APPENDIX D-3

Essential Fish Habitat Assessment

ESSENTIAL FISH HABITAT ASSESSMENT

AT&T DECOMMISSIONING OF SEGMENTS 8 AND 9 OF THE JAPAN-U.S. CABLE NETWORK MORRO BAY TO MANCHESTER, CALIFORNIA

Project No. 2302-1441

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1.0 INTRODUCTION

In support of a permit application to the U.S. Army Corps of Engineers (ACOE), Los Angeles District, and to satisfy the requirements of Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act, the following Assessment of potential impacts to Essential Fish Habitat (EFH) has been prepared. This EFH assessment has been prepared on behalf of AT&T Enterprises, LLC (AT&T) (Applicant) in support of the Japan-U.S. (JUS) Cable Network Decommissioning Project (Project). This Assessment is prepared in accordance with 50 Code of Federal Regulations (CFR) 600.920(g)(2) and addresses the managed fish and invertebrate taxa that could occur at the Project site.

EFH is defined as "…those waters and substrate necessary for fish spawning, breeding, feeding, or growth to maturity." "Waters," as used in this definition, are defined to include "aquatic areas and their associated physical, chemical, and biological properties that are used by fish." These may include "…areas historically used by fish where appropriate; 'substrate' to include sediment, hard bottom, structures underlying the waters, and associated biological communities." "Necessary" means, "the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem." EFH is described as a subset of all habitats occupied by a species (NOAA, 1998).

1.1 PROPOSED ACTION

The proposed Project is the removal, to the extent feasible, of the JUS Segments 8 and 9 (S8 and S9) cable segments from their U.S. shore landings out to the end of their burial depth at the 1,000-fathom contour (approximately 1,800 meters or 6,000 feet) in accordance with the out of service cable conditions, and then the termination of leases PRC 8203.1 and PRC 8204.1. The Project involves the removal of approximately 42.9 miles (mi) (69 kilometers [km]) of the S8 cable and 80.8 mi (130 km) of the S9 cable. In addition, the S9 cable would be removed from its subterranean conduit (bore pipe) at its shore landing (Morro Bay Lease Area), but the conduits themselves would be left in place at both shore landings.

1.2 PROJECT DESCRIPTION

AT&T Corp (AT&T) is proposing to decommission the S8 and S9 cables of the submarine fiber optic cable system associated with the California State Lands Commission (CSLC) Lease PRC 8203.1 (Japan – U.S. lease at Manchester State Beach, Mendocino County), and Lease PRC 8204.1 (Japan – U.S. lease at Morro Bay, San Luis Obispo County) (Project). The cable system was installed in accordance with the Project's Initial Study/Mitigated Negative Declaration (IS/MND), which was prepared by the CSLC and adopted in 2000 (State Clearinghouse No. 2000031062).

The 15-year leases are both set to expire on June 30, 2025. In support of AT&T's intent to terminate (non-renewal) its leases and in accordance with lease conditions and IS/MND mitigation measures, the following Project Description has been prepared to address removal of S8 and S9 cables.

1.3 PROJECT LOCATIONS

The Project areas are located offshore Mendocino and San Luis Obispo Counties (Project areas) (Figure 1-1): The full S9 cable segment runs offshore of the California coast between two shore landings in Montaña de Oro State Park, San Luis Obispo County and Manchester State Park, Mendocino County, and the full S8 cable segment runs between Manchester State Park and Japan.

1.3.1 Montaña de Oro State Park, San Luis Obispo County

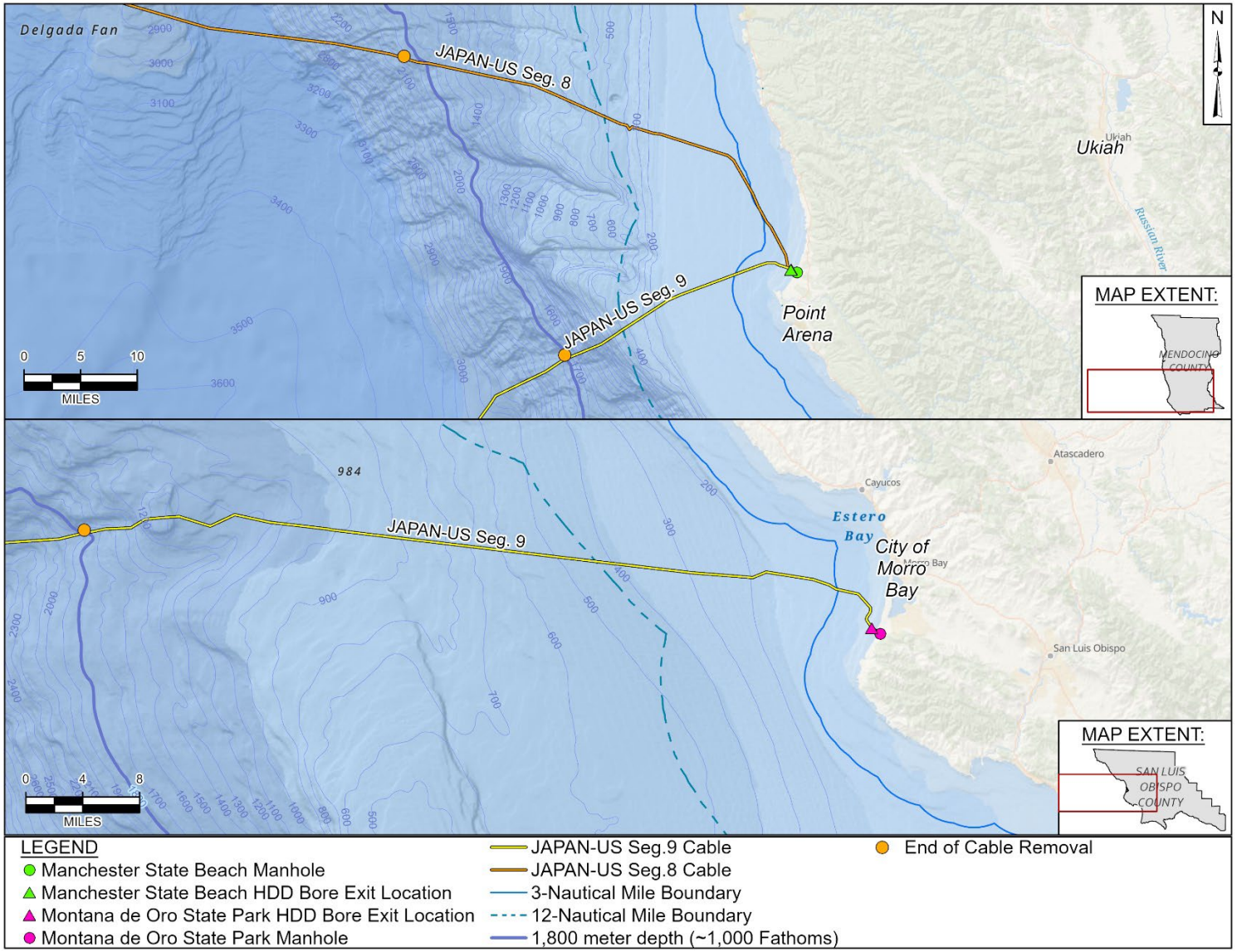
The JUS S9 segment to be removed offshore Montaña de Oro State Park is approximately 58.7-mi (94.5 km) long. The cable comes to shore via a horizontal directional drill (HDD) bore pipe that extends underground between a utility hole at the Sandspit parking lot at the State Park to an exit point approximately 0.5 mi (0.8 km) offshore. The cable runs through the conduit and out to a depth of 1,000 fathoms, then bends north where it connects to the AT&T cable station in Manchester State Park. At approximately 9.0 mi (14.5 km) offshore, a section of the S9 cable runs underneath the in-service Bifrost and Global West cables. To prevent interaction with the crossed cables, international cable regulations require this segment cannot be removed, which would leave 5,712 feet (ft) (1,741 meters [m]) of the S9 cable segment in place on the seafloor.

1.3.2 Manchester State Park, Mendocino County

The S8 cable originates from a utility hole located in an AT&T cable station within the Manchester State Park in Mendocino County. From the utility hole, the cable travels west within a subterranean conduit to where HDD bore exit is located, approximately 3,200 ft (975 m) offshore. From the HDD bore exit, the cable continues west through State Waters and into Federal and international waters until it makes landfall in Japan. A 42.9 mi (69 km) portion of the S8 cable was buried in the seafloor in State and federal waters out to a depth of 1,000 fathoms (6,000 ft; 1,829 m). This segment will be removed as part of the Project.

The S9 cable originates in the same cable station utility hole within Manchester State Park and parallels the S8 cable through a subterranean conduit to where the HDD bore exit is located, approximately 3,200 ft (975 m) offshore. From this point, the S8 and S9 cables diverge, and an approximately 22.4-mi (36 km) section of the Manchester S9 cable was buried in the seafloor through State waters and into Federal waters. At this point, the cable turns southeast toward the shore landing at Montaña de Oro State Park, San Luis Obispo County.

Figure 1-1. Project Location Overview



1.3.3 Marine Protected Areas and National Marine Sanctuaries

The S9 cable is routed through State Marine Protected Areas (MPA) and Federally managed National Marine Sanctuaries (NMS). Within the northern reaches of the Project area, the S9 cable traverses the Point Arena MPA State Marine Conservation Area, which has a total area of approximately 6.7 square miles. The cable bisects the MPA for approximately 4.3 miles through to its westernmost extent (3-nm State waters boundary) before the cable continues west toward the outer continental shelf.

The Greater Farallon NMS encompasses approximately 3,295 square miles of ocean between Point Arena and San Francisco. The S8 and S9 cable bisects the Greater Farallon NMS for approximately 1.7 miles and 32.5 miles, respectively, as they traverse west from the HDD Bore Exit past the 1,000-fathom depth contour offshore Manchester. A total of 1.7 miles of S8 cable and 22.6 miles of S9 cable will be removed from the Greater Farallon NMS.

The Monterey Bay NMS is approximately 6,094 square miles and stretches along the California coastline from Marin to Cambria with an additional protected area located offshore in the Davidson Seamount. The S9 cable traverses the northeastern corner of the Monterey Bay NMS within the Davidson Seamount for approximately 8.0 miles as the cable navigates south toward Morro Bay. The S9 cable would be left in place in the Davidson Seamount area of Monterey Bay NMS.

1.4 WORK AREAS

1.4.1 Montaña de Oro S9 Cable Alignment

Project activities for the Montaña de Oro S9 Cable Alignment will include work in onshore, nearshore, and offshore areas. The Montaña de Oro onshore work will be limited to the cable vault and utility hole within a parking lot in Montaña del Oro State Park. Diver-assisted cable removal activities would occur in the nearshore work areas. The nearshore work area would begin in water depths of 31 ft (9.1 m) depths. Offshore activities would occur west of the nearshore work areas out to 1,000 fathoms. All work activities will occur within the 328 ft (100 m) corridor along the S9 cable alignment.

1.4.2 Manchester S8 and S9 Cable Alignments

Project activities for the Manchester S8 and S9 Cable Alignments will include work in nearshore and offshore areas. No onshore work is proposed as part of the Project. Diver-assisted cable removal activities would occur in the nearshore work areas. The Manchester nearshore work area would begin in water depths of approximately 59 ft (18 m). Offshore activities would occur west of the nearshore work areas out to 1,000 fathoms. All work activities will occur within the 328 ft (100 m) corridor along the S8 and S9 cable alignments.

2.0 SITE CHARACTERISTICS

The Project area consists of benthic and open water habitats along the cables' routes from Manchester to Japan (S8) and Manchester to Montaña de Oro (S9). The Manchester nearshore work area would begin in water depths of approximately 59 ft (18 m), and the Montaña de Oro nearshore work area would be in water depths of 31 ft (9.1 m) depths for nearshore work. All in water work activities will occur within the 328 ft (100 m) corridor where work will occur within the S8 and S9 cable alignments. In 2015, remote operated vehicle (ROV) burial verification surveys conducted of the laid cable S8 and S9 alignments from the bore hole exits out to water depths of 6,069 ft (1,850 m) (Global Marine, 2015a, 2015b, 2015c). These surveys were used to characterize the site conditions within the Project area.

Offshore Manchester State Beach, the nearshore segments of the S8 and S9 cables are buried in the soft sand sediments. Seafloor conditions were reported as largely flat and featureless sand/silt with a gentle slope and predominately sand with small ripples (Global Marine, 2015a). In deeper portions of the Manchester S9 alignment, more instances of rocks and boulder fields were observed. In areas of rock, the cable remains exposed and has been colonized by soft invertebrate marine growth. Abandoned fishing gear was observed on spanning cable line in an area of rock approximately 7.0 feet high.

Offshore Montaña de Oro and along the southern portion of the S9 route, the seabed appears to be soft sand with areas of small pebbles and shells near the bore pipe exit and mixed sandy patches interspersed with rocky outcrops near shore. In rocky reef areas, the cable was laid over the rocks and exposed seven times for distances ranging from 32 to 288 ft (10 m to 88 m). Farther offshore and outside of the rocky outcrops, the seafloor returns to sandy substrates and is buried 15 to 62 inches (40 to 160 centimeters).

3.0 MANAGED SPECIES OF INTEREST

The National Marine Fisheries Service (NMFS) EFH online mapper was utilized to identify which management units are located within the Project area (NMFS, 2023). Species distribution and habitat information was used to develop Table 3-1 which lists the managed species that could occur within the geographical region, water depth range**,** and habitat types found within the Project area (McCain et al., 2019, PFMC 2021 and 2023).

The Pacific Fishery Management Council (PFMC) manages 90 species of fish under four Fishery Management Plans: 1) Coastal Pelagics Fishery Management Plan (CPFMP); 2) Pacific Salmon Fishery Management Plan; 3) Pacific Groundfish Fishery Management Plan (PGFMP); and 4) Highly Migratory Species Management Plan (HMSMP). A list of managed species that could be found during all or part of their life cycle within the Project areas is provided in Table 3-1.

3.1 MONTAÑA DE ORO

At least 12 species under the CPFMP, 73 species under PGFMP and seven species under the HMSMP could occur within water depths range of the Project area off the coast Montaña de Oro and could be present during some life stages within the Project area. Regional characteristics yield several areas of permanent refuge and cover (i.e., kelp canopy and rocky reefs); therefore, groundfish managed species within the Project area may be transient, utilizing the habitat in the Project area as foraging grounds or a refuge structure. Coastal pelagic fin fish may utilize the area for spawning when sea surface temperatures are between 57- and 60-degrees Fahrenheit (°F) (14 to 16 degrees Celsius) (PFMC, 2021). Lastly, Highly Migratory Species utilized the epipelagic, oceanic, and mesopelagic waters from water depths of 100 fathoms out to the Exclusive Economic Zone.

3.2 MANCHESTER

At least 12 species under the CPFMP, 70 species under PGFMP and eight species under the HMSMP could occur within water depths range of the Project area off the coast Manchester and could be present during some life stages within the Project area. As described above, regional characteristics yield areas of permanent refuge and cover (i.e., kelp canopy and rocky reefs); therefore, groundfish managed species within the Project site may be transient, utilizing the Project outfall as foraging grounds or a refuge structure. Coastal pelagic fin fish may utilize the area for spawning when sea surface temperatures are between 57- and 60-degrees Fahrenheit (°F) (14 to 16 degrees Celsius) (PFMC, 2021). Lastly, Highly Migratory Species utilized the epipelagic, oceanic, and mesopelagic waters from water depths of 100 fathoms out to the Exclusive Economic Zone.

Table 3-1. Fish Species Managed Under Pacific Fishery Management Plans in the Project Areas

Management Plan	Common Name	Scientific Name	MDO	Manchester
Managed under CPFMP	Krill	*Thysanoessa spinifera*	x	*x*
		Euphausia pacifica	*x*	*x*

Management Plan	Common Name	Scientific Name	MDO	Manchester
		Nyctiphanes simplex	*x*	*x*
		Nematocelis difficilis	*x*	*x*
		Thyanoessa gregaria	*x*	*x*
		Euphausia recurva	*x*	*x*
		Euphausia gibboides	*x*	*x*
		Euphausia eximia	*x*	*x*
	Jack mackerel	*Trachurus symmetricus*	*x*	*x*
	Pacific (chub) mackerel	*Scomber japonicus*	*x*	*x*
	Market squid	*Doryteuthis opalescens*		
	Northern anchovy	*Engraulis mordax*	*x*	*x*
	Pacific sardine	*Sardinops sagax*	*x*	*x*
	Total		**12**	**12**
Managed under PGFMP	Aurora	*Seabstes aurora*	*x*	*x*
	Bank	*Sebastes rufus*	*x*	*x*
	Big skate	*Beringraja (Raja) binoculata*	*x*	*x*
	Black rockfish	*Sebastes melanops*	*x*	*x*
	Black-and-yellow rockfish	*Sebastes chrysomelas*	*x*	*x*
	Blackgill	*Sebastes melanostomus*	*x*	*x*
	Blue	*Sebastes mystinus*	*x*	*x*
	Bocaccio	*Sebastes paucispinis*	*x*	*x*
	Bronzespotted	*Sebastes gilli*	*x*	*x*
	Brown rockfish	*Sebastes auriculatus*	*x*	*x*
	Butter sole	*Isopsetta isolepis*	*x*	*x*
	Cabezon	*Scorpaenichthys marmoratus*	*x*	*x*
	Calico rockfish	*Sebastes dallii*	*x*	
	California scorpionfish	*Scorpaena guttata*	*x*	
	Canary rockfish	*Sebastes pinniger*	*x*	*x*
	Chilipepper	*Sebastes goodei*	*x*	*x*
	China Rockfish	*Sebastes nebulosus*	*x*	*x*
	Copper rockfish	*Sebastes caurinus*	*x*	*x*
	Cowcod	*Sebastes levis*	*x*	*x*
	Curlfin sole	*Pleuronichthys decurrens*	*x*	*x*
	Darkblotched rockfish	*Sebastes crameri*	*x*	*x*
	Dover sole	*Microstomus pacificus*	*x*	*x*
	English sole	*Parophrys vetulus*	*x*	*x*
	Flag rockfish	*Sebastes rubrivinctus*	*x*	*x*
	Flathead sole	*Hippoglossoides elassodon*	*x*	*x*

Management Plan	Common Name	Scientific Name	MDO	Manchester
	Gopher rockfish	*Sebastes carnatus*	x	x
	Grass rockfish	*Sebastes rastrelliger*	x	x
	Greenblotched	*Sebastes rosenblatti*	x	x
	Greenspotted	*Sebastes chlorostictus*	x	x
	Greenstriped	*Sebastes elongatus*	x	x
	Honeycomb	*Sebastes umbrosus*	x	x
	Kelp greenling	*Hexagrammos decagrammus*	x	x
	Kelp rockfish	*Sebastes atrovirens*	x	x
	Leopard shark	*Triakis semifasciata*	x	x
	Lingcod	*Ophiodon elongates*	x	x
	Longnose skate	*Raja rhina*	x	x
	Mexican	*Sebastes macdonaldi*	x	x
	Olive rockfish	*Sebastes serranoides*	x	x
	Pacific cod	*Gadus macrocephalus*	x	x
	Pacific hake	*Merluccius productus*	x	x
	Pacific ocean perch	*Sebastes alutus*	x	x
	Pacific sanddab	*Citharichthys sordidus*	x	x
	Petrale sole	*Eopsetta jordani*	x	x
	Pink rockfish	*Sebastes eos*	x	x
	Quillback rockfish	*Sebastes malinger*	x	x
	Redbanded rockfish	*Sebastes babcocki*	x	x
	Redstriped rockfish	*Sebastes proriger*	x	x
	Rex sole	*Glyptocephalus zachirus*	x	x
	Rock sole	*Lipidopsetta bilineata*	x	x
	Rosethorn	*Sebastes helvomaculatus*	x	x
	Rosy rockfish	*Sebastes rosaceus*	x	x
	Rougheye	*Sebastes aleutianus*	x	x
	Sablefish	*Anoplopoma fimbria*	x	x
	Sand sole	*Pegusa lascaris*	x	x
	Sharpchin	*Sebastes zacentrus*	x	x
	Shortbelly	*Sebastes jordani*	x	x
	Shortracker rockfish	*Sebastes borealis*	x	x
	Shortspine Thornyhead rockfish	*Sebastolobus alascanus*	x	x
	Silvergray rockfish	*Sebastes brevispinis*	x	x
	Speckled rockfish	*Sebastes ovalis*	x	x
	Spiny dogfish	*Squalus suckleyi*	x	x
	Splitnose rockfish	*Sebastes diploproa*	x	x
	Squarespot rockfish	*Sebastes hopkinsi*	x	x
	Starry flounder	*Platichthys stellatus*	x	x

Management Plan	Common Name	Scientific Name	MDO	Manchester
	Stripetail rockfish	*Sebastes saxicola*	*x*	*x*
	Tiger rockfish	*Sebastes nigrocinctus*	*x*	*x*
	Treefish	*Sebastes serriseps*	*x*	
	Vermilion rockfish	*Sebastes miniatus*	*x*	*x*
	Widow rockfish	*Sebastes entomelas*	*x*	*x*
	Yelloweye rockfish	*Sebastes ruberrimus*	*x*	*x*
	Yellowmouth rockfish	*Sebastes reedi*	*x*	*x*
	Yellowtail rockfish	*Sebastes flavidus*	*x*	*x*
	Total		**73**	**70**
HMSMP	Albacore Tuna	*Thunnus alalunga*	*x*	*x*
	Bigeye Tuna	*Thunnus obesus*	*x*	*x*
	Blue Shark	*Prionace glauca*	*x*	*x*
	Broadbill Swordfish	*Xiphias gladius*	*x*	*x*
	Common Thresher Shark	*Alopias vulpinus*	*x*	*x*
	Northern Bluefin Tuna	*Thunnus thynnus*	x	*x*
	Shortfin Mako Shark	*Isurus oxyrinchus*	x	*x*
	Skipjack Tuna	*Katsuwonus pelamis*		*x*
	Total		**7**	**8**

4.0 EFFECTS DETERMINATION

The Japan-U.S. Cable Network was originally installed along a route that was pre-determined to primarily consist of sand and soft substrates to allow for maximum burial of the cable segments and avoid impacts to sensitive habitats and Habitat Areas of Particular Concern (HAPC). Seafloor conditions along the cable segments were reported as largely flat and featureless sand/silt with a gentle slope and predominately sand with small ripples. Occasionally, the cable was laid across areas of boulders and rocky reef, particularly along the Morro Bay portion of segment S9. In areas of exposure, the cable was found colonized by invertebrate epifauna and occasionally spanning over rocks or sand trenches (Global Marine 2015a, 2015b, 2015c).

Potential underwater activities and vessel operations associated with removal of cables that have the potential to affect groundfish, coastal pelagic, and highlight migratory species EFH. Project activities that would affect EFH include temporary activities such as anchoring, underwater cutting, hand jetting, and recovering cables to the Project vessel. Table 4-1 provides an estimate of the temporary disturbance footprints for both Project areas.

Table 4-1. Estimated Temporary Impact Footprints

Project Area	Length (ft)	Width (ft)	Average Burial Depth (ft)	Maximum Excavation Area (acres)	Maximum Excavation Volume (cubic yards)
Montana de Oro (Segment 9)					
Nearshore	98.4	16.4	1.5	0.04	90
Offshore	291,456	0.5	3.25	3.35	17,541
			subtotal	3.38	17,631
Manchester (Segments 8 and 9)					
Nearshore	196.8	16.4	1.5	0.08	180
Offshore	361,680	0.5	3.25	4.0	21,768
			subtotal	4.08	21,948
			Total	7.46	39,579

Effects to water quality would be temporary and minimal. Resuspended sediments disturbed during cable removal are expected to settle quickly to the seafloor after disturbance. No long-term water column turbidity is expected. Anchoring activities would disturb areas of soft substrates but would avoid anchoring on any sensitive habitats or HAPC (see Section 5.1 for impact avoidance measure). Indirect effects from potential oil spills could degrade water quality and impact managed species and habitat (see Section 5.2 for impact avoidance measure).

Minor and temporary loss of foraging or breeding opportunities would occur during Project activities. During Project activities, managed species that would be otherwise breeding or feeding in the area could be deterred from the Project site. Project activities would be temporary and limited to the immediate area above and adjacent to the cable alignment and anchoring locations. In addition, any displaced marine wildlife, including fish, would be adequately served by the abundant habitat provided by nearby undisturbed areas.

Benefits from decommissioning the cable would include the removal of free spanning sections and the potential for secondary entanglement of both managed fish species as well as other marine wildlife.

5.0 MITIGATION

5.1 ANCHORING PLAN

An anchor pre-plot will be developed specific to the Project area and Project activities. The anchor pre-plot will identify designated anchoring locations that would avoid any sensitive areas within the Project area. Based on seafloor mapping, anchoring locations will be pre-plotted and located within sand substrates. In addition, all anchors will be lowered vertically to the seafloor in a controlled manner. Each anchor will be recovered using a crown line to pull it vertically through the water column. Those methods will reduce sediment resuspension and unnatural seafloor alteration.

As mitigated, only short-term effects (sediment resuspension) are expected. No long-term impacts to the EFH, which consists of sedimentary habitats and the water column, are expected to result from the proposed action.

5.2 OIL SPILL CONTINGENCY AND RESPONSE PLAN

An Oil Spill Contingency and Response Plan (OSCRP) will be used to avoid any release of oil-based products into the marine environment and to reduce the effects of accidentally discharged petroleum by facilitating rapid response and cleanup operations. The Project vessels will be subject to the requirements and guidelines included within the OSCRP. All vessel discharges will comply with the requirements of the Clean Water Act under the U.S. Coast Guard (USCG) regulation including the proper treatment and monitoring of vessel effluents, as necessary.

Potential spill sources of hydrocarbons during Project activities include releases from offshore equipment (including Project vessels) used during the cable recovery activities, and/or accidental discharges from refueling operations of deck equipment (if needed). The vessels will fuel themselves prior to departure to the offshore Project areas. Equipment that is used on a day-to-day basis will be monitored for leaks; if a leak is observed, the faulty equipment will cease operation and appropriate clean-up and corrective measures will be implemented. All equipment will have secondary containment such as drip pans, and sorbent pads will be available on the vessels for clean-up of minor hydrocarbon leaks from the deck equipment. All equipment refueling will be conducted to minimize the potential for fuel spillage. All hydrocarbon-based fluids stored onboard the vessels will be in appropriate containers and will include secondary containment structures.

The Project contractor, under the direction of AT&T will maintain an onsite spill response team to handle minor spills, which is limited to five barrels or less. The contactor will also provide initial response to major spills, any spill exceeding five barrels, during Project activities. The onsite response team is responsible for reporting, containment, and clean-up of any minor spills using onsite equipment and procedures. The Project contractors also have a contract with the Oil Spill Response Organization (OSRO) certified National Response Corporation (NRC) which has local resources in Eureka and in Ventura, California that may be deployed in the event of a major marine spill.

In the event of any spill, notifications will be made to the Project team, emergency agencies, clean-up contractors if required, and other interested parties. If a spill impacts navigable

waters, notification of the NRC is mandatory and normally results in simultaneous notification of the USCG.

6.0 REFERENCES

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