

1 4.2 COMMERCIAL FISHING

2 Commercial fishing activities occur in the immediate project vicinity and are perhaps
3 uniquely vulnerable to potential disruptions from project impacts when compared to
4 other employment and economic activities in or around the project area. Potential
5 commercial fishing impacts and recommendations for mitigation measures are
6 presented in this section.

7 4.2.1 Description of Resource/Environmental Setting

8 There are a variety of commercial fishing activities in the vicinity of the Proposed
9 Project. The major species typically caught in the area include lobster, crabs, mackerel,
10 prawns, sardines, and sea urchins. Lobster traps are set during a limited season that
11 runs from the first Wednesday in October through the first Wednesday after March 15
12 each year.

13 The CDFG keeps data on the quantity and value of various species caught by
14 commercial fishermen off the California coast (CDFG 1997). The data are collected by
15 designated blocks, commonly known as “fish blocks,” along the coast. For this EIR, the
16 fisheries data were also analyzed in conjunction with the potential Environmental
17 Justice socioeconomic effects on commercial fishermen in the project area. Please
18 refer to Section 4.11.2, Environmental Setting/Description of Resource, subheading
19 “Unique Socioeconomic Circumstances/Population: Commercial Fishing” for a
20 complete discussion of the fisheries data for Fish Block 756, which includes the
21 Proposed Project area, as well as a discussion of fishing issues specific to the
22 immediate project area and information on ports of landing for resources harvested from
23 the project area.

24 4.2.2 Regulatory Setting

25 The commercial fishing activities in the project vicinity occur within State waters and are
26 regulated primarily under the (California) Marine Life Management Act, a number of
27 specific State fishery management plans (including the Nearshore, Urchin, Squid, and
28 Herring fishery management plans, among others), the *CDFG Marine Region Fish and
29 Game Code*, the *California Code of Regulations (CCR) Title 14*, and associated
30 required permits and licenses. Individual commercially fished species may also be
31 subject to regulation under Federal fishery management plans or, as is the case for
32 halibut, international convention.

1 **4.2.3 Significance Criteria**

2 Impacts to commercial fishing activities could result from the degradation or loss of
3 habitat for commercial species, temporary loss of fishing area during disposition
4 operations due to the designation of exclusion areas, increased vessel traffic and/or
5 gear damage or loss from fouling during disposition operations; and/or exposure of
6 commercial species to toxic substances.

7 Significant adverse impacts to commercial fishing are defined as those that would:

- 8 • cause substantial losses of commercially fished species or their habitats;
- 9 • alter the habitat quality that would otherwise sustain and/or help to propagate
10 kelp growth (hard substrate and water column clarity);
- 11 • substantially interfere with commercial fishing in the disposition area for more
12 than 1 month during open fishing season(s);
- 13 • preclude setting lobster or fish traps within a substantial area where it would
14 otherwise be permitted;
- 15 • substantially increase the area of altered (un-fishable) seafloor beyond the
16 offshore outfall footprints for more than one season; or
- 17 • substantially increase the exposure of commercially fished species to toxic
18 substances.

19 **4.2.4 Impact Analysis and Mitigation**

20 The Proposed Project is located in an area utilized for commercial fishing. The highest
21 value fisheries in Fish Block 756, which encompasses the project area, include the
22 lobster, crab, mackerel, prawn, sardine, and sea urchin fisheries. As described in
23 Section 4.11.2, lobster is easily the most economically important fishery in the
24 immediate vicinity of the Proposed Project. Due to the nature of the proposed
25 operations, short-term restrictions on fishing activities would be required to protect the
26 commercial fishermen and their equipment from project activities. Other disruptions to
27 fishing could occur due to environmental disturbance. This section assesses the
28 current fishing activities in the area to determine if mitigation measures are required to
29 reduce impacts to such activities during operations. There would be no long-term
30 impacts of the Proposed Project on commercial fishing.

1 Potential impacts of the Proposed Project were evaluated in light of the goals of the
2 applicable governmental plans and policies and the significance criteria described
3 above.

4 **Impact FSH-1: Effects on Commercial Species or Loss of Habitat**

5 **The Proposed Project would not result in significant impacts to commercial**
6 **fishing through loss of commercial species or their habitat (Class III).**

7 Although the Proposed Project would temporarily preclude commercial fishing
8 (discussed separately below), it would not permanently alter the seafloor or destroy
9 habitat in the project area, with the following exception: to the extent that lobsters use
10 the terminal structures and associated riprap scheduled for removal as habitat, there
11 would be a minor long-term net loss of lobster habitat under the Proposed Project.
12 Once short-term activities were completed, the project site would be available for
13 commercial fishing. Although turbidity and silt deposition would occur in the immediate
14 project area, potentially interfering with fishing operations temporarily on a localized
15 basis, habitat quality would not be altered in the long term. No significant impacts
16 related to a loss of commercial species or their habitats would occur (Class III); no
17 mitigation is required.

18 **Impact FSH-2: Effects from Interference with Access to Established Fishing**
19 **Locations**

20 **The Proposed Project could substantially interfere with commercial fishing in the**
21 **affected area for more than 1 month during open fishing season(s) or preclude**
22 **setting lobster or fish traps within a substantial area where it would otherwise**
23 **be permitted (Class II).**

24 The offshore area is commonly used by lobster fishermen who set traps in the project
25 vicinity, and much less frequently by fishermen targeting other species, such as dive
26 operations for sea urchins or live trap fisheries for finfish. There would be short-term
27 disruptions to commercial lobster fishing over a period of approximately 4 months, with
28 the severity of the impact depending on the timing of the exclusion. The exclusion of
29 commercial fishermen from a proven fishing ground during the lobster season could
30 significantly impact the livelihood of individual fishermen if they did not have an
31 economically viable alternate site to fish during that period (Class II).

1 Mitigation Measure for Impact FSH-2: Effects from Interference with Access to
2 Established Fishing Locations

3 **MM FSH-2. Project Scheduling.** Schedule offshore project activities to begin
4 after the close of lobster season (the first Wednesday after March
5 15) and conclude 2 weeks prior to the opening of the subsequent
6 lobster season (the first Wednesday in October).

7 Rationale for Mitigation

8 It will be possible to minimize the impacts to commercial fishing, if not avoid them
9 altogether, by starting the offshore portion of the project immediately after the close of
10 lobster season in March and completing the offshore work at least 2 weeks prior to the
11 opening of the subsequent lobster season in October. In general, as shown in Table
12 4.11-2, the most productive portion of lobster season consists of the first few months at
13 the start of any given season. While lobster trapping can occur in very shallow water,
14 most trapping occurs well outside the surf zone. The more months of open season that
15 are avoided in the offshore area beyond the surf zone, the more effective the mitigation
16 will be. If project scheduling requires an overlap with an open lobster season, offshore
17 project activities should overlap with the end of one lobster season rather than the
18 beginning of the following season. For example, over the five fishing seasons from
19 October 1999 – March 2004, the month of October, on average, accounted for over 40
20 percent of total seasonal catch, while the month of March, on average, accounted for
21 less than 4 percent of total seasonal catch. Project activities that continue into the
22 beginning of a lobster season would result in maximum impacts to local commercial
23 fishermen, given that the last offshore stages of the Proposed Project would occur at
24 the offshore end of the conduits, because the project would affect the most productive
25 fishing area at the most productive time of the lobster season.

26 **Impact FSH-3: Effects of Toxic Substance Exposure on Commercially Fished**
27 **Species**

28 **No impacts resulting from toxic substance exposure are anticipated (Class III).**

29 The Proposed Project would not involve the use or transport of toxic substances. Oil
30 and fuel spill prevention plans and procedures have been incorporated into the project
31 design. No significant impacts from toxic substance exposure would occur (Class III),
32 and no mitigation measures are required.

33 Table 4.2-1 summarizes the commercial fishing impacts and mitigation measures.

1 **Table 4.2-1. Summary of Commercial Fishing Impacts and Mitigation Measures**

Impact	Mitigation Measures
FSH-1: Effects on commercial species or loss of habitat	No mitigation required
FSH-2: Effects from interference with access to established fishing locations	FSH-2. Schedule offshore project activities to begin after the close of lobster season (the first Wednesday after March 15) and conclude 2 weeks prior to the opening of the subsequent lobster season (the first Wednesday in October).
FSH-3: Effects of toxic substance exposure on commercially fished species	No mitigation required

2

3

4 **4.2.5 Impacts of Alternatives**

5 The potential impacts of alternatives were evaluated in light of the goals of the
6 applicable governmental plans and policies, and the significance thresholds defined in
7 Section 4.2.3.

8 **4.2.5.1 Complete Removal of Conduits Alternative**9 **Impact FSH-ALT-1: Effects on Commercial Species or Loss of Habitat**

10 **The complete removal alternative would not result in significant impacts to**
11 **commercial fishing through loss of commercial species or habitat (Class III).**

12 Although the Proposed Project would preclude commercial fishing during operations
13 under this alternative (as discussed separately below), this alternative, like the
14 Proposed Project, would not permanently alter the seafloor or destroy habitat in the
15 project area, with the following exceptions: (1) to the extent that lobsters use the
16 terminal structures and associated riprap scheduled for removal as habitat, there would
17 be a minor long-term net loss of lobster habitat under this alternative; and (2) the burial
18 of surfgrass habitat and hardbottom substrate in the nearshore portions of the conduit
19 footprint. Once temporary disposition activities were completed, the project site would
20 be available for commercial fishing. Although turbidity and silt deposition would occur in
21 the immediate area during disposition, potentially interfering with fishing operations
22 temporarily on a localized basis, habitat quality would not be altered in the long term
23 except in the nearshore areas where little or no commercial fishing takes place in the
24 shallow waters within or just outside of the surf zone. No significant impacts to
25 commercial fishing related to a loss of commercial species or their habitats would occur
26 (Class III); no mitigation would be required.

1 **Impact FSH-ALT-2: Effects from Interference with Access to Established Fishing**
2 **Locations**

3 **The complete removal alternative could substantially interfere with commercial**
4 **fishing in the disposition area for more than 1 month during open fishing**
5 **season(s) or preclude setting lobster or fish traps within a substantial area**
6 **where it would otherwise be permitted (Class II).**

7 Effects from restricting access for commercial fishing under the Complete Removal
8 Alternative would be similar in nature to impacts associated with Proposed Project;
9 however, the longer project duration would increase the chances of interfering with local
10 fishing efforts, depending on the timing of project activities. Beyond exclusion of fishing
11 effort in a safety zone around offshore project activities, this alternative would create
12 more turbidity and sedimentation through more intense bottom disturbance over a
13 greater area that could interfere with lobster fishing by disrupting lobster behavior and
14 habitat. Given that substantial interference with commercial fishing for more than
15 1 month in the disposition area would be considered a significant impact, the complete
16 removal alternative would have significant impacts on commercial fishing given the
17 12-month duration of this alternative (Class II).

18 Mitigation Measure for Impact FSH-ALT-2: Effects from Interference with Access to
19 Established Fishing Locations

20 MM FSH-2 would apply to this impact.

21 Rationale for Mitigation

22 It would be possible to minimize the impacts to commercial fishing, if not avoid them
23 altogether, by starting the project immediately after the close of lobster season in March
24 and completing the work in deeper waters prior to the reopening of lobster season in
25 October. As this alternative requires that work commence at the terminals and progress
26 shoreward, this may result in having the work out of the more productive commercial
27 lobster trapping area and into more shallow waters before the lobster season reopens.
28 In general, as shown in Table 4.11-2, the most productive portion of lobster season
29 consists of the first few months at the start of any given season. While lobster trapping
30 can occur in very shallow water, most trapping occurs well outside the surf zone. The
31 more months of open season that are avoided in the offshore area beyond the surf
32 zone, the more effective the mitigation will be. If project scheduling requires an overlap
33 with an open lobster season, offshore project activities should overlap with the end of
34 one lobster season rather than the beginning of the following season. Project schedule

1 slippage resulting in activities continuing in deeper water offshore through the beginning
2 of a lobster season would result in maximum impacts to local commercial fishermen,
3 because the project would affect the most productive fishing area at the most productive
4 time of the season.

5 **Impact FSH-ALT-3: Effects of Toxic Substance Exposure on Commercially**
6 **Fished Species**

7 **No impacts resulting from toxic substance exposure are anticipated (Class III).**

8 The effects of toxic substance exposure for this alternative would be the same as for the
9 Proposed Project. This alternative would not involve the use or transport of toxic
10 substances. Oil and fuel spill prevention plans and procedures have been incorporated
11 into the project design. No significant impacts from toxic substance exposure would
12 occur (Class III), and no mitigation measures are required.

13 **4.2.5.2 Removal of Nearshore Components Alternative**

14 **Impact FSH-ALT-4: Effects on Commercial Species and Habitat Loss**

15 **This alternative would not result in significant impacts to commercial fishing**
16 **through loss of commercial species or habitat (Class III).**

17 Offshore lobster habitat utilized by commercial fishermen would not be altered from
18 existing conditions as the offshore terminal structures and associated riprap would be
19 left in place. If the subalternative that removes all vertical structures consistent with the
20 Proposed Project were adopted, this alternative would be similar to the Proposed
21 Project in terms of offshore habitat loss. To the extent that lobsters use the terminal
22 structures and associated riprap scheduled for removal as habitat, there would be a
23 minor long-term net loss of lobster habitat under this alternative (Class III). Loss of
24 some nearshore habitat would occur with the burial of surfgrass habitat and hardbottom
25 substrate in the nearshore portions of the conduit footprint, similar to conditions seen
26 under the Complete Removal of Conduits Alternative. Once temporary disposition
27 activities were completed, the project site would be available for commercial fishing.
28 Although turbidity and silt deposition would occur in the immediate area during
29 disposition, potentially interfering with fishing operations temporarily on a localized
30 basis, habitat quality would not be altered in the long term except in the nearshore
31 areas where little or no commercial fishing takes place in the shallow waters within or
32 just outside of the surf zone. No significant impacts to commercial fishing related to a
33 loss of commercial species or their habitats would occur (Class III); no mitigation would
34 be required.

1 **Impact FSH-ALT-5: Effects from Interference With Access to Established Fishing**
2 **Locations**

3 **This alternative may substantially interfere with commercial fishing in the project**
4 **area for more than 1 month during open fishing season(s) or preclude setting**
5 **lobster or fish traps within a substantial area where it would otherwise be**
6 **permitted, depending on the subalternative selected (Class II).**

7 This alternative would have no significant impacts on local commercial fishing if the
8 project were confined to only removing the nearshore components (those within 300
9 feet [91 m] of the shore), as relatively little or no fishing takes place in very shallow
10 water within or just outside the surf zone (Class III). If the subalternative that removes
11 all vertical structures was adopted, however, impacts to commercial fishing could occur
12 if this offshore work was initiated prior to the close of lobster season (the first
13 Wednesday after March 15) and/or if it were not concluded at least 2 weeks prior to the
14 opening of the subsequent lobster season (the first Wednesday in October) (Class II).

15 Mitigation Measure for Impact FSH-ALT-5: Effects from Interference With Access to
16 Established Fishing Locations

17 MM FSH-2 would apply to this impact.

18 **Impact FSH-ALT-6: Effects of Toxic Substance Exposure on Commercially**
19 **Fished Species**

20 **No impacts resulting from toxic substance exposure are anticipated (Class III).**

21 The effects of toxic substance exposure for this alternative would be the same as for the
22 Proposed Project. This alternative would not involve the use or transport of toxic
23 substances. Oil and fuel spill prevention plans and procedures have been incorporated
24 into the project design. No significant impacts from toxic substance exposure would
25 occur (Class III), and no mitigation measures are required.

26 **4.2.5.3 Crush Conduits and Remove Terminal Structures Alternative**

27 **Impact FSH-ALT-7: Effects on Commercial Species or Loss of Habitat**

28 **This alternative would not result in significant impacts to commercial fishing**
29 **through loss of commercial species or habitat (Class III).**

30 The impacts to commercial species or loss of offshore habitat under this alternative
31 would be similar to those experienced under the Proposed Project. To the extent that

1 lobsters use the terminal structures and associated riprap scheduled for removal as
2 habitat, there would be a minor long-term net loss of lobster habitat (Class III). Loss of
3 some nearshore habitat would occur with the burial of surfgrass habitat and hardbottom
4 substrate in the nearshore portions of the conduit footprint, similar to conditions seen
5 under the Complete Removal of Conduits Alternative. Once temporary disposition
6 activities were completed, the project site would be available for commercial fishing.
7 Although turbidity and silt deposition would occur in the immediate area during
8 disposition, potentially interfering with fishing operations temporarily on a localized
9 basis, habitat quality would not be altered in the long term except in the nearshore
10 areas where little or no commercial fishing takes place in the shallow waters within or
11 just outside of the surf zone. No significant impacts to commercial fishing related to a
12 loss of commercial species or their habitats would occur (Class III); no mitigation is
13 required.

14 **Impact FSH-ALT-8: Effects from Interference With Access to Established Fishing**
15 **Locations**

16 **This alternative could substantially interfere with commercial fishing in the**
17 **project area for more than 1 month during open fishing season(s) or preclude**
18 **setting lobster or fish traps within a substantial area where it would otherwise be**
19 **permitted (Class II).**

20 Effects from restricting access under this alternative would be similar in nature to the
21 effects seen under the Complete Removal Alternative, although the project schedule is
22 somewhat shorter (9 vs. 12 months). The duration of activities under this alternative
23 would likely interfere with local fishing efforts, depending on the timing of project
24 activities. Given that substantial interference with commercial fishing for more than
25 1 month in the disposition area would be considered a significant impact (Section 4.2),
26 avoiding significant impacts to commercial fishermen would be difficult given the
27 duration of this alternative (Class II).

28 Mitigation Measure for Impact FSH-ALT-8: Effects from Interference With Access to
29 Established Fishing Locations

30 MM FSH-2 would apply to this impact.

31 **Impact FSH-ALT-9: Effects of Toxic Substance Exposure on Commercially**
32 **Fished Species**

33 **No impacts resulting from toxic substance exposure are anticipated (Class III).**

1 The effects of toxic substance exposure for this alternative would be the same as for the
2 Proposed Project. This alternative would not involve the use or transport of toxic
3 substances. Oil and fuel spill prevention plans and procedures have been incorporated
4 into the project design. No significant impacts from toxic substance exposure would
5 occur (Class III), and no mitigation measures would be required.

6 **4.2.5.4 Artificial Reef Alternative**

7 **Impact FSH-ALT-10: Effects on Commercial Species or Loss of Habitat**

8 **This alternative would not result in significant impacts to commercial fishing**
9 **through loss of commercial species or habitat (Class IV).**

10 The Artificial Reef Alternative would create an artificial reef by retaining the concrete
11 removed from the terminal structures on the seafloor. This alternative would have no
12 long-term, adverse impacts on commercial species or habitat loss. The creation of the
13 reef under this alternative would enhance fishing in the area by increasing habitat for
14 fish and invertebrate species. This would enhance local commercial fishing over the
15 long term. There would be positive, if minor, beneficial effects associated with the
16 creation of the artificial reef under this alternative (Class IV).

17 **Impact FSH-ALT-11: Effects from Interference With Access to Established** 18 **Fishing Locations**

19 **The artificial reef alternative could substantially interfere with commercial fishing**
20 **in the disposition area for more than 1 month during open fishing season(s) or**
21 **preclude setting lobster or fish traps within a substantial area where it would**
22 **otherwise be permitted (Class II).**

23 This alternative would be similar to the Proposed Project, but would have a shorter
24 duration of impact in the offshore area (6 weeks vs. 4 months). Depending on project
25 timing, interference with commercial fishing could result in significant impacts (Class II).

26 Mitigation Measure for Impact FSH-ALT-11: Effects from Interference With Access to 27 Established Fishing Locations

28 MM FSH-2 would apply to this impact.

1 **Impact FSH-ALT-12: Effects of Toxic Substance Exposure on Commercially**
2 **Fished Species**

3 **No impacts resulting from toxic substance exposure are anticipated (Class III).**

4 The effects of toxic substance exposure for this alternative would be the same as for the
5 Proposed Project. This alternative would not involve the use or transport of toxic
6 substances. Oil and fuel spill prevention plans and procedures have been incorporated
7 into the project design. No significant impacts from toxic substance exposure would
8 occur (Class III), and no mitigation measures are required.

9 **4.2.5.5 No Project Alternative**

10 The No Project Alternative would retain the terminal structures and marker buoys in
11 place. Commercial fishing activities would continue as under existing conditions,
12 resulting in no significant impacts (Class III).

13 **4.2.6 Cumulative Projects Impact Analysis**

14 None of the other cumulative projects identified in Section 4.0 would have offshore
15 activities that would restrict commercial fishing activities; therefore, no cumulative
16 effects on commercial fishing would result from the implementation of the Proposed
17 Project.

18 **4.2.7 References**

19 California Department of Fish and Game. 2004. Personal Communication. 10/22/04
20 and 10/27/04. Data for San Diego area port landings, 1997-2003, Los Angeles
21 area port landings, 1997-2003, and Fish Block 756 harvest data, 1997-2003,
22 provided electronically by Jana Robertson, Management Services Technician,
23 Marine Fisheries Statistical Unit to Mike Downs

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