 Channel, drift gillnetting occurs for swordfish and thresher shark from August 15 through
11 January 31 and for bonito shark year-round. The peak season is from October through
12 December. During the summer months, some drift netting for white seabass and
13 barracuda may occur in the offshore portion of the Project area. One end of the net is
14 attached to the fishing vessel, while the other is secured to a free-floating buoy marked
15 with a flag, light, and radar reflector. The net also has floats on top and weights on the
16 bottom that can be arranged to allow the net to be at or below the surface. The vessel
17 and net drift together. When not deployed, the net is either stacked on the deck or rolled
18 on a reel. During net deployment, the vessel is under way, and the buoy is set over the
19 stern or side, pulling the net into the water. Rollers on the stern or side keep the net
20 from snagging as it is paid out. The net and buoy are hauled in from the leeward side of
21 the vessel. As the net comes aboard, the fish are removed from the net, which is then
22 restacked or reeled up for the next set. For the most recent 5 years commercial catch,
23 drift nets targeted white seabass and were more commonly used in FB 655 (Table 4-2).

24 4.1.1.4 Trap Fishing

25 Trap fishing for lobster, crab, and hagfish is a fixed gear operation. The crab and
26 hagfish seasons are year-round, and the lobster season is from October to mid-March.
27 Crab and lobster traps (pots) are baited and deployed in fishing grounds; hagfish are
28 usually caught with a large PVC tube-like trap or with fish traps. The crab and lobster
29 pots are commonly left to fish or soak for about 3 days (hagfish somewhat shorter
30 periods), and then are retrieved. The fishing vessel pulls alongside the pot buoy(s) that
31 are attached to lines and the traps, grapples the buoy on deck, feeds the line through a
32 pinch-puller, and raises the pot from the sea floor. The catch is taken from the pot; it is
33 re-baited and redeployed. Normal fishing practice dictates the movements of trap
34 location: if the traps are fishing well, they are left where they are. If the traps are not
35 catching much, they will usually be moved to a new location. In practice this means that
36 groups, or strings, of gear will be moving from one location to another on an
37 unpredictable time schedule dictated by crab and lobster population movements. It is
38 therefore difficult to predict the location of any particular string of gear at a given time.
39 Most full-time fishermen have at least 50 to 70 pots, and many fishermen have several

1 hundred pots arranged in strings of from five to 25 individual traps set along particular
 2 depth contours. From a practical standpoint in locating and avoiding a string(s) of pots,
 3 it is important to consider the effects of tide and current strength on the line and buoy,
 4 and the effects of wind and current on the buoy. During conditions of high tide, strong
 5 currents, or high winds, buoys may be below sea surface and invisible. Crab and lobster
 6 traps are required to have a release door so that any lost or unretrievable pots will not
 7 continue to fish indefinitely. Trap-caught crab and/or lobster contributed a substantial
 8 percentage of the total commercial catch from both Project area FBs and the relatively
 9 per-pound price for lobster makes it one of the major contributors to the total value of
 10 the commercial catch for the area (Table 4-2).

11 **4.1.2 Regulatory Setting**

12 There are no Federal laws pertaining to mineral resources in this area. State laws and
 13 regulations pertaining to this issue area and relevant to the Project are identified in
 14 Table 4-3.

Table 4-3. Laws, Regulations, and (Commercial Fishing)

CA	Coastal Act Chapter 3 policies (see also Table 1-3)	Coastal Act Chapter 3 policies applicable to this issue area are: <ul style="list-style-type: none"> • Section 30234 states: Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry. • Section 30234.5 states: The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.
CA	Fish and Game Code	<ul style="list-style-type: none"> • Section 9002, et seq., prohibits unlawful handling of legally set trap gear.
CA	Other	<ul style="list-style-type: none"> • California Commercial Fishing Laws and Licensing Requirements. Commercial fishing is regulated by a series of laws passed by the Fish and Game Commission and issued each year in a summary document. Seasonal and gear restrictions within the various CDFW Districts, licensing instructions and restrictions, and species-specific fishing requirements are provided in the document. Most of the MPAs have commercial fishing restrictions (based on the designation of each area), which are also listed in the summary document. • California Ocean Sport Fishing Regulations. Each year, the Fish and Game Commission issues regulations on the recreational fishing within the marine waters of the State, specifying the fishing season for species, size and bag limits, and gear restrictions, licensing requirements; a section on fishing restrictions within MPAs is also now included.

15 **4.1.3 Impact Analysis**

16 The impact analysis for the commercial fisheries in this document adopts the following
 17 significance criteria. An impact from the Project is significant if it is likely to cause any of
 18 the following:

- 1 • Fishermen are precluded from 10 percent or more of the fishing grounds during
2 the Project;
- 3 • 10 percent or more of a specific gear type is precluded from a fishing area for all
4 or most of a fishing season; or
- 5 • A decrease in catchability of target species exceeds 10 percent of the average
6 annual landing.

7 **Cable Removal and Installation Impacts.** The Project would involve the removal of
8 between 12 and 18 miles (19 and 29 km) of out-of-service power cable and installation
9 of 30 miles (49 km) of replacement cable in the general vicinity of the existing SYU
10 facilities. This section analyzes impacts to commercial fishing operations that would be
11 expected to occur as a result of cable retrieval and installation.

12 The potential conflicts to commercial fishing operations associated with the Project
13 include vessel traffic, Project-associated obstructions due to anchoring, the power
14 cables themselves, any Project-associated items lost overboard, and space-use
15 conflicts. Due to access limitations around the platform and the proposed actions, no
16 impacts to commercial fishing are expected from the on-platform modifications.

17 Vessel Traffic. Vessels involved in cable retrieval and installation include: a DP cable
18 installation vessel (CIV), a support tug, an anchor handling vessel, one to two dive
19 vessels, and a transfer vessel. Two to four support skiffs would also be deployed to
20 support cable activities in the nearshore area during the Project. Phase 2 activities are
21 expected to take 8 to 12 months to complete and would be initiated in 2014.

22 The Project would be expected to result in a temporary, minimal increase in area vessel
23 activity. Upon Project completion, vessel traffic is expected to return to current baseline
24 levels. Currently, three crew boats typically are in the SYU area at any time, and crew
25 boats normally make two to three round trips per day between the SYU Platforms and
26 Ellwood Pier. In addition, one supply boat typically is in the field at any time and supply
27 boats normally make one trip every other day between Port Hueneme and the SYU
28 Platforms. No significant increase in additional crew or supply boat trips are anticipated
29 for the Project. With this minimal increase in vessel traffic, the chances of Project
30 vessel/fishing vessel interaction are expected to increase at a less than significant level.

31 The Santa Barbara Channel Oil Service Vessel Traffic Corridor Program is intended to
32 minimize interactions between oil industry operations and commercial fishing
33 operations. It was developed cooperatively between the two industries through the Joint
34 Oil Fisheries Liaison Office (JOFLO). In accordance with **MM CF-1: Commercial**
35 **Fishery Constraints**, all vessels associated with the Project would use the vessel
36 traffic corridors in transit to and from onshore sites. This method of reducing vessel
37 conflicts has been shown to be effective during past OCS activities.

1 **MM CF-1: Commercial Fishery Constraints.** ExxonMobil shall implement the
2 following measures to reduce the potential for impacts to commercial fishing
3 operations:

- 4 • Consult with the Joint Oil Fisheries Liaison Office (JOFFLO) and commercial
5 fishermen, as appropriate, during the planning stages and construction to
6 identify and mitigate any unanticipated impacts regarding the Project. If the
7 JOFFLO determines that conflicts with commercial fishing operations in the
8 Santa Ynez Unit area develop during the Project, ExxonMobil shall make all
9 reasonable efforts to satisfactorily resolve any issues with affected fishermen.
10 Possible resolutions may include physical modification of identified problem
11 areas on the replacement cables, the establishment of temporary preclusion
12 zones, or off-site, out-of-kind, measures. Evidence of consultations shall be
13 provided to California State Lands Commission (CSLC) staff, Bureau of Safety
14 and Environmental Enforcement, and Santa Barbara County.
- 15 • Review design concepts and installation procedures with JOFFLO to minimize
16 impacts to commercial fishing to the maximum extent possible.
- 17 • Require contractors, to the extent reasonable and feasible, to recover all
18 items lost overboard during activities associated with the Project. Logs shall
19 be maintained on the cable installation and support vessels that identify the
20 date, time, location, depth, and description of all items lost overboard.
- 21 • Require the contractor to scout the nearshore conduit terminus area (prior to
22 initiating work there) to determine the presence of any traps that could
23 interfere with the cable operations. If any traps are found, the affected
24 fishermen shall be contacted through JOFFLO and requested to relocate the
25 traps for the Project duration. With written permission from the owner, if the
26 traps have not been moved by the time Project activities are scheduled to
27 begin, any traps that could interfere with the activities shall be relocated and
28 then returned to the original site at the end of the work.
- 29 • In the absence of existing corridors, establish temporary vessel traffic
30 corridors, reviewed and approved by JOFFLO, inside 30 fathoms (55 meters)
31 where vessel corridors have not been established specifically for the Project
32 area, for the Project duration.
- 33 • Include training on vessel traffic corridors in all pre-construction meetings with
34 Project contractors and their personnel.

35 Although minimal effects are expected, with incorporation of the vessel traffic corridors
36 outlined within **MM CF-1**, in combination with **MMs TRANS-1: Notice to Mariners** and
37 **TRANS-2: Vessel Traffic Corridors** (see Section 3.17, Transportation/Traffic), the
38 impact to commercial fishing operations attributed to increased vessel traffic associated
39 with the Project would be expected to be negligible.

1 Project-Associated Obstructions. Construction activities associated with the Project
2 have the potential to obstruct commercial fishing activities such as trawling in the
3 Project area. These obstructions could result from the CIV and/or support vessels,
4 vessel anchoring, the power cables themselves, and Project-associated items lost
5 overboard.

6 Anchoring. While the majority of the work would be performed using a dynamically
7 positioned cable installation vessel, thereby avoiding use of anchors, anchoring of a
8 diver support vessel would be required in the nearshore conduit terminus area. Anchor
9 scars caused by dragging the anchors as they are being set, may cause short to long-
10 term obstacles to commercial trawling depending upon the type of seafloor sediment
11 where the anchors are placed. Anchor scars would not impact trawl fishermen in the
12 nearshore conduit terminus area since trawling is prohibited within 1 mile (1.6 km) of
13 shore in this area and except for specified areas for halibut and sea cucumbers, for all
14 commercial trawling. Thus, only the anchoring operations in the nearshore area could
15 be of concern. With the use of a dynamically positioned cable installation vessel and
16 **MM MBIO-1b: Anchoring Plan** (see Section 3.5.3 for detail), would help to minimize
17 these potential impacts through limiting of vessels that would require anchoring and
18 adherence to an anchoring plan for the diver support vessel.

19 Power Cables and Lost Debris. ExxonMobil proposes to lay approximately 30 miles (49
20 km) of replacement power cable from the Las Flores Canyon Processing Facility
21 (LFCPF) to Platform Harmony and from Platform Harmony to Platform Heritage. The
22 Project also proposes to retrieve 12 to 18 miles (19 to 29 km) of out-of-service cables
23 from the nearshore conduit to the OCS break and adjacent to the platforms.

24 Commercial fishing gear damage and loss problems attributed to obstructions and lost
25 debris related to offshore California oil and gas activities have been identified since at
26 least 1966. Since 1983, JOFLO has served as an information clearinghouse with
27 primary responsibility for inter-industry communications. A search of the JOFLO inter-
28 industry interactions records on the Project area has found no incident in the vicinity of
29 either the existing or proposed power cable route that could be attributed to the existing
30 cables. The power cables are approximately 7 inches (18 centimeters [cm]) in diameter,
31 and weigh approximately 30 to 40 pounds per foot (lbs/foot) (50 to 60 kilograms per
32 meter [kg/m]). Due to the weight and small diameter of the power cables, they are
33 partially to completely self-buried and thus pose a low risk of snagging or entangling a
34 trawl net. No adverse impact to commercial fishing operations due to the replacement or
35 the existing power cables in the proposed area would be expected. In the unlikely event
36 that commercial fishing conflicts attributable to the replacement power cables in the
37 SYU area develop in the future, the permitting agencies could require additional
38 mitigations that may include physical modification of identified problem areas, removal
39 of the abandoned cable, or offsite, out-of-kind measures.

1 The Applicant proposes to require its contractors on the cable installation and support
2 vessels for the Project to maintain logs that identify the date, time, location, depth, and
3 description of all items lost overboard. To the extent reasonable and feasible, the
4 Applicant proposes to require its contractors to recover all items lost overboard during
5 activities associated with the Project. In accordance with **MBIO-3b: Post-Project**
6 **Survey** and **MBIO-3c: Post-Project Technical Report**, a post-Project survey will be
7 conducted and post-Project Report prepared to document seafloor conditions and
8 ensure that no impacts to seafloor habitat have resulted from the Project. No adverse
9 impact to commercial fishing operations due to Project-related lost debris in the Project
10 area would be expected.

11 Space-Use Conflicts. As previously discussed, three to four vessels (a CIV, a support
12 tug and dive and transfer vessels) and several support skiffs would be involved in the
13 Phase 2 offshore activities over a 1 to 2 month period.

14 The CIV, support tug, dive vessels and support skiffs would be onsite an estimated 1 to
15 2 months to retrieve the out-of-service cables and install the replacement cables. During
16 deployment and retrieval operations, the CIV would move slowly and will create a minor
17 obstruction to commercial fishing activities within an estimated 0.3 mile (0.4 km) radius
18 centered on the vessel. The following sections describe the potential impacts to those
19 commercial gear types primarily related to maneuverability while nets are deployed, and
20 analyzes the impacts associated with the Project.

21 *Trawl:* The trawl fishery is a mobile fishery; however, with nets deployed, a trawl vessel
22 is not readily maneuverable. The net is on the bottom and in fairly deep water can be up
23 to or even exceed 1 mile (1.6 km) behind the vessel. Trawlers often work along the
24 edges of steep drop-off slopes; to turn into deeper water would force the net to drop off
25 these slopes. This causes loss of fishing time since the net has to be picked up and
26 reset. Similarly, seafloor obstructions (i.e., rocky outcrops, wrecks, or other debris) are
27 usually pre-located by the trawl fishers so they can be avoided. Knowledge of the
28 location of these snags also limits the maneuverability of the trawler when towing a
29 net(s). Turning into such a snag may mean loss or damage to the net(s), and potential
30 hazard to the vessel itself if the hang is significant and/or weather/sea conditions are
31 unfavorable. Since turning into such obstructions would be hazardous, most trawlers
32 would have to stop towing and pull their gear rather than turn.

33 The ridgeback prawn and sea cucumber trawl fisheries are both active in the Project
34 area. During cable retrieval and installation operations, the CIV would move slowly, and
35 experienced trawlers would likely be able to avoid conflicts. Considering the limited area
36 of effect (i.e., no anchors will be deployed), the impact to commercial trawlers would be
37 expected to be insignificant. **MM CF-1** would further minimize potential impacts.

1 *Drift Gillnet:* Drift gillnets may be 1 mile (1.6 km) or more in length and the vessels to
2 which the net is attached has restricted ability to maneuver. The “free” end of the gillnet
3 usually has a radar reflector/lighted buoy attached to it, but may not be immediately
4 obvious because it is so far from the fishing vessel. Since drift gillnetting is usually done
5 at night, and often during the darker phases of the moon, it is difficult for other vessels
6 to be aware of the configuration of drift gillnet operations. A drift gillnet up to 6,000 feet
7 (2,000 m) long and 60 to 100 feet (20 to 30 m) deep can be fished anywhere from right
8 at the surface to 30 to 40 feet (10 to 15 m) below the surface. Since drift gillnetters drift
9 with the current and wind, this fishery would be precluded from an increasing large area
10 up-current of the CIV. The preclusion zone would be a triangular-shaped area up-
11 current, with the apex at the CIV. Since gillnets are restricted from State waters and
12 most drift net fishing occurs in mid- to south Channel, only a relatively small area
13 compared to the available area between the 3-nm State seaward boundary and the
14 platforms would potentially be affected. Drift net fishers would be expected to routinely
15 avoid fixed objects such as platforms, thus the Project area would be expected to be
16 within the area normally avoided. Given this very small area of affect to the drift gillnet
17 fishery, no impact to this fishery would be expected from the Project.

18 *Purse Seine:* By necessity, the purse seine fleet is very mobile, and usually consists of
19 a group of vessels. While searching, the vessels often move on erratic or zigzag
20 courses, trying to spot schools of fish visually or with onboard sonar; aerial observations
21 are also used to locate near-surface schools of target fish. When a school of fish is
22 spotted, the vessel maneuvers into position and launches the stern-mounted skiff, which
23 drags the seine around the school of fish and back to the mother vessel. The purse line
24 of the seine is rapidly winched-in to close the bottom of the net, and the entire net is
25 brought in with a power block and winch. A successful set and haul usually takes from
26 30 to 90 minutes, depending on the size of the fish school, weather, and other factors.
27 With nets deployed, purse seiners are essentially dead in the water and drift with the
28 current. Purse seining would therefore be precluded from a triangle-shaped area up-
29 current of the CIV. Due to the highly mobile nature of this fishery and the limited Project
30 area, only minor inconveniences would be expected to occur during the cable
31 installation phase of the Project.

32 *Trap:* Both crab and lobster traps are expected in the nearshore (up to approximately
33 200 feet [61 m]), however hagfish traps could be located in substantially deeper water
34 within the Project area. A dive vessel with a two to four anchor spread would be onsite
35 at the conduit terminus area for approximately 30 to 45 days. Assuming a 6 to 1 anchor
36 scope in a water depth of 25 feet (8 m) at the conduit terminus, trapping operations
37 would be precluded from within the anchor spread radius of approximately 165 feet (50
38 m) around the vessels for the time period. Trap fishing for crab and lobster would also
39 be precluded from an area approximately 0.25 mile (0.44 km) down current of the work
40 vessel for several days while the replacement cables are floated in a controlled bundle

1 to be pulled through the conduit to shore. Due to the short duration (estimated to be 30
2 to 45 days) and the limited Project area, only minor inconveniences to the trap fishery
3 would occur. Hagfish trap fishing, if the fishery is active, would be affected by a smaller
4 area than the crab/lobster fishery as it is located in deeper water where vessel
5 anchoring is not proposed. The impact to the hagfish fishery is, therefore, also expected
6 to be minor. **MM CF-1** (above) would further minimize any impact.

7 **4.1.4 Mitigation Summary**

8 ExxonMobil has proposed to implement the following mitigation measures reduce the
9 potential for impacts to commercial fishing operations:

- 10 • MM CF-1: Commercial Fishery Constraints.
- 11 • MM TRANS-1: Notice to Mariners (see Section 3.17.3).
- 12 • MM TRANS-2: Vessel Traffic Corridors (see Section 3.17.3).
- 13 • MM MBIO-1b: Anchoring Plan (see Section 3.5.3).
- 14 • MM MBIO-3a: Cable Installation and Retrieval, MM MBIO-3b: Post-Project
15 Survey, and MM MBIO-3c: Post-Project Technical Report (see Section 3.5.3).

16 **4.2 ENVIRONMENTAL JUSTICE**

17 Platforms Heritage, Harmony, and Hondo are located within water depths of
18 approximately 842 to 1,198 feet at a distance of approximately 5.1 to 8.2 miles from the
19 nearest point of land along the coastline of Santa Barbara County (SBC), California.
20 Cables A (or B) and C1 (to be removed) and Cables A2 (or B2), F2, and G2 are located
21 within Federal and State waters en route to the Offshore Substation (OSS) located at
22 the LFCPF within Las Flores Canyon.

23 Personnel would be required to access the offshore Project site(s) from Port Hueneme
24 (Ventura County) and Ellwood Pier (SBC). As such, demographics for these onshore
25 communities have been discussed herein.

26 **4.2.1 Environmental Setting**

27 **Demographics.** As indicated in Table 4-4, a summary of the regional demography
28 within the Project onshore potentially affected areas (LFCPF) shows that in SBC, there
29 is an uneven distribution of white (non-minority) vs. minority populations (approximately
30 69.6 percent of white vs. 30.4 percent of minority populations). This number increases
31 for the City of Port Hueneme (approximately 56.9 percent of white vs. 43.1 percent of
32 minority populations).

33 Additionally, one feature of the U.S. Census data is important to note, because it
34 complicates the environmental justice analysis. Hispanic and Latino persons are
35 considered as minority persons, consistent with Federal and State environmental justice

1 policies. However, as characterized in the census data, Hispanic or Latino persons may
 2 also belong to any race (i.e., White, Black, Native American, or any other racial
 3 category). Because an unspecified percentage of Hispanic or Latino persons identify
 4 themselves as White, the census data do not include members of that group in the
 5 category of “ethnic minorities.” As a result, for a given population, the total percentage
 6 of persons belonging to “ethnic minorities” (as defined by census data) underestimates
 7 the actual percentage of minority community members. Since Hispanic and Latino
 8 persons represent a substantial portion of the minority communities in some parts of the
 9 onshore Project area considered; the percentage of each area’s population identifying
 10 themselves as Hispanic or Latino is summarized separately below.

11 Specifically, as shown within Table 4-4, approximately 42.9 percent of persons within
 12 the SBC onshore Project areas considered classify themselves as being of Hispanic or
 13 Latino decent. In Port Hueneme, approximately 52.3 percent (just over half) of persons
 14 classify themselves as being of Hispanic or Latino decent.

Table 4-4. U.S. Census Regional Demographic Comparison Table (2010)

County/City	Total Population	White	Ethnicity of Minority Population						Approx % of Minority Population	Persons of Hispanic or Latino Origin (From Total Population)
			Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Two Or More Races	Some Other Race		
Santa Barbara	423,895	69.6%	2.0%	1.3%	4.9%	0.2%	4.6%	17.4%	30.4%	42.9%
Ventura	823,318	68.7%	1.8%	1.0%	6.7%	0.2%	4.5%	17.0%	31.3%	40.3%
Port Hueneme	21,723	56.9%	5.1%	1.4%	6.0%	0.5%	6.1%	24.0%	43.1%	52.3%

Source: DP-1 Profile of General Population and Housing Characteristics, 2010. US Census, Factfinder, 2014.

15 **Socioeconomics.** As shown in Table 4-5 below, socioeconomic statistics regarding
 16 income and poverty levels from the City of Port Hueneme (Ventura County) northward
 17 to SBC as estimated by the U.S. Census Bureau during the 2010-2012 American
 18 Community Survey 3-Year Estimates are varied. The City of Port Hueneme has the
 19 lowest incomes; \$20,843 per capita, \$49,028 median household, and \$49,546 median
 20 family. The City of Port Hueneme has the highest percentage of individuals (20.9
 21 percent) and families (18.7 percent) below the established poverty level. This area is
 22 significantly worse than the County of Ventura as a whole, which has income levels of
 23 \$31,960 per capita, \$74,458 median household, and \$84,590 median family; and 11.1
 24 percent of individuals and 8.2 percent of families below the established poverty level.
 25 The SBC income is lower than the County of Ventura, but much higher than the City of
 26 Port Hueneme at \$29,238 per capita, \$61,351 median household, and \$71,077 median
 27 family; with 16.3 percent of individuals and 9.8 percent of families below poverty level.

Table 4-5. Socioeconomic Comparison of Affected Environment

County/City	Per Capita Income	Median Household Income	Median Family Income	Percentage of Individuals below Poverty Level	Percentage of Families Below Poverty Level
County of Santa Barbara	\$29,238	\$61,351	\$71,077	16.3%	9.8%
County of Ventura	\$31,960	\$74,458	\$84,590	11.1%	8.2%
City of Port Hueneme	\$20,843	\$49,028	\$49,546	20.9%	18.7%

Source: U.S. Census Bureau, 2010-2012 American Community Survey 3-Year Estimates (DP04 and DP05)

1 **4.2.2 Regulatory Setting**

2 A summary of State laws and regulations as applicable pertaining to the Project are
 3 identified in Table 4-6.

Table 4-6. Applicable State Laws, Regulations, and Policies

CA	Coastal Act Chapter 3 policies	<p>Coastal Act Chapter 3 policies applicable to this issue area are:</p> <ul style="list-style-type: none"> • Section 30234 states: Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry. • Section 30234.5 states: The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.
CA	Other	<ul style="list-style-type: none"> • California Commercial Fishing Laws and Licensing Requirements. Commercial fishing is regulated by a series of laws passed by the Fish and Game Commission and issued each year in a summary document. Seasonal and gear restrictions within the various CDFW Districts, licensing instructions and restrictions, and species-specific fishing requirements are provided in the document. Most of the MPAs have commercial fishing restrictions (based on the designation of each area), which are also listed in the summary document. • California Ocean Sport Fishing Regulations. Each year, the Fish and Game Commission issues regulations on the recreational fishing within the marine waters of the State, specifying the fishing season for species, size and bag limits, and gear restrictions, licensing requirements; a section on fishing restrictions within MPAs is also now included.

4 **4.2.2.1 CSLC Environmental Justice Policy**

5 Environmental justice is defined by California law as “the fair treatment of people of all
 6 races, cultures, and incomes with respect to the development, adoption,
 7 implementation, and enforcement of environmental laws, regulations, and policies”
 8 (Gov. Code § 65040.12, subd. (e)). This definition is consistent with the Public Trust
 9 Doctrine principle that the management of trust lands is for the benefit of all of the
 10 people. The CSLC adopted an environmental justice policy in October 2002 to ensure
 11 that environmental justice is an essential consideration in the agency’s processes,

1 decisions, and programs. Through its policy, CSLC reaffirms its commitment to an
2 informed and open process in which all people are treated equitably and with dignity,
3 and in which its decisions are tempered by environmental justice considerations. As part
4 of this policy, the CSLC pledges to continue and enhance its processes, decisions, and
5 programs with environmental justice as an essential consideration by:

- 6 • Identifying relevant populations that might be adversely affected by CSLC
7 programs or by projects submitted by outside parties for its consideration.
- 8 • Seeking out community groups and leaders to encourage communication and
9 collaboration with the CSLC and its staff.
- 10 • Distributing public information as broadly as possible and in multiple languages,
11 as needed, to encourage participation in the CSLC's public processes.
- 12 • Incorporating consultations with affected community groups and leaders while
13 preparing environmental analyses of projects submitted to the CSLC for its
14 consideration.
- 15 • Ensuring that public documents and notices relating to human health or
16 environmental issues are concise, understandable, and readily accessible to the
17 public, in multiple languages, as needed.
- 18 • Holding public meetings, public hearings, and public workshops at times and in
19 locations that encourage meaningful public involvement by members of the
20 affected communities.
- 21 • Educating present and future generations in all walks of life about public access
22 to lands and resources managed by the CSLC.
- 23 • Ensuring that a range of reasonable alternatives is identified when siting facilities
24 that may adversely affect relevant populations and identifying, for the CSLC's
25 consideration, those that would minimize or eliminate environmental impacts
26 affecting such populations.
- 27 • Working in conjunction with Federal, State, regional, and local agencies to
28 ensure consideration of disproportionate impacts on relevant populations, by
29 instant or cumulative environmental pollution or degradation.
- 30 • Fostering research and data collection to better define cumulative sources of
31 pollution, exposures, risks, and impacts.
- 32 • Providing appropriate training on environmental justice issues to staff and the
33 CSLC so that recognition and consideration of such issues are incorporated into
34 its daily activities.
- 35 • Reporting periodically to the CSLC on how environmental justice is a part of the
36 programs, processes, and activities conducted by the CSLC and by proposing
37 modifications as necessary.

1 4.2.3 Methodology

2 The CSLC Environmental Justice Policy does not specify a methodology for conducting
3 programmatic-level analysis of environmental justice issues. This analysis focuses
4 primarily on whether the Project's impacts have the potential to affect areas of high-
5 minority populations and/or low-income communities disproportionately and thus would
6 create an adverse environmental justice effect. For the purpose of the environmental
7 analysis, the Project's inconsistency with the CSLC's Environmental Justice Policy
8 would occur if the Project would:

- 9 • Have the potential to disproportionately affect minority and/or low-income
10 populations adversely; or
- 11 • Result in a substantial, disproportionate decrease in employment and economic
12 base of minority and/or low-income populations residing in immediately adjacent
13 communities.

14 4.2.4 Impact Analysis

15 **Communities of Concern Identified Within the Project Study Area.** Cable removal
16 and replacement activities would be located from just south of the LFCPF in SBC, within
17 the private property of the LFCPF and the beach area between Refugio and El Capitan
18 State Beaches, to offshore Platforms Harmony, Heritage, and Hondo. Cable removal
19 and replacement activities would occur over approximately 8 to 12 months. Of this
20 timeframe, offshore cable retrieval and installation would require approximately 1 to 2
21 months. Offshore removal or replacement of Cables A (or B) and C1 (to be removed)
22 and Cables A2 (or B2), F2, and G2 (to be replaced) will occur in Federal and State
23 waters and may be seen by recreational boaters or from adjacent onshore communities
24 or beach areas and U.S. 101 and Calle Real. Vessels and personnel for offshore work
25 will mobilize from Port Hueneme (County of Ventura) or Ellwood Pier (SBC).

26 Based upon Tables 4-4 and 4-5, none of the areas analyzed has a percentage of
27 minorities that exceed 50 percent (highest is Port Hueneme at 43.1 percent).
28 Additionally, none of the areas analyzed has a population below poverty level of over 50
29 percent, however the city of Port Hueneme has a population below poverty level above
30 that (20.9 percent) of their corresponding County (Ventura) percentage (11.1 percent).

31 4.2.4.1 Project Equipment Mobilization

32 Vessel mobilization for all Project phases would occur from Port Hueneme (Ventura
33 County) and/or Ellwood Pier (SBC), which are used primarily for commercial and oil and
34 gas purposes. As discussed in Section 3.16 (Transportation), vessel mobilization from
35 these ports would increase offshore vessel traffic and congestion. The increase in
36 vessel traffic during mobilization will be temporary and will remain in accordance with

1 existing uses through noticing (**MM TRANS-1: Notice to Mariners**) and use of vessel
2 traffic lanes en route to the Project site (**MMs TRANS-2: Vessel Traffic Corridors and**
3 **CF-1: Commercial Fishery Constraints**). Expenditures during mobilization would be
4 limited to equipment rental and food and lodging for construction personnel, and would
5 typically stay in the local economy. Onshore mobilization may require several days of
6 hotel stay for workers; however, the small increase in number of construction workers
7 during Project mobilization would not displace any residences, and would not
8 necessitate construction of additional housing. As such, short-term socioeconomic
9 effects of mobilization are expected to be minimal. Additionally, no disproportionate
10 impact to minority and low-income populations would result.

11 4.2.4.2 Cable Removal and Installation

12 As discussed within Section 4.1 above, Project activities could temporarily
13 (approximately 1 to 2 months) preclude some commercial and recreational fishing
14 opportunities within the Platform areas or cable corridors (and outside of the existing
15 approximately 1,600-foot [500-m] radius of the established USCG safety zone for the
16 Harmony and Heritage offshore oil and gas platforms).⁵ However, Project-incorporated
17 measures described in Section 4.2.5 (Project-Incorporated Measures) below; such as
18 communication with the local fishing community (**MM CF-1**) and publication of a local
19 Notice to Mariners (**MM TRANS-1**) would reduce those potential impacts to the extent
20 feasible. Following construction, the replacement cables would be subsurface, located
21 near previously used corridors, and no further preclusion would be required. No long-
22 term socioeconomic impacts to commercial fishing would result.

23 During construction, although some personnel will be housed on vessels, personnel
24 required for onshore work may temporarily reside within the SBC area. The addition of
25 these crew members for up to 12 months would contribute to a slight increase in
26 housing demand and local traffic within the respective local roadway systems and
27 communities. However, transportation impacts within SBC are not anticipated as this
28 area does not contain a high percentage (~30.4 percent) of minority persons.

29 4.2.5 Mitigation Summary

30 ExxonMobil has proposed to implement the following mitigation measures (see Sections
31 4.1, Commercial Fishing, and 3.17, Transportation, for further detail) which will also
32 reduce the potential for impacts to environmental justice populations:

- 33 • MM CF-1: Commercial Fishery Constraints.
- 34 • MM TRANS-1: Notice to Mariners (see Section 3.17.3).
- 35 • MM TRANS-2: Vessel Traffic Corridors (see Section 3.17.3).

⁵ In accordance with CFR 147.1114 (Platform Harmony) and CFR 147.1115 (Platform Heritage).