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# SOURCES OF HUMAN-RELATED INJURY AND MORTALITY FOR U.S. PACIFIC WEST COAST MARINE MAMMAL STOCK ASSESSMENTS, 2016-2020

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## Summary

The Marine Mammal Protection Act (MMPA) requires the National Marine Fisheries Service (NMFS) to document human-caused mortality, non-serious injury (NSI), and serious injury (SI) of marine mammals in marine mammal stock assessments and to compare these levels to potential biological removal (PBR) thresholds under the MMPA (Wade 1998). NMFS defines SI as “any injury that will likely result in mortality” (50 CFR 229.2). NMFS interprets the regulatory definition of serious injury as any injury that is more likely than not to result in mortality, or any injury that presents a greater than 50 percent chance of death to a marine mammal (NMFS 2012b). The definition does not require that all such injured animals die, but rather requires only that the animal is more likely than not to die (NMFS 2012b).

While documenting observed mortality is straightforward (excluding undetected or ‘cryptic mortality’, Pace *et al.* 2020), distinguishing NSI from SI requires data on injury severity and animal condition, often derived from opportunistic observations where complete assessment of injuries or gear burdens is not possible (Carretta and Henry 2022). NMFS updated its SI designation and reporting process in 2012, using guidance from previous SI workshops (Angliss and DeMaster 1998, Andersen *et al.* 2008), expert opinion, and analysis of historical injury cases to develop new [criteria](#) for distinguishing SI from NSI (NMFS 2012a, 2012b; NOAA 2012; Moore *et al.* 2013). NMFS is currently proposing updates to pinniped and small cetacean injury categories (NMFS 2022, 87 FR 43247), while exploring potential improvements to large whale injury assessments with new data (Carretta and Henry 2022).

This report contains 1919 cases of human-caused injury (including non-serious injuries) and mortality of marine mammals occurring in U.S. West Coast waters during 2016-2020 (Appendix 1), for species included in Pacific region marine mammal stock assessment reports (SARs) (e.g. Carretta *et al.* 2022). Subsistence and directed takes, such as gray whales taken by Russian natives, are not included in this report, but are reported in SARs published by NMFS. Previous serious injury and mortality records, including cases from 2007 through 2019, are published in previous reports (Carretta *et al.* 2013, 2014, 2015b, 2016a, 2017, 2018, 2019, 2020a, 2021).

Sources of injury and mortality data include strandings, disentanglement networks, public reports, commercial and recreational fishermen, researchers, and fishery observer programs. Records include observations of injured marine mammals at sea and ashore. Injury sources include, but are not limited to, vessel strikes, gillnet entanglement, pot and trap gear entanglement, shootings, marine debris entanglement, research-related injuries/deaths, hook and line fishery interactions, and entrapment in power plant water intakes. Most records originate from stranding networks in California, Oregon, and Washington, though a few Alaska records of Eastern North Pacific gray whales (*Eschrichtius robustus*) and northern elephant seals (*Mirounga angustirostris*) are included, because these species are assessed in the Pacific region SARs. Other marine mammals, such as Steller sea lions (*Eumetopias jubatus*), that occur in California, Oregon, and Washington waters are assessed in Alaska region SARs (e.g. Muto *et al.* 2022) and are included in injury reports produced by the Alaska region (e.g. Freed *et al.* 2022). Two stocks of northern fur seal (*Callorhinus ursinus*) overlap in U.S. West Coast waters seasonally from December through May, the Eastern North Pacific stock (assessed in Alaska region SARs) and the California

stock (assessed in Pacific region SARs) and interactions that occur during that time period are assigned to both stocks. Injury determinations for Pacific region species/stocks in the central Pacific from Hawaii westward are included in separate reports (e.g. Bradford 2021, Bradford and Lyman 2022).

## Methods

The assessment of marine mammals for evidence of human-related injury or death requires application of systematic forensic protocols, combined with expertise in diagnosing trauma (Moore *et al.* 2013). Stranding network personnel may have varying regional standards for assessing causes of death and injury and thorough examination of carcasses or injured animals is not always possible. With respect to the uncertainties in determining whether injuries or deaths are human-related, we reviewed stranding records, including at-sea sightings, from NMFS West Coast and Alaska regional stranding networks. Records with human-related causes of injury were evaluated using SI/NSI criteria for three broad taxonomic categories (pinnipeds, large whales, and small cetaceans) detailed in [NMFS 2012b](#). Animals whose initial reporting condition was ‘dead’ were not evaluated for SI/NSI, but are also included in tabular summaries of this report and in Appendix 1.

Injury determinations (excluding 965 records where an animal’s initial condition was ‘dead’) include 954 injury records from 2016-2020 (Table 2). Both initial and final injury determinations are given for each record. For example, a pinniped entangled in gillnet that is constricting or impeding movement is considered seriously injured. This animal may be captured, taken to a rehabilitation center, treated for injuries, and released back into the wild without serious injuries. In the context of categorizing commercial fisheries (based on levels of SI and mortality) for the NMFS List of Fisheries (LOF), this pinniped is considered seriously injured. This designation allows evaluation of fishery-specific risk to marine mammals, even though the pinniped was released back into the wild with non-serious injuries. In cases where injured pinnipeds are transferred to public display facilities (aquaria) or U.S. Navy marine mammal programs following treatment, because their survival in the wild is questionable, the final injury determination is termed ‘captivity’, as the animal is permanently removed from the wild population. This is equivalent to a SI for the purposes of evaluating injuries against PBR. Similar cases involve large whales entangled in fishing gear and subsequent disentanglement efforts. The whale’s injuries may initially be considered serious, especially if the entanglement restricts movement. Successful disentanglement of all gear from a whale without lingering evidence of an entanglement-related health decline or SI may be designated as a NSI. For purposes of the LOF, initial injury assessments are used in evaluating individual fisheries. In the context of assessing SI and mortality against PBR levels, the final injury assessment or condition is used.

Takes reported by the Northwest Indian Fisheries Commission (NWIFC) lack details on animal condition. However, the interactions reported here occurred primarily in drift and set gillnet fisheries, gear types where survival of pinnipeds and cetaceans is rarely-observed (Carretta 2022). In this report, we assume that reported NWIFC interactions represent serious injuries or deaths and thus, they are coded as ‘DEAD’ in this report. Serious injuries and deaths both represent a mortality and serious injury (MSI) value = 1 that is counted against PBR in marine mammal stock assessments, therefore, the coding of these cases as

either 'SI' or 'DEAD' results in the same level of removals that is compared to potential biological removal (PBR).

Most records involve a single anthropogenic source of injury or death, but animals may show signs of trauma from multiple sources. For example, pinnipeds entangled in gillnets may also have evidence of gunshot wounds. Where multiple sources of injury or death are reported, we attempt to identify the primary cause of death or injury in this report.

### Prorating of serious injuries (large whales only)

Large whales offer the opportunity to track outcomes of human-caused injuries, due to the ability to recognize individuals over time. In addition to 'NSI' and 'SI' categories, a third category of prorated serious injury ('SI prorated') is used for large whales. Prorated SI categories are determined from large whale records where the outcome of the injury is known, based on a review of historical large whale injury cases (NMFS 2012b). For example, 25 vessel-strike cases involving large whales with known outcomes were reviewed and 13 (52%) resulted in a decline in health status or death of the animal (NMFS 2012b). These data are used to inform decision-making on current vessel-strike lacerations where the severity of the laceration ('superficial' versus 'deep') is unknown and the vessel's size and speed are unknown. For these cases, SI is prorated by 0.52 to reflect the known outcomes of the 25 cases with vessel-strike lacerations. For cases with sufficient vessel-strike injury details, other SI codes are applied. If a vessel-strike laceration is superficial and does not extend below the blubber layer, this is considered a NSI. If the laceration extends below the blubber layer ('deep'), the whale is considered seriously injured (equivalent to a SI prorated value of 1.0). An example of calculating annual human-caused SI and mortality for large whales as part of the SAR process might include 10 documented vessel-strike lacerations of large whales of unknown severity, where the vessel's size and speed are unknown. Ten large whales with lacerations of unknown severity are counted as  $10 \times 0.52 = 5.2$  cases of SI. If one of these cases were confirmed as a deep laceration, then the calculation would be  $4.7 + 1.0 = 5.7$  cases of SI.

### Number of cases vs MSI totals

In this report, we distinguish between the number of cases documented, versus the sum of total mortality and serious injury (MSI) reported here and in marine mammal stock assessments. Using humpback whales as an example, the total number of cases assessed between 2016 and 2020 was  $n=153$ , whereas the sum of mortalities and serious injuries resulting from these cases was  $n=112.45$  (Table 1). In this report, case totals for the pooled taxa of pinnipeds, large whales, and small cetaceans are summarized in Tables 2a, 2b, and 2c, while individual cases for all species appear in Appendix 1. Species-specific MSI totals after cases are assessed and assigned as non-serious or serious injuries are shown in Figure 1. MSI totals by species and broad taxa are summarized in Tables 1-13 (for species with 10 or more cases) and Figures 1-4 (all species and broad taxa). The reader should understand that human-caused MSI totals included in SARs may exceed totals summarized in this report. This is because SARs may include statistical estimates of undetected MSI from fisheries bycatch (Carretta 2022, Jannot *et al.* 2021), estimates of vessel strike mortality (Rockwood *et al.* 2017), prorating of unidentified whale injuries to species (Carretta 2018), and



corrected estimates of fishery-related stranding numbers from estimates of carcass recovery (Carretta *et al.* 2016b).

## Results

For the five-year period 2016-2020, a total of 1919 human-related injury (n=954) and mortality (n=965) records are summarized by species and broad taxa in Tables 1-2 and Figures 2-4. For species with 10 or more records, we summarize MSI totals by anthropogenic source in Tables 3-13. Approximately 82% of all records represent opportunistic reports of beach strandings and at-sea sightings, while the remaining 18% represent systematic/monitored sources, including fishery observer programs (n=326), monitored research-related activities (n=19), or authorized removals of pinnipeds from Bonneville Dam and Willamette Falls under MMPA Section 120 (n=151). Pinnipeds (n=1513) were the most commonly documented injured or killed taxon due to human-related activities (Table 2a, Figure 2), followed by large whales (n=257) (Table 2b, Figure 3) and small cetaceans (n=149) (Table 2c, Figure 4). Animals initially encountered alive accounted for 954 records, which were evaluated and assigned SI/NSI determinations, including 745 pinnipeds, 200 large whales, and 9 small cetaceans (Tables 2a-c).

Pinnipeds were most commonly seriously injured or killed due to interactions with gillnet and trawl fisheries (n=555), shootings (n=172), and authorized removals under MMPA Section 120 (n=151), and harassment (n=109) (Figure 2). Pinniped injury and mortality records included California sea lions (*Zalophus californianus*) (n=998) (Table 3), harbor seals (*Phoca vitulina*) (n=365) (Table 4), northern elephant seals (*Mirounga angustirostris*) (n=66) (Table 7), Guadalupe fur seals (*Arctocephalus townsendi*) (n=61) (Table 8), unidentified pinnipeds (n=8), northern fur seals (n=8), unidentified fur seals (n=3), unidentified sea lions (n=2), unidentified otariids (n=1), and unidentified seals (n=1) (Table 2). Many pinniped cases involve human intervention and treatment, either in the field or through capture and care at a rehabilitation facility. For those pinnipeds treated at rehabilitation facilities and subsequently released, it is assumed that they survived following treatment and their final injury assessments were NSI. An exception to this involves dependent pups that are released alone post-treatment, which are considered to be serious injuries. Pinniped records lacking details whether the animal was released following treatment are assumed to be seriously injured. Some pinnipeds were treated and released on site, and their final injury status was case-specific. A number of pinnipeds were euthanized due to their injuries (n=102), while others were sent to public display facilities (n=4) because their existing post-treatment condition made survival in the wild unlikely or they were individuals targeted for removal to protect endangered salmon. Of the 1513 pinniped records, 1031 animals died as a result of their injuries and an additional 268 pinniped cases were assigned as serious injuries, likely to result in death (Table 2a). Increasing numbers of pinniped strandings in recent years have stretched the resources of rehabilitation facilities on the U.S. West Coast and have limited the ability to track the outcome of all cases.

Large whale injury and mortality cases involved humpback whales (*Megaptera novaeangliae*, n=153) (Table 5), gray whales (n=71) (Table 6), blue whales (*Balaenoptera musculus*, n=13) (Table 13), unidentified large whales (n=11), fin whales (*Balaenoptera physalus*, n=6), minke whale (*Balaenoptera acutorostrata*, n=2), and sperm whale (*Physeter*

*macrocephalus*, n=1) (Table 1). Approximately 26.5% of large whale injury cases (excluding whales initially detected dead) involved human intervention to remove gear. The relatively low percentage of rescue attempts reflects that many entangled whales are only seen once and that adverse weather conditions often prohibit safe disentanglement attempts. Fourteen large whale records initially designated as SI resulted in a final injury status of NSI, the result of successful disentanglement efforts or the animal freeing itself of gear over time (Table 2b). Of the 257 large whale records of human-caused injuries and mortalities, 57 whales were initially reported as dead (+ 8 later died from their injuries) and the remaining 200 were assessed for NSI/SI (Table 2b). The 65 large whale records involving dead animals were represented by vessel strikes (n=36), fishery-related entanglements (n=26), entanglement in marine debris (n=1), illegal hunts (n=1), and shootings (n=1). Of the 200 large whales evaluated for NSI/SI, fishery-related entanglements (n=182) were the most common cause of injury, followed by vessel strikes (n=14) and entanglement in marine debris (n=4).

Humpback whale injuries and mortality (n=153) were most often reported from entanglements in pot/trap fisheries (n=70), followed by unidentified fishing gear (n=58), vessel strikes (n=14), gillnet fisheries (n=9), hook and line fisheries (n=1) and marine debris (n=1) (Table 5). Many humpback whale records involving unidentified fishing gear are likely to represent pot/trap fisheries, because they are the most commonly-identified source of entanglement for the species. The sum of all non-serious, serious, and prorated serious injuries from the 153 humpback whale cases recorded during 2016-2020 was n=112.45 (Table 2, Figure 1).

Gray whale injuries and mortality (n=71) included vessel strikes (n=21), unidentified fishing gear (n=19), gillnet fisheries (n=15), pot/trap fisheries (n=11), marine debris (n=4), and an illegal hunt (n=1) (Table 6). Many of the unidentified fishing gear cases involving gray whales were likely pot/trap fisheries or entangling net fisheries, based on the percentages of known gear type records involving gray whales. The sum of all non-serious, serious, and prorated serious injuries from the 71 gray whale cases recorded during 2016-2020 was n=61.25 (Table 1, Figure 1).

A total of 149 small cetacean records were reviewed but were rarely assessed for SI (n=9) because most were initially reported as dead (n=140) (Table 2c). Mortality in gillnets, trawls, and unidentified fisheries accounted for 138 small cetacean records, and 62 small cetacean records were derived from systematic observer programs or monitored activities. Most records involved fishery-related deaths of harbor porpoise (*Phocoena phocoena*) (n=39) (Table 9), short-beaked common dolphin (*Delphinus delphis*) (n=38) (Table 10), and long-beaked common dolphins (*Delphinus delphis bairdii*) (n= 33) (Table 11). Research-related entanglements of small cetaceans in scientific trawls or nets accounted for 14 records, all were Pacific white-sided dolphins (*Lagenorhynchus obliquidens*) (Table 12). Small cetaceans assessed for injury severity (excluding animals initially found dead) included long-beaked common dolphin (n=2), unidentified common dolphin (n=2) (*Delphinus* sp.), Pacific white-sided dolphin (n=1), harbor porpoise (n=1), striped dolphin (*Stenella coruleoalba*) (n=2), and unidentified dolphin (n=1). (Tables 1 and 2). Of the 9 small cetacean records assessed for injuries, 5 animals later died, 3 were determined to be serious injuries, and one was determined to be a non-serious injury (Table 2c). In addition to delphinids and porpoises, there was one Blainville's beaked whale (*Mesoplodon densirostris*, n=1) recorded dead as the

result of a gillnet fishery interaction, and one vessel strike death of a Baird's beaked whale (*Berardius bairdii*, n=1).

## Discussion

Most records of human-related injuries and deaths to marine mammals represent opportunistic reports from strandings and at-sea sightings. Stranding data are considered minimum counts of human-related injury and mortality because not all carcasses come ashore, are detected, or human-related causes are not recognized due to carcass decomposition. Where evaluated, estimates of recovery rates of cetacean carcasses are consistently low (<1% to 33%) across different regions and species, highlighting that observed numbers underestimate true impacts (Kraus *et al.* 2005, Williams *et al.* 2011, Pace *et al.* 2021, Prado *et al.* 2013), even for extremely coastal species (Wells *et al.* 2015, Carretta *et al.* 2016b). Not all human-related impacts are represented in this report, such as military sonars and other anthropogenic sounds that may impact beaked whales and the effects of which would be unknown unless affected animals stranded (Cox *et al.* 2006). Variability in the assessment and determination of human-related injuries and mortality by responder or region is an unavoidable situation because regional data-recording standards may differ and the ability to examine animals may be compromised by weather or accessibility to carcasses (Moore *et al.* 2013). We have made an effort to review only records that have unequivocal or probable human-related impacts and recognize that some cases may be missed because of a failure to recognize human-caused injuries and deaths. Some injuries and deaths attributed to marine debris involve derelict fishing gear that cannot be linked to a specific fishery. In some cases, fishing gear originates from outside of U.S. waters (Carretta *et al.* 2014). Impacts of commercial gillnet, pot, and trap fisheries are likely greater than the number of observations because derelict gear may entangle new animals for long periods. Examples include ghost netting that contained harbor seal carcasses in varying states of decomposition, evidence that the net had entangled animals over a long time (Carretta *et al.* 2013, 2014, 2015b, 2016b). A small percentage of pinnipeds died after an initial injury assessment of NSI. Nearly all of these animals died during treatment in rehabilitation facilities, with hook-related injuries that appeared superficial (hooks in flippers and/or lip). Post-mortem examinations often revealed causes of death that were unrelated to the visible injury. For example, a California sea lion with a hook in its back was found during necropsy to have sharp fragments of plastic in its stomach. Other cases involved bullets found post-mortem or hooks in the esophagus/stomach, which were not apparent during the initial examination.

## Data Availability

The data summarized in this report are available at Github for download as a CSV file. In the R-programming environment, run the following code, which will return a data frame:

```
address<- "https://raw.githubusercontent.com/JimCarretta/MSI-data/main/2016_2020_5yr_MSI.csv"
MSI.data<-read.csv(url(address))
```

## Acknowledgments

Many of the records in this report provided by those who devote their time to rescue and aid marine mammals in the wild. We would like to thank the fishery observers, academic researchers, disentanglement and stranding network personnel, vessel skippers, and members of the public for their reports on dead and injured marine mammals. Thanks to Allison Henry, Nancy Young, James Freed, and the Pacific Scientific Review Group for reviewing our serious injury cases.

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**Table 1. Species, number of mortality and injury cases assessed, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

Species	Cases	MSI.Total
BAIRD'S BEAKED WHALE	1	1.00
BLAINVILLE'S BEAKED WHALE	1	1.00
BLUE WHALE	13	10.50
CALIFORNIA SEA LION	998	834.00
COMMON DOLPHIN, LONG-BEAKED	33	33.00
COMMON DOLPHIN, SHORT-BEAKED	38	38.00
COMMON DOLPHIN, UNIDENTIFIED	3	2.00
DALL'S PORPOISE	2	2.00
FIN WHALE	6	6.00
GRAY WHALE	71	61.25
GUADALUPE FUR SEAL	61	47.00
HARBOR PORPOISE	39	39.00
HARBOR SEAL	365	358.00
HUMPBACK WHALE	153	112.45
MINKE WHALE	2	1.75
NORTHERN ELEPHANT SEAL	66	53.00
NORTHERN FUR SEAL	8	6.00
NORTHERN RIGHT WHALE DOLPHIN	4	4.00
PACIFIC WHITE-SIDED DOLPHIN	17	17.00
RISSE'S DOLPHIN	1	1.00
SPERM WHALE	1	1.00
STRIPED DOLPHIN	5	5.00
UNIDENTIFIED DOLPHIN	5	5.00
UNIDENTIFIED FUR SEAL	3	1.00
UNIDENTIFIED OTARIID	1	1.00
UNIDENTIFIED PINNIPED	8	0.00
UNIDENTIFIED SEA LION	2	2.00
UNIDENTIFIED SEAL	1	1.00
UNIDENTIFIED WHALE	11	7.59



**Table 2a. Matrix of initial (rows) and final (columns) injury determinations for pinnipeds. NSI=non-serious injury, SI=serious injury. Records with initial determinations of 'ALIVE' include individual California sea lions targeted for removal at Willamette Falls and Bonneville Dam to protect endangered salmon under authority of the MMPA Section 120.**

	CAPTIVITY	DEAD	NSI	SI
ALIVE	0	151	0	0
DEAD	0	768	0	0
NSI	0	11	96	26
SI	4	101	114	242

**Table 2b. Matrix of initial (rows) and final (columns) injury determinations for large whales. NSI=non-serious injury, SI=serious injury.**

	DEAD	NSI	SI	SI (PRORATE)
DEAD	57	0	0	0
NSI	0	12	0	0
SI	8	6	52	3
SI (PRORATE)	0	8	1	110

**Table 2c. Matrix of initial (rows) and final (columns) injury determinations for small cetaceans. NSI=non-serious injury, SI=serious injury.**

	DEAD	NSI	SI
DEAD	140	0	0
SI	5	1	3

**Table 3. California sea lion human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

Source	Cases	MSI.Total
GILLNET FISHERY, TRIBAL	175	175
HOOK AND LINE FISHERY	166	95
AUTHORIZED MMPA SEC. 120 REMOVAL SHOOTING	151	151
CATCHER PROCESSOR MIDWATER TRAWL	135	131
MARINE DEBRIS	93	83
CATCH SHARES BOTTOM TRAWL	59	39
OPEN ACCESS CA HALIBUT BOTTOM TRAWL	34	13
GILLNET FISHERY	34	31
MS CATCHER VESSELS MIDWATER TRAWL	30	19
UNIDENTIFIED FISHERY INTERACTION	19	19
CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	17	13
VESSEL STRIKE	15	15
LIMITED ENTRY SABLEFISH HOOK AND LINE	13	13
HARASSMENT	8	2
CA SWORDFISH DRIFT GILLNET FISHERY	7	6
OIL / TAR	6	6
SCIENTIFIC RESEARCH	6	3
TROLL FISHERY, TRIBAL	5	5
WEST COAST GROUND FISH FISHERY	5	5
UNIDENTIFIED HUMAN INTERACTION	4	4
VEHICLE COLLISION	3	3
CATCH SHARES HOOK AND LINE	3	3
RIDGEBACK PRAWN BOTTOM TRAWL	2	1
BLUNT FORCE TRAUMA	2	0
CA LOBSTER TRAP / POT ENTANGLEMENT	1	1
HAKE MIDWATER TRAWL	1	0
MIDWATER TRAWL ROCKFISH EM	1	0
NEARSHORE HOOK AND LINE	1	1
SEA CUCUMBER BOTTOM TRAWL	1	1

**Table 4. Harbor seal human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

Source	Cases	MSI.Total
GILLNET FISHERY, TRIBAL	119	119
HARASSMENT	100	98
SHOOTING	37	37
GILLNET FISHERY	36	35
VESSEL STRIKE	21	21
HOOK AND LINE FISHERY	13	10
MARINE DEBRIS	9	9
CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	8	8
DOG ATTACK	8	7
UNIDENTIFIED FISHERY INTERACTION	5	5
UNIDENTIFIED HUMAN INTERACTION	3	3
OPEN ACCESS CA HALIBUT BOTTOM TRAWL	2	2
VEHICLE COLLISION	2	2
OIL / TAR	1	1
POT FISHERY, TRIBAL	1	1

**Table 5. Humpback whale human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

Source	Cases	MSI.Total
UNIDENTIFIED FISHERY INTERACTION	58	43.75
DUNGENESS CRAB POT FISHERY (CALIFORNIA)	34	23.75
VESSEL STRIKE	14	13.20
UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	13	9.50
DUNGENESS CRAB POT FISHERY (WASHINGTON)	7	5.50
GILLNET FISHERY	6	2.00
CA SPOT PRAWN TRAP FISHERY	5	3.25
GILLNET FISHERY, TRIBAL	3	2.50
DUNGENESS CRAB POT FISHERY (COMMERCIAL)	2	2.00
DUNGENESS CRAB POT FISHERY (OREGON)	2	1.75
DUNGENESS CRAB POT FISHERY (RECREATIONAL)	2	1.00
WA/OR/CA SABLEFISH POT FISHERY	2	1.50
HOOK AND LINE FISHERY	1	0.75
MARINE DEBRIS	1	1.00
POT FISHERY, TRIBAL	1	1.00
SPOT PRAWN TRAP/POT FISHERY (RECREATIONAL)	1	0.00
WA/OR/CA SABLEFISH POT FISHERY AND CA COONSTRIPE SHRIMP POT FISHERY	1	0.00

**Table 6. Gray whale human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

Source	Cases	MSI.Total
VESSEL STRIKE	21	19.00
UNIDENTIFIED FISHERY INTERACTION	19	16.00
GILLNET FISHERY	11	9.25
DUNGENESS CRAB POT FISHERY (WASHINGTON)	6	4.75
MARINE DEBRIS	4	2.75
DUNGENESS CRAB POT FISHERY (CALIFORNIA)	2	2.00
UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	2	1.75
CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	1	1.00
CA SWORDFISH DRIFT GILLNET FISHERY	1	1.00
DUNGENESS CRAB POT FISHERY (COMMERCIAL)	1	1.00
GILLNET FISHERY, TRIBAL	1	1.00
ILLEGAL HUNT	1	1.00
SALMON GILLNET FISHERY	1	0.75

**Table 7. Northern elephant seal human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

Source	Cases	MSI.Total
OIL / TAR	16	15
HARASSMENT	12	5
MARINE DEBRIS	8	4
CA SWORDFISH DRIFT GILLNET FISHERY	4	4
HOOK AND LINE FISHERY	3	2
SHOOTING	3	3
CATCHER PROCESSOR MIDWATER TRAWL	2	2
DOG ATTACK	2	2
VESSEL STRIKE	2	2
BERING SEA AND ALEUTIAN ISLANDS ATKA MACKEREL TRAWL	1	1
CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	1	1
CATCH SHARES BOTTOM TRAWL	1	1
CATCH SHARES POT	1	1
DUNGENESS CRAB POT FISHERY (CALIFORNIA)	1	1
GULF OF ALASKA PACIFIC COD LONGLINE	1	1
GULF OF ALASKA SABLEFISH LONGLINE	1	1
MIDWATER HAKE TRAWL	1	1
MIDWATER ROCKFISH TRAWL	1	1
MS CATCHER VESSELS MIDWATER TRAWL	1	1
OPEN ACCESS CA HALIBUT BOTTOM TRAWL	1	1
UNIDENTIFIED HUMAN INTERACTION	1	1
VEHICLE COLLISION	1	1
WEST COAST GROUND FISH TRAWL	1	1

**Table 8. Guadalupe fur seal human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

Source	Cases	MSI.Total
UNIDENTIFIED FISHERY INTERACTION	23	19
MARINE DEBRIS	16	13
HAWAII LONGLINE SHALLOW SET FISHERY	10	4
GILLNET FISHERY	4	4
SHOOTING	2	2
TRAWL FISHERY UNIDENTIFIED	2	2
UNIDENTIFIED HUMAN INTERACTION	2	2
HOOK AND LINE FISHERY	1	0
UNIDENTIFIED NET FISHERY	1	1

**Table 9. Harbor porpoise human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

Source	Cases	MSI.Total
GILLNET FISHERY	13	13
GILLNET FISHERY, TRIBAL	10	10
UNIDENTIFIED FISHERY INTERACTION	10	10
UNIDENTIFIED NET FISHERY	4	4
VESSEL STRIKE	2	2

**Table 10. Short-beaked Common dolphin human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

Source	Cases	MSI.Total
CA SWORDFISH DRIFT GILLNET FISHERY	34	34
CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	3	3
GILLNET FISHERY	1	1

**Table 11. Long-beaked Common dolphin human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

Source	Cases	MSI.Total
GILLNET FISHERY	23	23
UNIDENTIFIED FISHERY INTERACTION	4	4
CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	2	2
CA SWORDFISH DRIFT GILLNET FISHERY	2	2
CA SPOT PRAWN TRAP FISHERY	1	1
HOOK AND LINE FISHERY	1	1

**Table 12. Pacific white-sided dolphin human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

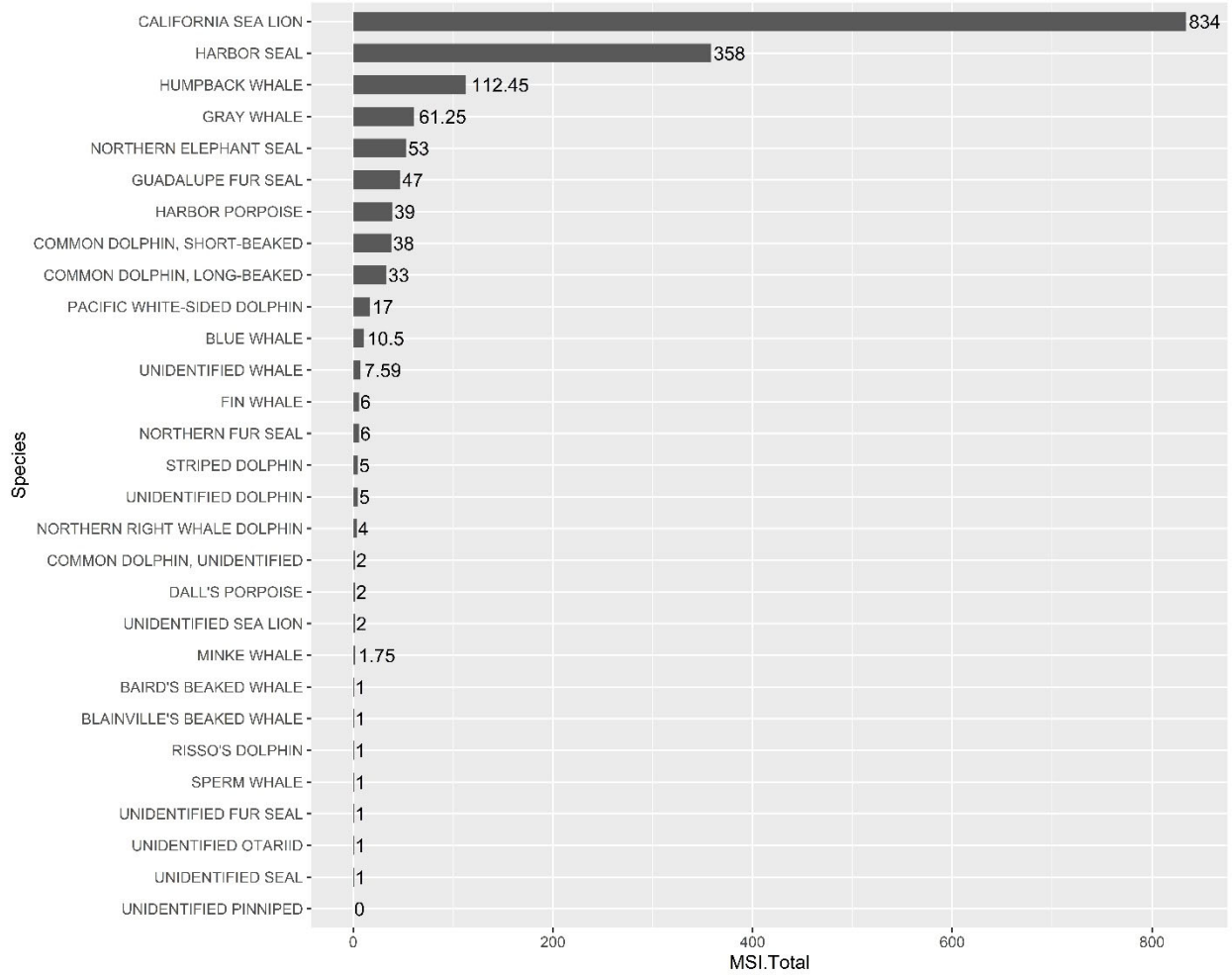
Source	Cases	MSI.Total
SCIENTIFIC RESEARCH	14	14
CATCH SHARES BOTTOM TRAWL	1	1
CATCHER PROCESSOR MIDWATER TRAWL	1	1
GILLNET FISHERY	1	1

**Table 13. Blue whale human-related injury and mortality sources, number of cases, and total mortality and serious injury (MSI.Total), 2016 - 2020.**

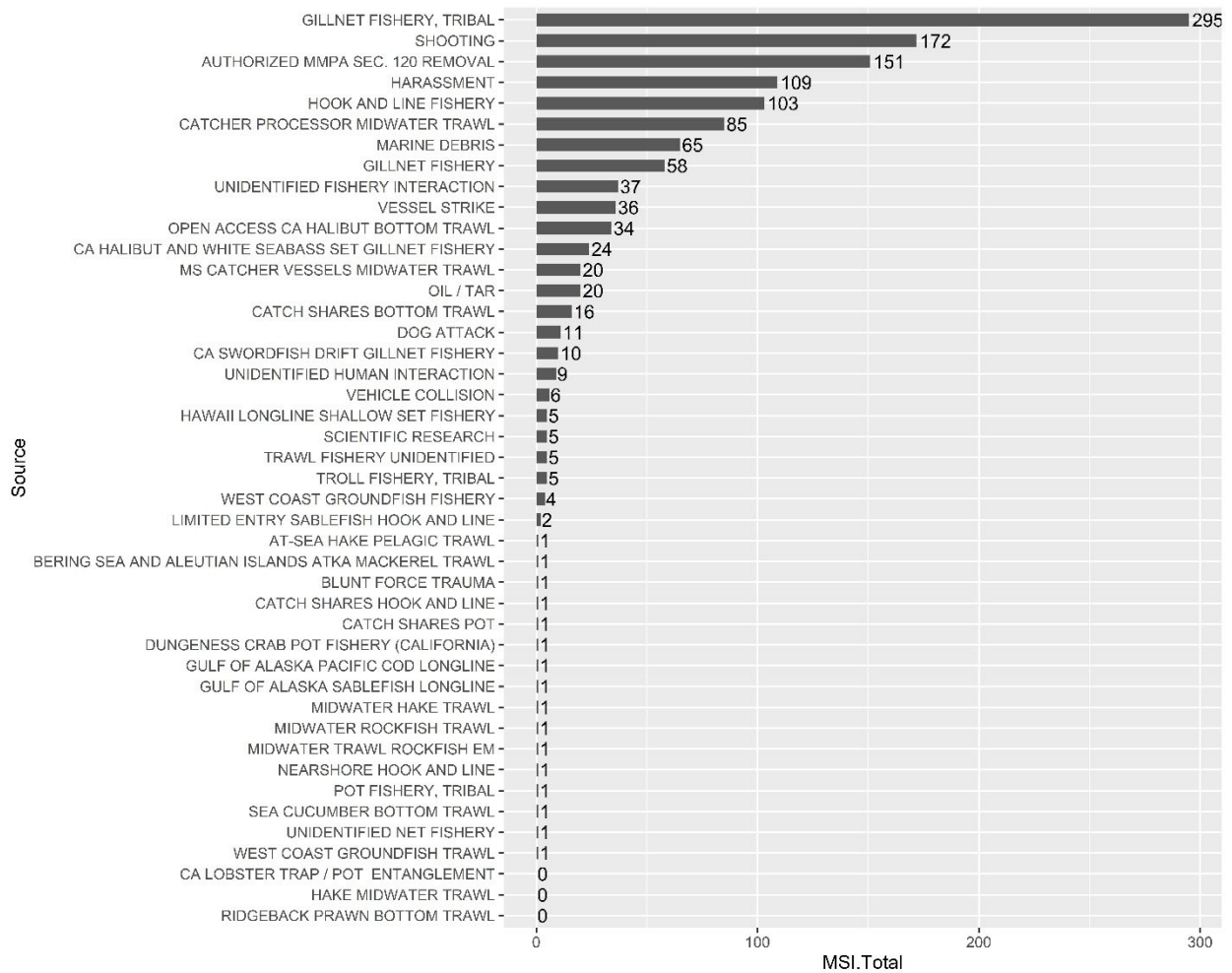
Source	Cases	MSI.Total
UNIDENTIFIED FISHERY INTERACTION	6	3.75
VESSEL STRIKE	4	4.00
DUNGENESS CRAB POT FISHERY (CALIFORNIA)	3	2.75



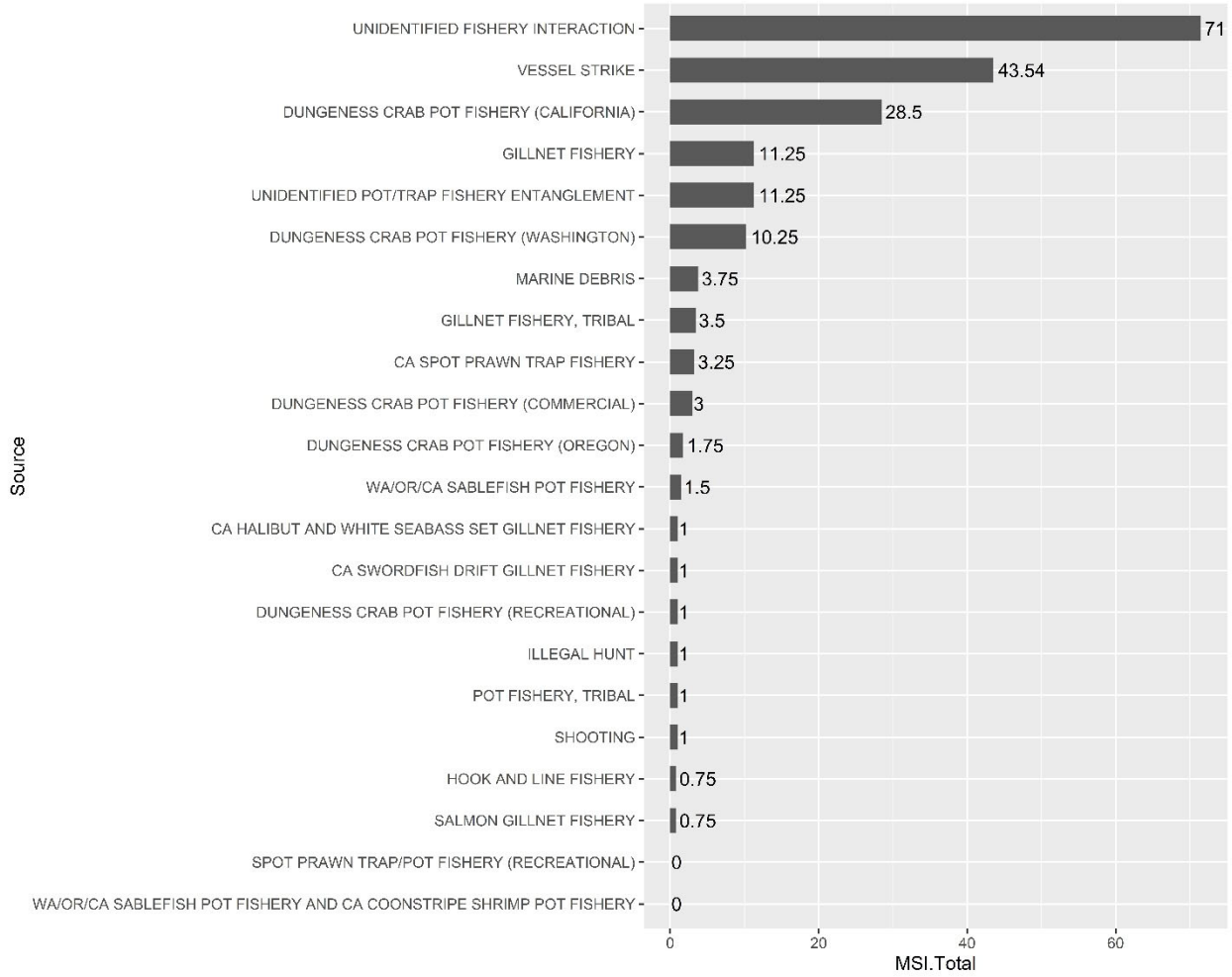
**Figure 1. Total human-caused mortality and serious injury (MSI.Total) of marine mammal species appearing in the Pacific Stock Assessment Reports, 2016-2020. Some injury cases are determined to be non-serious (assigned a MSI value = 0) or are prorated (assigned a positive MSI value > 0 and <1), thus, the sum of MSI values in this figure may not be a whole number and may be less than the number of species-specific cases noted in the text or Table 1.**



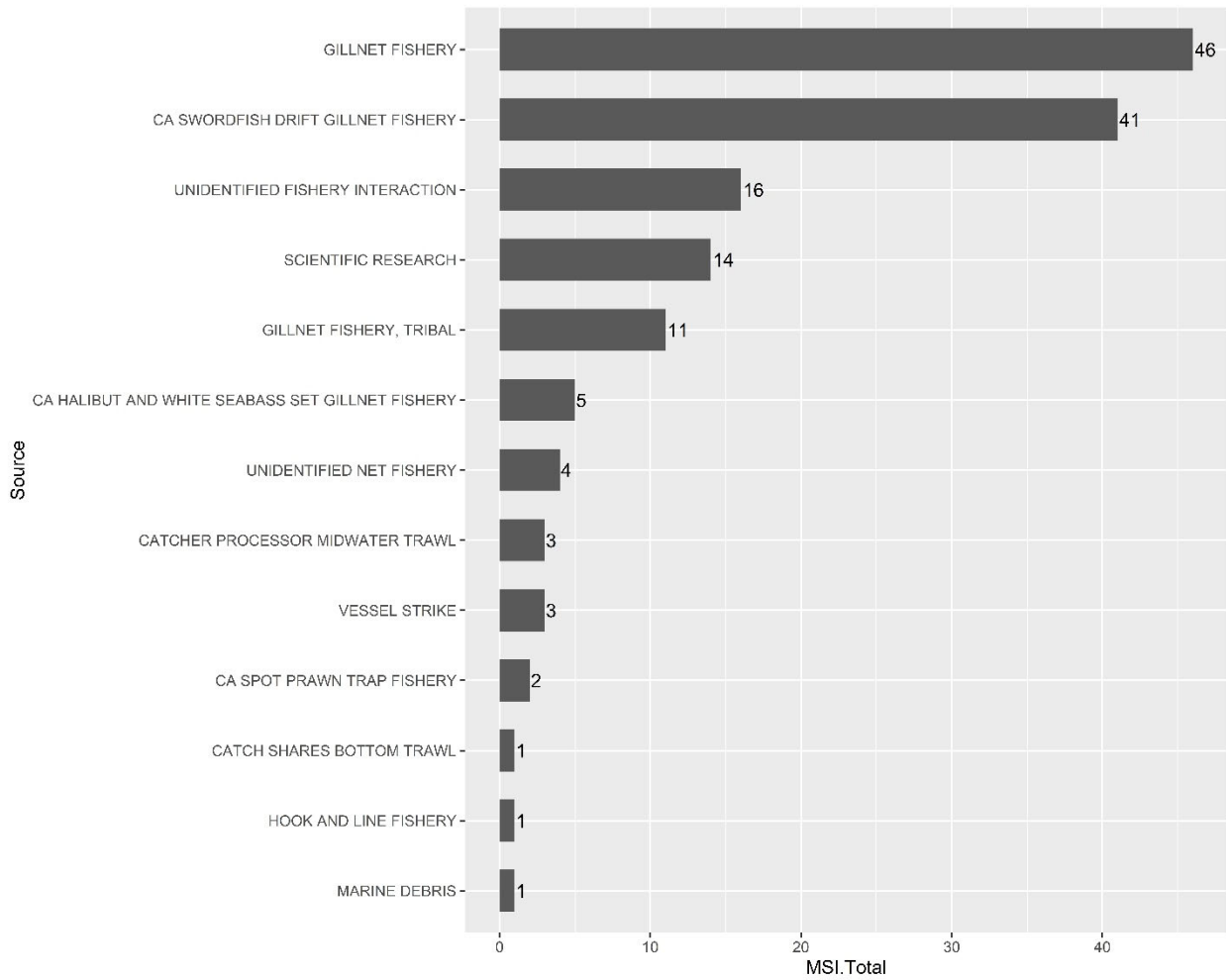
**Figure 2. Total human-caused mortality and serious injury (MSI.Total) of pinnipeds by source, 2016-2020. MSI totals shown may be less than the total number of cases evaluated, as non-serious injuries (NSI) are assigned a MSI value of zero.**



**Figure 3. Total human-caused mortality and serious injury (MSI.Total) of large whales by source, 2016-2020. MSI totals shown may be less than the total number of cases evaluated, as non-serious injuries (NSI) are assigned a MSI value of zero, while other cases may be assigned prorated MSI values greater than 0 but less than 1.**



**Figure 4. Total human-caused mortality and serious injury (MSI.Total) of small cetaceans by source, 2016-2020. MSI totals shown may be less than the total number of cases evaluated, as non-serious injuries (NSI) are assigned a MSI value of zero.**



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
BAIRD'S BEAKED WHALE	CA-OR-WA	2016	8	29	VESSEL STRIKE	MARIN	CA	DEAD	THE DISTAL END OF THE PEDUNCLE AND THE FLUKES HAD BEEN SEVERED OFF, LIKELY PERIMORTEM. STANDARD LENGTH MEASUREMENT IS TO THE SEVERED PEDUNCLE. LIMITED NECROPSY DUE TO THE LEVEL OF DECOMPOSITION.	DEAD	NA	1.00	N	Y
BLAINVILLE'S BEAKED WHALE	CA-OR-WA	2016	10	9	GILLNET FISHERY	CLALLAM	WA	DEAD	DETERMINED VIA EXTERNAL AND INTERNAL EXAM, HISTOLOGY. SEVERAL EVENLY SPACED (5CM BETWEEN EACH "X") CROSSHATCH MARKS ON FRONT OF ROSTRUM AND SIDES OF HEAD. THIN INDENTATIONS ON LEFT AND RIGHT SIDES OF BEAK THAT APPEAR TO WRAP AROUND BEAK. DIFFUSE BRUISING THROUGHOUT HEAD BLUBBER, SEVERE ON RIGHT SIDE BEHIND BLOWHOLE, WITH EDEMATOUS MUSCLE BENEATH. BODY BRUISING, PARTICULARLY ON ENTIRE VENTRAL SIDE OF THE ANIMAL AND ALONG THE TIPS OF THE DORSAL VERTEBRAL PROCESSES. EVIDENCE OF POSSIBLE DROWNING, CONFIRMED VIA HISTOLOGY. ALSO INGESTED 15CM LONG PIECE OF BLACK KNOTTED ROPE (3CM DIAMETER).	DEAD	NA	1.00	Y	Y
BLUE WHALE	EASTERN N PACIFIC	2016	6	26	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	SAN DIEGO	CA	SI	TRAILING 2 RED BULLET BUOYS WITH PURPLE T6 CDFW DUNGENESS CRAB BUOY TAG; LINE WRAPPED THROUGH MOUTH OR AROUND PECTORAL FIN. GEAR WAS ORIGINALLY SET OFF SAN LUIS OBISPO IN 40 - 70 FATHOMS OF WATER. WHALE SEEN NEXT DAY, LOGGING AT SURFACE, WHICH IS ABNORMAL BEHAVIOR FOR A BLUE WHALE. UNSUCCESSFUL ATTEMPT AT DISENTANGLING WHALE. FULL CONFIGURATION OF GEAR UNKNOWN. THIS IS A SERIOUS INJURY BECAUSE OF THE NOTED HEALTH DECLINE OF THE WHALE.	SI	L10	1.00	Y	Y
BLUE WHALE	EASTERN N PACIFIC	2016	7	14	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	LOS ANGELES	CA	SI	TRAILING BUOYS AND LINE. MULTIPLE RESIGHTS AS FAR NORTH AS SANTA CRUZ COUNTY. SEEN ACTIVELY FEEDING WITH OTHER BLUE WHALES THROUGH EARLY OCTOBER. FINAL SIGHTING WAS IN OCTOBER OFF OF LOS ANGELES. WHALE BODY CONDITION WAS DESCRIBED AS 'EMACIATED' IN AUGUST AND 'FAIR' IN OCTOBER. LINE WRAPPED AROUND BODY, 2 YELLOW BUOYS WITH BLUE TIPS, TRAILING 30 FEET BEHIND WHALE. SPACED 1 FM APART, PURPLE CDFW DUNGENESS CRAB BUOY TAG VISIBLE, VIDEO SHOWS ALGAE AND BARNACLE GROWTH ON ROPE AND BUOYS, COMPRESSION OF BUOYS. UNCERTAINTY OVER WHETHER LINE EXTENDS THROUGH MOUTH OR JUST OVER PECTORAL FLIPPERS. HEALTH DECLINE AND TWO CRISS-CROSSED CONSTRICTING MULTIPLE WRAPS OF LINE POSTERIOR OF DORSAL AROUND BODY WARRANTS SERIOUS INJURY.	SI	L2	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
BLUE WHALE	EASTERN N PACIFIC	2016	8	15	UNIDENTIFIED FISHERY INTERACTION	SAN FRANCISCO	CA	SI (PRORATE)	REPORT OF AN ENTANGLED WHALE NEAR THE FARALLON ISLANDS. AMOUNT OF GEAR AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
BLUE WHALE	EASTERN N PACIFIC	2016	8	28	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	TWO BLACK OR GREEN BUOYS WITH ABUNDANT MARINE GROWTH TRAILING BEHIND WHALE ABOUT 20-30 FEET. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
BLUE WHALE	EASTERN N PACIFIC	2016	10	26	VESSEL STRIKE	SAN MATEO	CA	DEAD	MODERATELY DECOMPOSED 65-FOOT LONG BLUE WHALE NECROPSIED. FINDINGS OF BLUNT FORCE TRAUMA. SOME UNCERTAINTY WHETHER OR NOT VESSEL STRIKE WAS POST-MORTEM.	DEAD	NA	1.00	N	Y
BLUE WHALE	EASTERN N PACIFIC	2017	5	25	VESSEL STRIKE	MARIN	CA	DEAD	NECROPSY. BLUNT FORCE TRAUMA DUE TO A BOAT STRIKE. LEFT SIDE OF BODY WAS DAMAGED. FINDINGS INCLUDED 10 BROKEN RIBS AND 10 FRACTURED VERTEBRAE NEAR THE TAIL AND MID-BODY.	DEAD	NA	1.00	N	Y
BLUE WHALE	EASTERN N PACIFIC	2017	6	10	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	SAN FRANCISCO	CA	SI (PRORATE)	TWO BUOYS ON RIGHT SIDE OF BODY, WITH LINE POSSIBLY EXTENDING TO MOUTH. ONE BUOY HAD A RED/ORANGE TAG, THIS IS A CA DUNGENESS CRAB ENTANGLEMENT. ONE LARGER YELLOW BUOY WITH BLACK LONGITUDINAL STRIPE TRAILING OFF RIGHT SIDE, MID BODY, POSSIBLE MOUTH ENTANGLEMENT. ANIMAL LUNGING AT SURFACE, OBSERVERS REPORT IT MIGHT HAVE SELF-RELEASED, BUT BUOYS WERE NOT SEEN AGAIN. UNCERTAINTY REGARDING CONTINUED PRESENCE OF GEAR ON ANIMAL AND UNKNOWN CONFIGURATION WARRANTS PRORATED SERIOUS INJURY.	SI (PRORATE)	L10	0.75	Y	Y
BLUE WHALE	EASTERN N PACIFIC	2017	8	19	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	SI (PRORATE)	BLUE LINE DRAPED OVER BACK OF WHALE DIAGONALLY, FROM ANTERIOR TO DORSAL FIN, TOWARDS MIDBODY. PHOTOS SHOW THAT PRIVATE VESSEL RETRIEVED, VIA CUTTING, A LONG LENGTH OF BLUE LINE AND 2 LARGE BUMPER BUOYS. UNCLEAR IF GEAR REMAINS ON ANIMAL. GOOD BODY CONDITION. UNKNOWN GEAR CONFIGURATION AND AMOUNT.	SI (PRORATE)	L10	0.75	Y	Y
BLUE WHALE	EASTERN N PACIFIC	2017	9	23	UNIDENTIFIED FISHERY INTERACTION	SAN FRANCISCO	CA	SI (PRORATE)	BLUE WHALE TRAILING A SINGLE BUOY APPROXIMATELY 1.5 BODY LENGTHS BEHIND TAIL. ANIMAL WAS ACTIVELY SWIMMING. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
BLUE WHALE	EASTERN N PACIFIC	2018	6	16	VESSEL STRIKE	SAN FRANCISCO	CA	DEAD	<p>NECROPSY: LARGE AREAS OF MUSCLE HEMORRHAGE ON THE LEFT AND RIGHT DORSO-LATERAL SIDES. HEMORRHAGED TISSUE OBSERVED CAUDAL TO THE GAPE ON THE LEFT SIDE. EXTENSIVE NECROTIC TISSUE WAS NOTED CAUDAL TO THE SKULL AT THE CERVICAL VERTEBRAE. BONE BRUISING WAS OBSERVED ON ALL OF THE RIBS THAT WERE VISUALIZED ON THE LEFT SIDE AND ON THE LEFT MANDIBLE. THERE WAS EXTENSIVE FREE-FLOWING BLOOD OBSERVED WHEN THE RIGHT THORAX WAS OPENED UP. THE FIRST THREE (3) LUMBAR VERTEBRAE WERE SURROUNDED BY NECROTIC TISSUE AND WERE SHATTERED INTO MANY PIECES, INCLUDING FRACTURED LATERAL PROCESSES, FRACTURED CENTRUMS, AND A FRACTURED EPIPHYSEAL PLATE. ALL OTHER VERTEBRAE THAT WERE VISUALIZED WERE INTACT. FINDINGS CONSISTENT WITH VESSEL STRIKE AS CAUSE OF DEATH.</p>	DEAD	NA	1.00	N	Y
BLUE WHALE	EASTERN N PACIFIC	2018	7	16	UNIDENTIFIED FISHERY INTERACTION	SONOMA	CA	SI (PRORATE)	<p>WHALE TRAILING 2 YELLOW BUOYS APPROXIMATELY 40 FT. BEHIND ANIMAL. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.</p>	SI (PRORATE)	L10	0.75	Y	Y
BLUE WHALE	EASTERN N PACIFIC	2019	6	2	VESSEL STRIKE	LOS ANGELES	CA	DEAD	<p>WHALE CAME IN ON THE BOW OF A CRUISE SHIP ENTERING LONG BEACH. VESSEL HAD LEFT MEXICO THE PREVIOUS NIGHT. LARGE AREA OF TRAUMA SURROUNDING A CREASE ON THE WHALES BACK JUST IN FRONT OF DORSAL FIN. CREASE WAS ALSO SURROUNDED BY BLUE PAINT. CREASE AND BLUE PAINT ARE LIKELY FROM ANIMAL BEING PINNED TO THE BOW OF THE SHIP. THERE IS HEMORRHAGING OBSERVED ON THE OPPOSITE SIDE OF THE BODY FROM WHERE THE CREASE WAS, IT IS BELIEVED THAT THE VESSEL COLLISION WAS ANTE-MORTEM. RIGHT PECTORAL FLIPPER BROKEN AT INSERTION AND JAWS WERE SEPARATED, BOTH OF THESE ARE BELIEVED TO BE POST-MORTEM.</p>	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
BLUE WHALE	EASTERN N PACIFIC	2020	9	3	UNIDENTIFIED FISHERY INTERACTION	SANTA BARBARA	CA	NSI	BLUE WHALE WITH HEALING LINEAR SCAR POSTERIOR TO DORSAL FIN THAT APPEARS TO HAVE BEEN CAUSED BY LARGE DIAMETER ROPE OR OTHER ENTANGLING MATERIAL. THERE ARE ALSO RAW ABRASIONS THE LENGTH OF THE CAUDAL PEDUNCLE AND ON THE ANTERIOR MARGIN OF THE DORSAL FIN, INDICATING THAT ENTANGLING MATERIAL SHIFTED TOWARDS THE BACK OF THE WHALE AT SOME POINT. ANOTHER, LARGER DIAMETER INDENTATION IS VISIBLE MID-BODY FROM UAV FOOTAGE, PRESUMABLY FROM THE SAME ENTANGLEMENT. WHALE WAS FREE-SWIMMING WITH NO GEAR ATTACHED, IN APPARENT GOOD HEALTH, DESPITE EVIDENCE OF A PREVIOUS CONSTRICTING ENTANGLEMENT. ASSIGNED NON-SERIOUS INJURY AS THE WHALE IS GEAR FREE AND IN APPARENT GOOD HEALTH. .	NSI	L2	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	1	1	SHOOTING	PIERCE	WA	DEAD	FRESH CARCASS WITH EVIDENCE OF SHOOTING / GUNSHOT.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	1	1	VESSEL STRIKE	PIERCE	WA	DEAD	FRESH DEAD. VESSEL TRAUMA (SHARP AND BLUNT)8 ROUGHLY PARERALL LACERATION/ IMPRESSIONS EXTENDING FOR L SIDE TIP OF NOSE DOWN TO BASE OF TAIL.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	1	14	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH FISHING LINE WOUND AROUND DORSAL REGION. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	1	14	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH SWOLLEN LEFT FLIPPER WHERE FISHING HOOK HAD BEEN LOCATED. EUTHANIZED IN REHAB CENTER.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	1	20	GILLNET FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH GILLNET ENTANGLEMENT INJURY AROUND NECK. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	1	28	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	HOOK IN BOTTOM JAW. TAKEN TO REHAB, TREATED AND RELEASED	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	2	1	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	LETHARGIC AND EMACIATED ANIMAL WITH FISHING HOOK AND LINE IN MOUTH. INITIALLY SEEN ALIVE. LATER FOUND DEAD WITH FISHING LINE AROUND NECK.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	2	1	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	ANIMAL WITH CIRCUMFERENTIAL WOUNDS AROUND NECK. TREATED AT REHAB AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	2	3	SHOOTING	SAN LUIS OBISPO	CA	SI	LETHARGIC AND EMACIATED ANIMAL EUTHANIZED IN REHAB. NECROPSY PERFORMED, DETAILS ON LOCATION OF GUNSHOT INJURY NOT GIVEN.	DEAD	NA	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	2	4	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	EMACIATED ANIMAL WITH HOOK IN LEFT LOWER JAW, REMOVED EASILY BY RESCUERS. TREATED AT REHAB AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	2	14	HARASSMENT	SAN DIEGO	CA	NSI	SEA LION PUP ON BEACH BEING HARASSED BY PUBLIC, REPORTEDLY BEING TOUCHED AND PINCHED. TAKEN TO REHAB FACILITY, TREATED AND RELEASED.	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	2	15	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	FISH HOOK IN RIGHT SIDE OF LOWER LIP. ANIMAL TREATED IN REHAB AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	2	15	MARINE DEBRIS	CLATSOP	OR	SI	CIRCUMFERENTIAL, CONSTRICTING WOUND AROUND NECK, POSSIBLY FROM PACKING BAND MATERIAL. NO RESCUE EFFORT INITIATED.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	2	16	MARINE DEBRIS	CLATSOP	OR	SI	CIRCUMFERENTIAL WOUND AROUND NECK FROM UNKNOWN MATERIAL. MATERIAL CUTTING INTO SKIN, SUBDERMAL LAYER EXPOSED. NO RESCUE EFFORT.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	2	16	HOOK AND LINE FISHERY	CLATSOP	OR	SI	CIRCUMFERENTIAL CONSTRICTING WOUND AROUND NECK FROM WHAT APPEARS TO BE SINGLE STRAND OF MONOFILAMENT LINE. NO RESCUE EFFORT.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	2	16	MARINE DEBRIS	CLATSOP	OR	SI	CIRCUMFERENTIAL ENTANGLEMENT AROUND NECK, CONSTRICTING, MATERIAL UNKNOWN. NO RESCUE EFFORT.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	2	16	MARINE DEBRIS	CLATSOP	OR	SI	CIRCUMFERENTIAL ENTANGLEMENT AROUND NECK, CONSTRICTING, MATERIAL UNKNOWN. NO RESCUE EFFORT.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	2	18	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	CIRCUMFERENTIAL WOUND AROUND NECK FROM FISHING LINE. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	2	23	SHOOTING	LINCOLN	OR	DEAD	APPARENT BULLET ENTRY WOUND AT DORSAL INSERSION OF RIGHT FRONT FLIPPER; RADIUS AND ULNA SHATTERED; SURROUNDING TISSUED HEMORRHAGED	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	2	24	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	EMACIATED ANIMAL WITH HOOK IN MOUTH. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	2	24	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	EMACIATED ANIMAL WITH HOOK IN MOUTH. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	2	24	OIL / TAR	SAN LUIS OBISPO	CA	SI	EMACIATED ANIMAL WITH LACERATION NEAR EYE AND OIL / TAR ON BODY. DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	2	25	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	SEVERELY EMACIATED. MONOFILAMENT FISHING LINE WRAPPED AROUND FACE AND BEHIND EYES. SEVERE POOR BODY CONDITION RESULTING FROM ENTRAPMENT WITH FISHING TACKLE, AND GASTROESOPHAGEAL WOUNDS ASSOCIATED WITH INGESTED FISHING TACKLE FOREIGN BODIES WAS CONSIDERED TO BE THE PRIMARY CAUSE OF DEATH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	2	26	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	2	27	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	EMACIATED ANIMAL WITH FISHING HOOK IN CHEEK. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	2	28	HOOK AND LINE FISHERY	ORANGE	CA	SI	MALNOURISHED ANIMAL WITH FISHING LINE IN MOUTH. TREATED AND DIED IN REHAB FACILITY. NECROPSY PERFORMED.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	2	28	MARINE DEBRIS	SAN LUIS OBISPO	CA	SI	MALNOURISHED ANIMAL ENTANGLED IN MARINE DEBRIS. ANIMAL EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	3	7	VEHICLE COLLISION	LOS ANGELES	CA	DEAD	HIT BY CAR.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	3	12	OIL / TAR	MONTEREY	CA	SI	EMACIATED ANIMAL WITH SMALL PATCH OF TAR ON ABDOMEN TAKEN INTO REHAB FACILITY, TREATED AND RELEASED.	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	3	13	MARINE DEBRIS	VENTURA	CA	SI	ANIMAL DISENTANGLED FROM EITHER MARINE DEBRIS OR FISHING GEAR. ENTANGLING MATERIAL WAS NOT DESCRIBED BY RESPONDERS.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	3	15	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH FISHING LINE ENTANGLEMENT SCAR AROUND NECK. ANIMAL DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	3	16	SHOOTING		OR	DEAD	SEVERAL SUSPICIOUS HOLES AND HEMORRHAGE IN THE BODY; SKULL TOTALLY EXPOSED; KIDNEYS AND LUNGS ABNORMAL; A SUBSTANTIAL AMOUNT OF CLOUDY, PINK-TINGED FLUID IN THORACIC CAVITY; THE ANIMAL HAD GOOD BODY CONDITION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	3	17	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	MALNOURISHED PUP WITH FISHING LINE IN MOUTH THAT WRAPS AROUND BODY AND FLIPPER WITH ONE HOOK IN FLIPPER AND TWO HOOKS IN MOUTH. HOOKS AND LINE REMOVED IN REHAB FACILITY, ANIMAL RELEASED.	NSI	P5C	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	3	19	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	FISH HOOK IN LOWER JAW AND LIP OF MALNOURISHED ANIMAL. DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	3	23	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	ANIMAL WITH GOOD BODY CONDITION WITH HOOK IN MOUTH, TREATED IN REHAB AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	3	24	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	HOOK IN LEFT FRONT FLIPPER, REMOVED AT REHAB FACILITY.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	3	27	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	3 HOOKS ON FLIPPERS, OIL/TAR PATCH ON EMACIATED ANIMAL. DIED IN REHAB.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	3	27	MARINE DEBRIS	SANTA CRUZ	CA	SI	EMACIATED ANIMAL WITH PLASTIC IN ITS STOMACH. DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	3	28	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	FISHING HOOK ON RIGHT SIDE OF FACE NEAR EYE, EMACIATED ANIMAL. TREATED IN REHAB AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	3	28	SHOOTING		OR	DEAD	ENTRANCE/EXIT HOLES WITH ASSOCIATED BONE DAMAGE, HEMORRHAGE, AND BLOOD CLOTTING; HEMORRHAGE ALSO IN OTHER AREAS OF BODY AND JUST ANTERIOR TO HEART; INTESTINES TIGHTLY TWISTED; THE SEA LION HAD EXCELLENT BODY CONDITION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	3	31	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	HOOK REMOVED FROM MOUTH AND ANIMAL RELEASED ON THE BEACH. NO INFORMATION ON CONDITION OF ANIMAL.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	4	1	MARINE DEBRIS	LOS ANGELES	CA	SI	ANIMAL WITH WOUND AROUND NECK FROM UNKNOWN CAUSE. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	4	2	HOOK AND LINE FISHERY	MONTEREY	CA	SI	ANIMAL WITH FISHING LINE WRAPPED AROUND NECK, DIED IN REHAB.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 4 (ODFW SUMMARY): ONE OF TEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 4 (ODFW SUMMARY): ONE OF TEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 4 (ODFW SUMMARY): ONE OF TEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	4	4	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 4 (ODFW SUMMARY): ONE OF TEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 4 (ODFW SUMMARY): ONE OF TEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 4 (ODFW SUMMARY): ONE OF TEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 4 (ODFW SUMMARY): ONE OF TEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 4 (ODFW SUMMARY): ONE OF TEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 4 (ODFW SUMMARY): ONE OF TEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 4 (ODFW SUMMARY): ONE OF TEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	HOOK AND LINE FISHERY	ORANGE	CA	SI	EMACIATED ANIMAL WITH FISH HOOKS IN HEAD AND FLIPPERS, DIED IN REHAB.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	SHOOTING		OR	DEAD	OCCIPITAL BROKEN WITH ASSOCIATED HEMORRHAGE; TRACKS AND VARIOUS AREAS OF EXTENSIVE HEMORRHAGE IN BODY; SOME ORGANS HEMORRHAGED; THE ANIMAL HAD EXCELLENT BODY CONDITION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	4	SHOOTING	PACIFIC	WA	DEAD	TRACKS WITH ASSOCIATED HOLES AND HEMORRHAGE IN BODY; TWO BROKEN RIBS; ABDOMINAL CAVITY FILLED WITH BLOODY FLUID; LIVER LOBE RUPTURED WITH CLOTTING; INTESTINES TWISTED; THE ANIMAL HAD EXCELLENT BODY CONDITION	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	5	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	UNDERWEIGHT ANIMAL WITH HOOK IN FLIPPER. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	4	6	HOOK AND LINE FISHERY	ORANGE	CA	SI	FISHING LINE GOING DOWN THROAT. DIED IN REHAB.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	4	6	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT ANIMAL WITH FISHING LINE GOING DOWN THROAT, SUSPECTED INGESTED FISH HOOK. OUTCOME UNKNOWN.	SI	P2	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 11 (ODFW SUMMARY): ONE OF SIX CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 11 (ODFW SUMMARY): ONE OF SIX CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 11 (ODFW SUMMARY): ONE OF SIX CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 11 (ODFW SUMMARY): ONE OF SIX CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 11 (ODFW SUMMARY): ONE OF SIX CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 11 (ODFW SUMMARY): ONE OF SIX CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	12	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH MONOFILAMENT AROUND HEAD TREATED IN REHAB AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	4	12	OIL / TAR	SAN DIEGO	CA	SI	ANIMAL WITH OIL / TAR ON VARIOUS BODY PARTS FOUND IN GARAGE. TREATED AT REHAB AND RELEASED.	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	4	13	MARINE DEBRIS	MONTEREY	CA	SI	EMACIATED ANIMAL WITH GLASS FOUND IN STOMACH. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	15	MARINE DEBRIS	CLALLAM	OR	SI	CIRCUMFERENTIAL ENTANGLEMENT AROUND NECK, CONSTRICTING, MATERIAL UNKNOWN. NO RESCUE EFFORT.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 18 (ODFW SUMMARY): ONE OF THIRTEEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	18	SHOOTING	CLATSOP	OR	DEAD	TREMENDOUS AND EXTENSIVE HEMORRHAGE IN BODY, ESP. AT NECK AND SCAPULAE AREAS; PERICARDIUM AND MEDIAL LUNGS HEMORRHAGED; INTESTINES TWISTED; ABDOMINAL CAVITY MODERATELY FILLED WITH BLOODY FLUID	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 23 (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 23 (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 23 (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 23 (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 23 (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 23 (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 23 (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 23 (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF APRIL 23 (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	24	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH FISHING ENTANGLEMENT, HOOK IN NOSTRIL; BACK AND CHEST HAVE HOOKS WITH FLIES AND SINKER. TREATED AND RELEASED FROM REHAB.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	4	24	SHOOTING	SAN LUIS OBISPO	CA	SI	ANIMAL EUTHANIZED IN REHAB. NECROPSY SHOWED EVIDENCE OF SHOOTING.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	28	HOOK AND LINE FISHERY	SAN MATEO	CA	SI	MODERATELY UNDERWEIGHT, SINGLE MONOFILAMENT LINE AROUND NECK, TISSUE HEALING AROUND LINE, TRAUMA TO RIGHT REAR FLIPPER WITH BONE EXPOSED. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	4	30	MARINE DEBRIS	CLALLAM	OR	SI	CIRCUMFERENTIAL ENTANGLEMENT AROUND NECK, CONSTRICTING, MATERIAL UNKNOWN. NO RESCUE EFFORT.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	30	MARINE DEBRIS	CLALLAM	OR	SI	CIRCUMFERENTIAL ENTANGLEMENT AROUND NECK, CONSTRICTING, MATERIAL UNKNOWN. NO RESCUE EFFORT.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	4	30	SHOOTING	PACIFIC	WA	DEAD	EVIDENCE OF HOLES WITH ASSOCIATED TRACKS, CLOTTING, AND HEMORRHAGE; ADDITIONAL HEMORRHAGE IN VARIOUS AREAS OF THE BODY; INTESTINES TWISTED; THE ANIMAL HAD EXCELLENT BODY CONDITION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 2ND (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 2ND (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 2ND (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 2ND (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 2ND (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 2ND (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 2ND (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 2ND (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 2ND (ODFW SUMMARY): ONE OF NINE CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	4	HOOK AND LINE FISHERY	MONTEREY	CA	SI	FISHING LINE 'IN' MUZZLE AND LEFT FOREFLIPPER , TREATED AT REHAB FACILITY AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	5	4	SHOOTING	ORANGE	CA	SI	PELLET REMOVED FROM HEAD DURING NECROPSY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	7	MARINE DEBRIS	LOS ANGELES	CA	SI	GASTRIC DILATION DUE TO INGESTION OF LATEX GLOVES. DIED IN REHAB, NECROPSIED.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	9	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 9TH (ODFW SUMMARY): ONE OF SEVEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	9	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 9TH (ODFW SUMMARY): ONE OF SEVEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	9	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 9TH (ODFW SUMMARY): ONE OF SEVEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	9	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 9TH (ODFW SUMMARY): ONE OF SEVEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	9	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 9TH (ODFW SUMMARY): ONE OF SEVEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	5	9	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 9TH (ODFW SUMMARY): ONE OF SEVEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	9	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	WEEK OF MAY 9TH (ODFW SUMMARY): ONE OF SEVEN CA SEA LIONS TARGETED FOR REMOVAL THAT WERE TRAPPED AND EUTHANIZED UNDER MMPA SECTION 120.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	9	SHOOTING	TILLAMOOK	OR	DEAD	SUSPICIOUS GASHES AND HOLES W/ASSOCIATED TRACKS, CLOTTING, AND/OR HEMORRHAGE; ADDITIONAL EXTENSIVE HEMORRHAGE IN VARIOUS AREAS OF BODY; ORGANS HEMORRHAGED; THREE BROKEN RIBS; INTESTINES TWISTED; THE ANIMAL HAD EXCELLENT BODY CONDITION	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	13	MARINE DEBRIS	SAN DIEGO	CA	SI	ANIMAL HAD INGESTED A SOCK AND PLASTIC PARTS. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	14	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	ANIMAL WITH GOOD BODY WEIGHT RESCUED BECAUSE OF MONOFILAMENT LINE AROUND NECK. ALSO HAD A HOOK IN CHEST. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	5	14	SHOOTING	MENDOCINO	CA	SI	RADIOGRAPHS OF EUTHANIZED ANIMAL SHOWED EVIDENCE OF METALLIC FRAGMENTS.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	15	SHOOTING	SANTA CRUZ	CA	DEAD	STRANDED ANIMAL WITH DORSAL GUNSHOT ENTRY WOUND AND VENTRAL EXIT WOUND.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	16	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	FISHING LINE, HOOK AND LURE ENTANGLED AROUND REAR FLIPPERS OF EMACIATED ANIMAL. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	5	17	SHOOTING	SANTA CRUZ	CA	DEAD	MARINE MAMMAL CENTER RESPONDED AND SEA LION WAS DECEASED WHEN THEY ARRIVED TO THE BEACH. WAS OBSERVED HAVING TROUBLE BREATHING. HEAD THRUSTS AND POSSIBLE SEIZURES. FOUND SMALL CALIBER BULLET RESTING AGAINST OPPOSITE KIDNEY WHICH HAD HEMORRHAGE. GUNSHOT CAUSE OF DEATH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	19	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED SEIZURING ANIMAL WITH FISH HOOKS IN FRONT AND REAR FLIPPERS AND EARS. ANIMAL DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	20	GILLNET FISHERY	ORANGE	CA	SI	GILLNET WOUND AROUND NECK, TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	Y	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	5	23	SHOOTING	SAN LUIS OBISPO	CA	SI	GOOD BODY CONDITION, SUPERFICIAL LACERATIONS NEAR HEAD AND LEFT SIDE, ALERT BUT NOT ACTIVE, OBSERVED OVERNIGHT AND FOUND IN THE SAME LOCATION NEXT DAY. RADIOGRAPHS SHOWED BUCKSHOT SCATTERED THROUGHOUT CERVICAL REGION. ANIMAL TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	5	23	SHOOTING	CLATSOP	OR	DEAD	EVIDENCE OF HOLES AND TRACKING WOUNDS WITH ASSOCIATED HEMORRHAGE IN BODY; OTHER AREAS OF HEMORRHAGE/DAMAGE IN BODY/ORGANS; THORACIC CAVITY FILLED WITH BLOODY FLUID; SEA LION HAD EXCELLENT BODY CONDITION	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	5	26	HOOK AND LINE FISHERY	MONTEREY	CA	SI	DARTING CAPTURE, MONOFILAMENT ENTANGLEMENT AROUND NECK, MILDLY UNDERWEIGHT. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	5	27	MARINE DEBRIS	MONTEREY	CA	SI	TWINE AROUND NECK, TREATED AT REHAB AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	5	31	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	FISHING LINE JUST IN FRONT OF SHOULDER BLADE JOINT. LACERATION APPROXIMATELY 3/4 WAY AROUND BODY WHERE LINE WAS. TREATED AT REHAB AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	5	31	SHOOTING		OR	DEAD	SUSPICIOUS HOLES W/ASSOC. HEMORRHAGE; POSSIBLE EVIDENCE TRACK ASSOC. W/BLACKENED BLUBBER; THORACIC CAVITY FILLED WITH CLOUDY, PINK-TINGED FLUID; ODD HOLE W/GELATINOUS TISSUE IN LUNG; THORACIC L.N.'S ABNORMAL; KIDNEY DAMAGED AND HEMORRHAGIC	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	6	2	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	6	4	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	FISHING HOOK CAUGHT IN LOWER LEFT LIP WITH ~70 CENTIMETER FISHING LINE AND 8 OUNCE WEIGHT STILL ATTACHED. AREA OUTSIDE OF THE MOUTH AROUND HOOK IS SWOLLEN; INSIDE THE MOUTH IS BLEEDING FROM HOOK WOUND. THIN WITH HIPS AND SPINE VISIBLE. GOOD HYDRATION/WETNESS AROUND THE EYES. ALERT AND ACTIVE. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P5C	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	6	5	HOOK AND LINE FISHERY	MARIN	CA	SI	RESTRAND. MODERATELY UNDERWEIGHT, HEAD WEAVING, DISORIENTED. FULL CIRCUMFERENCE CERVICAL SCAR FROM PREVIOUS MONOFILAMENT ENTANGLEMENT. TAGGED ON BOTH FLIPPERS DURING PREVIOUS STRAND BECAUSE OF ENTANGLEMENT. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	6	14	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	EMBEDDED MONOFILAMENT LINE NEAR EAR. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	6	15	HOOK AND LINE FISHERY	MONTEREY	CA	SI	EMACIATED ANIMAL, FISH HOOKS IN MOUTH. ANIMAL DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	6	15	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	FISHING HOOK IN PECTORAL RIGHT FLIPPER WITH LINE WRAPPED AROUND. OTHERWISE GOOD BODY CONDITION.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	6	15	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	6	16	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	EMACIATED ANIMAL WITH MONOFILAMENT ENTANGLEMENT AROUND NECK. DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	6	17	GILLNET FISHERY	SAN DIEGO	CA	SI	GOOD BODY CONDITION. ENTANGLED WITH GILL NET AROUND NECK CAUSING LARGE OPEN GASHES. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2016	6	19	MARINE DEBRIS	CLALLAM	OR	SI	CIRCUMFERENTIAL ENTANGLEMENT AROUND NECK, CONSTRICTING, MATERIAL UNKNOWN. NO RESCUE EFFORT.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	6	22	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	FISH HOOK ON LOWER LEFT LIP/MOUTH AREA. HOOK REMOVED AND ANIMAL RELEASED ON SITE. NO INFORMATION ON BODY CONDITION.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	6	22	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	FISH HOOK ON LEFT FRONT FLIPPER. HOOK REMOVED AND ANIMAL RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	6	22	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	FISH HOOK ON RIGHT FRONT FLIPPER. FISH HOOK WAS REMOVED AND ANIMAL WAS RELEASED ON SITE	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	7	2	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	MONOFILAMENT LINE WRAPPED AROUND ANIMAL'S NECK. ANIMAL GOOD WEIGHT, ACTIVE, ALERT. DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	7	4	MARINE DEBRIS	LOS ANGELES	CA	SI	EMACIATED ANIMAL WITH CIRCUMFERENTIAL ENTANGLEMENT WOUND AROUND NECK; DIED IN REHAB FACILITY. ENTANGLING MATERIAL NOT KNOWN.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	7	4	SHOOTING	MONTEREY	CA	SI	MODERATELY UNDERWEIGHT ANIMAL WITH DISPLACED JAW. EUTHANIZED IN REHAB FACILITY. BULLET FOUND IN NECK UPON NECROPSY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	7	9	SCIENTIFIC RESEARCH	SAN MIGUEL ISLAND	CA	DEAD	PUP DIED DURING CAPTURE EFFORTS DUE TO ASPHYXIATION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	7	17	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	ANIMAL CAUGHT AT BEACH, REMOVED THREE HOOKS FROM NECK, MOUTH AND BOTTOM OF LEFT FRONT FLIPPER. ANIMAL RELEASED AT SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	7	24	SHOOTING		OR	DEAD	BULLET/PELLET ENTRANCE HOLE IN SKULL; VARIOUS AREAS OF HEMORRHAGE IN BODY; TWO APPROXIMATELY 9 CM DIAMETER HOLES FILLED WITH SAND IN BODY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	7	27	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	ANIMAL KILLED IN GEAR.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	7	28	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	ANIMAL KILLED IN GEAR.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	7	28	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	ANIMAL KILLED IN GEAR.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	7	29	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	SUPERFICIAL ENTRY OF FISHING HOOK WITH LURE ON STOMACH. GOOD BODY CONDITION AND ATTITUDE. REMOVED HOOK AND RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	7	30	HOOK AND LINE FISHERY	ORANGE	CA	SI	FISHING LINE AROUND NECK, SMALL WOUNDS REAR FLIPPERS. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	7	31	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	LARGE FISH HOOK THROUGH RIGHT FRONT FLIPPER. REMOVED HOOK AND RELEASED ON SITE. GOOD BODY CONDITION.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	8	1	SHOOTING	LOS ANGELES	CA	SI	FISHING ENTANGLEMENT AROUND HEAD; LIMITED RANGE OF MOTION IN JAW; 2 SHOTGUN PELLETS BETWEEN SHOULDERS. EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	8	2	VESSEL STRIKE	SAN DIEGO	CA	SI	TRAUMA TO LEFT FRONT FLIPPER. APPROXIMATELY HALF OF THE TIP OF THE FLIPPER HAD BEEN SLICED OFF WITH BONE EXPOSED. DEHYDRATED. MILD TREMORS. SUSPECTED PROPELLER WOUND. ANIMAL EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	8	8	GILLNET FISHERY	VENTURA	CA	DEAD	ENTANGLED IN GILLNET AROUND NECK.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	8	24	SHOOTING	CLATSOP	OR	DEAD	BLOOD CLOTTING, EXTENSIVE HEMORRHAGE, AND SUSPICIOUS HOLES IN NECK; HEMORRHAGE IN HEAD AND BODY; URINE BLOODY; THE ANIMAL HAD GOOD BODY CONDITION	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	8	24	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	8	28	MARINE DEBRIS	LINCOLN	OR	SI	PACKING BAND CUTTING DEEPLY INTO NECK OF ANIMAL.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	9	1	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	FISHING LINE AROUND NECK, RIGHT ABOVE SHOULDERS. EMBEDDED WITH PUS AND LACERATIONS. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	9	11	VESSEL STRIKE	ORANGE	CA	SI	ANIMAL HAS PROP STRIKES ACROSS MID SECTION. JUMPED INTO HARBOR PATROL BOAT AND ALLOWED TEAM TO NET WITH NO FIGHTING. WALKED INTO CAGE. PREVIOUSLY RELEASED TWICE BY PMMC. ON 7/21/16 AT CHANNEL ISLANDS AT 137.8 POUNDS. LOST 27.8 POUNDS IN 52 DAYS. TRANSFERRED TO PUBLIC DISPLAY FACILITY.	CAPTIVITY	P9	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	9	12	MARINE DEBRIS	MONTEREY	CA	SI	MILDLY UNDERWEIGHT ANIMAL WITH ENTANGLEMENT AROUND NECK TAKEN INTO REHAB, TREATED AND RELEASED. NO INFORMATION ON ENTANGLING MATERIAL.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	9	12	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	MONOFILAMENT LINE PREVIOUSLY AROUND NECK. UPON RESCUE, LINE WAS WRAPPED AROUND FLIPPER TAG. RELEASED ON SITE.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	9	12	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	9	13	GILLNET FISHERY	SAN DIEGO	CA	SI	GILL NET EMBEDDED/ENTANGLED AROUND NECK. GOOD WEIGHT, ACTIVE, ALERT, VOCAL. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	Y	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	9	14	HOOK AND LINE FISHERY	MONTEREY	CA	SI	MONOFILAMENT AROUND NECK DEEP ENOUGH TO EXPOSE MUSCLE. TREATED AT REHAB AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	9	20	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	9	21	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT, FISH HOOK IN MOUTH RELEASED FROM PMMC ON 9/01/16 LOST 16.8 POUNDS IN 21 DAYS. ALTHOUGH ANIMAL WAS RELEASED FROM REHAB, WEIGHT LOSS WHILE IN REHAB CASTS DOUBT ON ABILITY OF ANIMAL TO SURVIVE POST-RELEASE.	SI	P5C	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	9	24	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	TWO INCH THREE HOOK FISHING LURE EMBEDDED IN THE TOP AND BOTTOM LIP OF THE OF THE ANIMAL MAKING HIM UNABLE TO OPEN HIS MOUTH. GOOD BODY CONDITION. ANIMAL WAS DE-HOOKED AND RELEASED ON SITE UNDER THE SUPERVISION OF A VETERINARIAN.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	10	2	SHOOTING	PACIFIC	OR	DEAD	EVIDENCE COLLECTED TO ENFORCEMENT, CLEAR EVIDENCE HOLE WITH TRACK, BONE DAMAGE, AND AREAS OF HEMORRHAGE IN HEAD AND/OR BODY	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	10	8	SHOOTING	SANTA CRUZ	CA	SI	BUCKSHOT IN HIS MUZZLE AND FACE AND A BULLET LODGED IN HIS LEFT SHOULDER, EMACIATED. HARASSED BY PEOPLE ON THE BEACH, PETTING. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	10	12	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	10	16	SCIENTIFIC RESEARCH	SAN MATEO	CA	DEAD	ANO NUEVO ISLAND. ASPHYXIATION RESULTING FROM CAPTURE ACTIVITIES.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	10	18	SHOOTING	CLATSOP	OR	DEAD	CLEAR EVIDENCE HOLE IN OCCIPITAL BONE, VARIOUS AREAS OF HEMORRHAGE AND SUSPICIOUS HOLES IN ANIMAL, INCLUDING ABDOMEN	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	10	24	MARINE DEBRIS	SAN DIEGO	CA	SI	ACTIVE ANIMAL WITH GOOD BODY CONDITION HAD A PAIR OF SWIM GOGGLES AROUND MIDSECTION OF BODY. GOGGLES REMOVED AND ANIMAL RELEASED ON SITE.	NSI	P7B	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	10	26	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	ANIMAL THAT HAD STRANDED MULTIPLE TIMES WITH FISH HOOK IN LEFT SIDE OF MOUTH AND IN LEFT REAR FLIPPER. VERY THIN BODY. TREATED AT REHAB FACILITY, BUT NO NOTES ON OUTCOME. TREATED AS SERIOUS INJURY, BASED ON MULTIPLE STRANDINGS AND BODY CONDITION.	SI	P5C	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	10	27	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	10	28	VESSEL STRIKE	MARIN	CA	SI	EMACIATED. BLUNT FORCE TRAUMA TO PELVIS DUE TO BOAT STRIKE. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	10	28	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	10	28	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	10	29	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL CAPTURED IN NET. RELEASED ALIVE AFTER BEING BROUGHT ON BOARD. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	10	29	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	10	31	MARINE DEBRIS	MONTEREY	CA	SI	EMACIATED, ENTANGLEMENT CUTTING IN AROUND SHOULDERS. EUTHANIZED IN REHAB FACILITY. INITIALLY IDENTIFIED AS FISHERY INTERACTION, BUT TYPE OF ENTANGLING MATERIAL WAS NOT IDENTIFIED.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	11	3	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	5	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	7	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	7	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	7	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	8	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	8	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	9	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	10	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	10	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	10	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	11	10	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	11	10	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	11	10	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	10	CATCHER PROCESSOR MIDWATER TRAWL		OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	10	CATCHER PROCESSOR MIDWATER TRAWL		OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	10	CATCHER PROCESSOR MIDWATER TRAWL		OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	12	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	12	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	12	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	12	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	12	CATCHER PROCESSOR MIDWATER TRAWL		OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	13	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	11	13	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	13	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	13	CATCHER PROCESSOR MIDWATER TRAWL		OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	14	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	14	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	14	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	14	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	14	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	15	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	15	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	15	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	15	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	11	15	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	15	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	15	CATCHER PROCESSOR MIDWATER TRAWL		OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	16	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	16	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	16	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	16	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	16	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	11	17	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	17	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	17	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	17	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2016	11	17	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	18	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	18	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	18	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	18	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2016	11	18	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	12	3	GILLNET FISHERY	SAN DIEGO	CA	SI	GILL NET DEEPLY EMBEDDED AROUND NECK. BODY CONDITION GOOD, HYDRATION LEVEL GOOD. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2016	12	4	SHOOTING	CLATSOP	OR	DEAD	EVIDENCE HOLE AND FRACTURES IN SKULL W/ASSOC. HEMORRHAGE, AS WELL AS PALATE, SNOUT, AND TOOTH DAMAGE	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	12	12	SHOOTING	CLATSOP	OR	DEAD	SUSPICIOUS 1-CM DIA. HOLE THROUGH SKIN AT DORSAL SNOUT, WITH SNOUT SHATTERED; SIMILAR HOLE AT MANDIBLE; DEEP HEMORRHAGE IN VARIOUS AREAS OF BODY	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	12	14	SHOOTING	CLATSOP	OR	DEAD	SNOUT SHATTERED AND ADDITIONAL MANDIBULAR DAMAGE; SOME HEMORRHAGE IN BODY; THE SEA LION HAD EXCELLENT BODY CONDITION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2016	12	18	CATCH SHARES BOTTOM TRAWL	OFFSHORE	WA	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2016	12	28	UNIDENTIFIED HUMAN INTERACTION	KING	WA	DEAD	CARCASS FOUND WITH ROPE AROUND IT.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	1	4	SHOOTING	MONTEREY	CA	SI	UNDERWEIGHT AND LETHARGIC ANIMAL. PRE-MORTEM RADIOGRAPHS SHOWED BUCKSHOT IN CERVICAL SPINE. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	1	6	CA SWORDFISH DRIFT GILLNET FISHERY		CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	1	14	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT ANIMAL ASSOCIATED WITH FISHING LINE AND LURE. TREATED AND RELEASED. NO DETAILS GIVEN ON EXTENT OF INJURY ASSOCIATED WITH GEAR. TREATED AS SERIOUS INJURY DUE TO LACK OF DETAILS.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	1	27	SCIENTIFIC RESEARCH	VENTURA	CA	DEAD	ANIMAL STARTLED DURING RESEARCH ACTIVITIES AND FELL OVER CLIFF.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	1	31	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	2	4	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	MALE ADULT CALIFORNIA SEA LION HAD ABOUT AN 8 INCH FISHING LURE ATTACHED TO HIS RIGHT FLIPPER. HE SEEMED TO HAVE GOOD BODY CONDITION. THE LURE WAS SUCCESSFULLY REMOVED AND THE ANIMAL WAS RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	2	9	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	ANIMAL WITH GOOD BODY CONDITION AND A TREBLE HOOK IN LEFT CHEEK AND LURE AND HOOK IN LOWER RIGHT JAW. ANIMAL TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	2	13	MARINE DEBRIS	SAN DIEGO	CA	SI	ANIMAL IN GOOD BODY CONDITION HAD RUBBER GASKET AROUND HEAD LOCATED BEHIND EARS AND UNDER CHIN. REMOVED GASKET AND RELEASED ON SITE. RUBBER GASKET APPROXIMATELY 8 INCHES IN DIAMETER. BEFORE RESCUE, ANIMAL WAS SEEN FREQUENTLY IN ORANGE COUNTY BY PACIFIC MARINE MAMMAL CENTER AS WELL AS SAN DIEGO.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	2	14	SHOOTING	LINCOLN	OR	DEAD	DEAD ANIMAL WITH LARGE CALIBER COPPER BULLET BULLET FOUND IN CAUDAL LUMBAR AREA.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	2	22	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE CA		DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	2	25	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	WOUND AROUND NECK DUE TO MONOFILAMENT LINE AROUND NECK. ANIMAL TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	3	17	SHOOTING	SOLANO	CA	SI	GUNSHOT TRAUMA, BLIND ANIMAL. DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	3	20	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	3	20	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	3	22	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	3	26	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	SI	MONOFILAMENT LINE REMOVED FROM ANIMAL IN GOOD BODY CONDITION.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2017	3	31	SHOOTING	ORANGE	CA	SI	ANIMAL SHOT WITH ARROW THROUGH NECK. MEMBERS OF PUBLIC / FISHERMEN REMOVED ARROW FROM ANIMAL, WHICH THEN DEPARTED SCENE. EXTENT OF INJURY UNKNOWN, CONSIDERED SERIOUS INJURY.	SI	P9	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	4	9	MARINE DEBRIS	LOS ANGELES	CA	SI	ANIMAL INGESTED AN UNKNOWN MATERIAL, EUTHANIZED IN REHAB.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	4	10	VEHICLE COLLISION	ORANGE	CA	SI	PREGNANT FEMALE HIT BY CAR, EUTHANIZED IN REHAB.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	4	15	NEARSHORE HOOK AND LINE	OFFSHORE	CA	SI	ANIMAL GRABBED GEAR WITH 7 HOOKS ATTACHED AND DEPARTED TRAILING GEAR. OBSERVER PROGRAM.	SI	P5A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	4	16	HOOK AND LINE FISHERY	ORANGE	CA	SI	FISH HOOKS IN FLIPPER AND MOUTH. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	4	19	SHOOTING	ORANGE	CA	SI	ANIMAL SHOT IN RIGHT SHOULDER. EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	4	19	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	4	20	SHOOTING	CLATSOP	OR	DEAD	ANIMAL WITH TREMENDOUS HEMORRHAGE AT HEAD AND NECK, WITH APPARENT BULLET EXIT HOLE IN ABDOMEN.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	4	21	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	4	21	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	LETHARGIC ANIMAL WITH FISHING LINE AROUND FLIPPER AND POSSIBLE INGESTED FISHING HOOK. ANIMAL TREATED AT REHAB FACILITY AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	4	24	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT ANIMAL WITH FISHING HOOK AND LINE AROUND FLIPPER. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	4	25	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	4	25	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	4	25	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	4	25	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	4	27	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	3	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	4	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	5	4	HOOK AND LINE FISHERY	MONTEREY	CA	SI	MONOFILAMENT LINE AROUND FISHING NECK. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	5	4	MARINE DEBRIS	SAN LUIS OBISPO	CA	SI	MEMBER OF PUBLIC DISENTANGLED ANIMAL FROM UNKNOWN CONSTRICTING MATERIAL. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	5	7	GILLNET FISHERY	LOS ANGELES	CA	SI	ANIMAL WITH GILLNET WOUND TAKEN INTO REHAB FACILITY, TREATED AND RELEASED.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2017	5	9	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	10	MARINE DEBRIS	LOS ANGELES	CA	SI	INGESTED HARD PLASTIC TRASH. EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	10	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	10	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	5	11	MARINE DEBRIS	LOS ANGELES	CA	SI	INGESTED FOREIGN BODY. TREATED AT REHAB AND RELEASED.	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	5	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	16	SHOOTING	MONTEREY	CA	SI	GUNSHOT AND LACERATIONS. DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	16	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	17	MARINE DEBRIS	LOS ANGELES	CA	SI	WOODEN BLOCK MATERIAL FOUND IN STOMACH. ANIMAL DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	17	MARINE DEBRIS	MONTEREY	CA	SI	PACKING STRAP ENTANGLEMENT. TREATED AT REHAB AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	5	17	HOOK AND LINE FISHERY	SANTA BARBARA	CA	DEAD	FISHING LINE AROUND HEAD AND NECK.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	17	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	18	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT ANIMAL WITH FISH HOOKS IN CHEST, HIP, AND REAR FLIPPER. TREATED AT REHAB AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	5	22	MARINE DEBRIS	LINCOLN	OR	SI	LARGE CONSTRICTING INJURY AROUND NECK WITH PROTRUDING TISSUE. ANIMAL WAS NOT PRESENT NEXT DAY.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	23	MARINE DEBRIS	SAN DIEGO	CA	SI	BALLOON FOUND IN FECAL MATERIAL OF UNDERWEIGHT, LETHARGIC ANIMAL. TREATED AT REHAB AND RELEASED.	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	5	26	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	FISH HOOK IN LIP AND REAR FLIPPER. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	5	28	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	FISHING LINE AROUND NECK. SWOLLEN FACE ON BOTH SIDES FROM STING RAY BARB INJURY FOUND DURING SURGERY. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	5	28	SHOOTING	LOS ANGELES	CA	SI	BULLET WOUND ACROSS NOSE AND EYE, SECOND BULLET IN NECK. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	5	28	HOOK AND LINE FISHERY	LINCOLN	OR	SI	SALMON FLASHER LURE AND SEVERAL FEET OF LINE HANGING OUT OF MOUTH. TRAUMA EVIDENT AT LEFT SIDE OF MOUTH.	SI	P2	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	5	29	HOOK AND LINE FISHERY	ORANGE	CA	NSI	FISH HOOK IN BACK. PUBLIC FEEDING AND HOLDING ANIMAL. TREATED AT REHAB AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	5	29	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	5	31	MARINE DEBRIS	LOS ANGELES	CA	SI	GASTRIC IMPACTION WITH INGESTED PLASTIC AND ROCKS. ANIMAL DIED IN REHAB.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	6	1	MARINE DEBRIS	LOS ANGELES	CA	SI	ANIMAL INGESTED METALLIC FOIL MATERIAL. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	6	3	SHOOTING	LOS ANGELES	CA	SI	PELLET LODGED BEHIND RIGHT EYE INSIDE SKULL DETERMINED VIA RADIOGRAPH. NO DETAILS ON FINAL OUTCOME OF CASE, ASSIGNED AS SERIOUS INJURY.	SI	P9	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	6	4	SHOOTING	LOS ANGELES	CA	SI	ANIMAL WITH PELLET INSIDE HEAD AND MISSING EYE TREATED AT REHAB AND TRANSFERRED TO PUBLIC DISPLAY FACILITY	CAPTIVITY	P9	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	6	6	SHOOTING	CLALLAM	WA	SI	CARCASS AND SKELETON COLLECTED FOR SCIENTIFIC RESEARCH. A CROSSBOLT ARROW WAS FOUND IN THE THORACIC CAVITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	6	6	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	6	7	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	6	7	SHOOTING	SAN LUIS OBISPO	CA	SI	MALNOURISHED ANIMAL WITH GUNSHOT WOUND TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	6	7	HOOK AND LINE FISHERY	ORANGE	CA	SI	ANIMAL WITH SEIZURES CAPTURED WITH FISH HOOK IN MOUTH. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P5C	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	6	9	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	6	9	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	6	15	SHOOTING	LOS ANGELES	CA	SI	ANIMAL WITH PELLET SHOTS AND A BRAIN HEMORRHAGE EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	6	16	MARINE DEBRIS	LOS ANGELES	CA	SI	MARINE DEBRIS INGESTION AND DOMOIC ACID TOXICITY. ANIMAL CHASING MEMBERS OF PUBLIC. EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	6	23	SHOOTING	LOS ANGELES	CA	SI	HUMAN INTERACTION WITH GUNSHOT; SPINAL PERFORATION BETWEEN APPARENT ENTRY WOUND AND BULLET. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	6	24	MARINE DEBRIS	MONTEREY	CA	SI	MALNOURISHED ANIMAL WITH GREEN NYLON ROPE AROUND NECK, BUT NOT EMBEDDED IN TISSUE. EUTHANIZED IN REHAB DUE TO RENAL FAILURE.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	7	1	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	ANIMAL WAS ENTANGLED IN FISHING LINE WITH ONE LARGE HOOK IN HIS NECK AND ONE LARGE HOOK IN HIS LOWER JAW. EXCELLENT BODY CONDITION. TREATED IN REHAB FACILITY AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	7	6	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	7	7	HOOK AND LINE FISHERY	SANTA BARBARA	CA	SI	TWO FISH HOOKS REMOVED FROM MOUTH OF ANIMAL. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	7	8	HOOK AND LINE FISHERY	SAN LUIS OBISPO	CA	SI	MALNOURISHED ANIMAL WITH MONOFILAMENT LINE ENTANGLED AROUND THE HEAD AND EARS.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	7	18	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	ANIMAL WITH MONOFILAMENT LINE WRAPPED AROUND HIS NECK ABOUT 5 CENTIMETERS FROM HIS FOREFLIPPERS, CAUSING LACERATIONS. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	7	19	MARINE DEBRIS	LOS ANGELES	CA	SI	CIRCUMFERENTIAL WOUND AROUND NECK. ENTANGLING MATERIAL UNKNOWN. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	7	26	HOOK AND LINE FISHERY	SAN MATEO	CA	SI	MALNOURISHED ANIMAL WITH FISHING HOOK EMBEDDED IN MAXILLARY BUCCAL MUCOSA. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	7	26	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	ONE TO TWO-INCH FISH HOOK WITH RED/YELLOW FEATHERS FOUND IN PYLORIC REGION OF STOMACH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	8	8	SHOOTING	SAN MATEO	CA	SI	GUNSHOT TRAUMA TO JAW. EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	8	8	SHOOTING	SAN DIEGO	CA	DEAD	FRESH DEAD ANIMAL WITH ENTANGLEMENT INJURY AROUND NECK AND CONFIRMED (VIA X-RAY) BULLET AND SEVERE SKULL FRACTURES.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	8	8	GILLNET FISHERY	SAN DIEGO	CA	DEAD	FISHERY INTERACTION INDICATED BY LINEAR ABRASIONS AROUND BODY.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	8	11	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	FISH HOOK IN LIP. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	8	15	HOOK AND LINE FISHERY	MONTEREY	CA	SI	EMACIATED, ALERT BUT NOT ACTIVE, FISH HOOK AND LINE FELL OUT OF CORNER OF MOUTH DURING RESCUE. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	8	15	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	8	18	VESSEL STRIKE	SAN DIEGO	CA	DEAD	ANIMAL REPORTED WITH PROPELLER WOUNDS UNDERNEATH A DOCK.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	8	18	SCIENTIFIC RESEARCH	SAN DIEGO	CA	DEAD	ANIMAL REMOTELY SEDATED AND DROWNED.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	8	23	LIMITED ENTRY SABLEFISH HOOK AND LINE	OFFSHORE	OR	NSI	DETERRENCE USED TO SCARE OFF 5 SEA LIONS FEEDING ON CATCH. NO INJURIES REPORTED. OBSERVER PROGRAM	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	8	23	LIMITED ENTRY SABLEFISH HOOK AND LINE	OFFSHORE	OR	NSI	DETERRENCE USED TO SCARE OFF 5 SEA LIONS FEEDING ON CATCH. NO INJURIES REPORTED. OBSERVER PROGRAM	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	8	23	LIMITED ENTRY SABLEFISH HOOK AND LINE	OFFSHORE	OR	NSI	DETERRENCE USED TO SCARE OFF 5 SEA LIONS FEEDING ON CATCH. NO INJURIES REPORTED. OBSERVER PROGRAM	NSI	P9	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	8	23	LIMITED ENTRY SABLEFISH HOOK AND LINE	OFFSHORE	OR	NSI	DETERRENCE USED TO SCARE OFF 5 SEA LIONS FEEDING ON CATCH. NO INJURIES REPORTED. OBSERVER PROGRAM	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	8	23	LIMITED ENTRY SABLEFISH HOOK AND LINE	OFFSHORE	OR	NSI	DETERRENCE USED TO SCARE OFF 5 SEA LIONS FEEDING ON CATCH. NO INJURIES REPORTED. OBSERVER PROGRAM	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	9	3	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	HEALTHY ANIMAL WITH MONOFILAMENT LINE WRAPPED AROUND NECK, CUTTING INTO ANIMAL APPROXIMATELY 1-INCH DEEP. 3 FEET OF TRAILING LINE. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	9	8	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	9	12	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	FISH HOOK IN STOMACH. EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	9	17	VESSEL STRIKE	VENTURA	CA	DEAD	CARCASS NEAR ANACAPA ISLAND WITH EVIDENCE OF A PROPELLER STRIKE.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	9	17	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	9	20	SHOOTING	LOS ANGELES	CA	SI	LIVE ANIMAL BROUGHT TO REHAB CENTER WHERE RADIOGRAPHIC EVIDENCE INDICATED A BULLET. EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	9	22	HOOK AND LINE FISHERY	SANTA BARBARA	CA	SI	MONOFILAMENT LINE AROUND NECK. ANIMAL DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	9	22	HOOK AND LINE FISHERY	KITSAP	WA	SI	LURE FLASHER COMING OUT OF MOUTH.	SI	P2	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	9	28	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	DEAD	0.3 CM WIDE TAN/YELLOW ROPE WRAPPED TWICE AROUND IT'S NECK, CREATING A SEVERE CIRCUMFERENTIAL LACERATION EXTENDING INTO MUSCLE LAYER, WITH ASSOCIATED POOL OF BLOOD UNDERNEATH VENTRAL SIDE OF LACERATION	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	9	28	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	9	29	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	RECORDS INDICATE ANIMAL DIED ON ITS WAY TO REHAB FACILITY WITH A HOOK AND LINE FISHERY INJURY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	9	29	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	1	HOOK AND LINE FISHERY	MARIN	CA	SI	DETAILS LACKING, BUT A SEA LION WITH A HOOK AND LINE INJURY WAS TREATED AT A REHAB FACILITY AND RELEASED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	10	4	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	5	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	6	SHOOTING	SAN DIEGO	CA	SI	ANIMAL WITH GUNSHOT WOUND EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	10	9	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	12	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	13	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	14	BLUNT FORCE TRAUMA	MONTEREY	CA	SI	ANIMAL DESCRIBED WITH INJURIES CONSISTENT WITH BEING CLUBBED TO DEATH WAS EUTHANIZED IN REHAB FACILITY	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	10	16	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	20	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	23	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	10	23	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	23	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	24	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	24	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	24	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	24	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	24	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	24	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	27	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	28	SHOOTING	KITSAP	WA	DEAD	RADIOGRAPH SHOWED HALF A DOZEN PELLETS IN NECK. C1 AND C2 VERTEBRAE WERE FRACTURED. SEVERAL WERE RETRIEVED ON NECROPSY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	10	31	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	10	31	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	10	31	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	11	3	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	SI	ANIMAL OBSERVED WITH CIRCUMFERENTIAL FISHERY ENTANGLEMENT AROUND NECK. RESCUE ATTEMPT WAS MADE, ANIMAL DARTED DUE TO SIZE AND LOCATION, BUT NOT SEEN AGAIN.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	5	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	6	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	8	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	11	8	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	9	GILLNET FISHERY	LOS ANGELES	CA	SI	DETAILS LACKING ON AN ANIMAL DESCRIBED AS HAVING A GILLNET INJURY. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2017	11	9	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	9	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	9	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	9	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	9	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	10	SHOOTING	LANE	OR	DEAD	GUNSHOT WOUNDS ON RIGHT SIDE OF BODY; THROUGH FRONT FLIPPER, ENTRY AND EXIT WOUNDS THROUGH ABDOMEN.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	11	12	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	SI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2017	11	18	SHOOTING	CLATSOP	OR	DEAD	THE SNOUT WAS CUT OFF; OBVIOUS BULLET HOLE ON VENTRAL BODY BY FOREFLIPPER (POSSIBLE EXIT HOLE); THE SEA LION HAD EXCELLENT BODY CONDITION	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	11	18	SHOOTING	CLATSOP	OR	DEAD	TWO OBVIOUS BULLET HOLES IN THE ABDOMEN.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	11	25	SHOOTING	LOS ANGELES	CA	SI	RADIOGRAPH SHOWED BULLET IN NECK. ANIMAL TREATED AND RELEASED FROM REHAB FACILITY.	NSI	NA	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	11	25	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	28	SHOOTING	PACIFIC	WA	DEAD	ANIMAL WITH GOOD BODY CONDITION AND OBVIOUS BULLET ENTRY INJURY.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017	11	29	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	11	29	RIDGEBACK PRAWN BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	11	29	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	12	1	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	MORTALITY SELF-REPORT FROM VESSEL OPERATOR.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	12	6	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	MORTALITY SELF-REPORT FROM VESSEL OPERATOR.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017	12	10	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	ANIMAL HAD FISH HOOKS IN THE RIGHT SIDE OF MOUTH AND UPPER FRONT FLIPPER. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	12	10	MARINE DEBRIS	PACIFIC	WA	DEAD	PLASTIC BAG FOUND IN STOMACH OF CARCASS THAT HAD BEEN SCAVENGED ON BEACH BY BALD EAGLES.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	12	10	SHOOTING	LINCOLN	OR	NSI	SUBCUTANEOUS BULLET FOUND IN BLUBBER. CAUSE OF DEATH LISTED AS LEPTOSPIROSIS. STRANDING PROGRAM SAID BULLET WAS NOT A FACTOR IN CAUSE OF DEATH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	12	15	OIL / TAR	SAN MATEO	CA	NSI	ANIMAL WITH OIL / TAR AND A DORSAL PUNCTURE WOUND TREATED AT REHAB FACILITY AND RELEASED.	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2017	12	16	SHOOTING	SANTA BARBARA	CA	SI	LEAD PELLET (0.177 INCH CALIBER) UNDER SKIN BETWEEN EAR FLAPS. NO ASSOCIATED SKELETAL DAMAGE. ANIMAL DIED IN REHAB.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017	12	18	SHOOTING	CLATSOP	OR	DEAD	ANIMAL IN GOOD BODY CONDITION WITH OBVIOUS BULLET WOUND AT MID-ABDOMEN AND POSSIBLY THROUGH HEAD, BASED ON DAMAGE TO SKULL.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2017			CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2017			CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017			CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017			CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017			CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017			CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2017			CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	1	1	HOOK AND LINE FISHERY	ORANGE	CA	SI	EMACIATED ANIMAL WITH FISH HOOK IN UPPER RIGHT LIP. OUTCOME UNKNOWN.	SI	P5B	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	1	2	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	1	9	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	EMACIATED ANIMAL WITH FISH HOOK IN UPPER RIGHT LIP. OUTCOME UNKNOWN.	SI	P5B	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	1	15	SHOOTING	KING	WA	DEAD	ANIMAL IN EXCELLENT BODY CONDITION WITH PENETRATING WOUND TO HEAD FOUND DEAD ON BEACH. MULTIPLE PELLETS / BULLETS FOUND IN HEAD AND NECK ON RADIOGRAPHS. DUE TO FRESHNESS SUSPECT THAT SEA LION WAS LETHALLY SHOT IN CLOSE PROXIMITY TO QUARTERMASTER HARBOR, LESS THEN 2 DAYS PRIOR TO INITIAL REPORT DATE. RECOVERED OF BULLET #1 WAS SUFFICIENT TO KILL THE SEA LION. OTHER PROJECTILE IS FROM PREVIOUS HUMAN INTERACTIONS AND APPEARS TO HAVE BEEN IN THE SEA LION FOR A WHILE NOT CONSIDERED PART OF THE CAUSE OF DEATH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	1	20	MARINE DEBRIS	SONOMA	CA	SI	UNDERWEIGHT ANIMAL WITH WHITE PACKING STRAP WRAPPED LOOSELY AROUND NECK, STRANDED AND RELEASED, LATER RESTRAINED. OUTCOME UNKNOWN.	SI	P8B	1.00	N	Y

## Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	1	26	HARASSMENT	MONTEREY	CA	SI	UNAUTHORIZED PICKUP OF MALNOURISHED PUP - MATERNAL SEPARATION. REPORTING PARTY DROVE TO MONTEREY BAY AQUARIUM RESEARCH INSTITUTE WITH ANIMAL AND WAITED FOR TMMC TO PICK UP. FINAL OUTCOME UNKNOWN.	SI	P14	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	1	30	RIDGEBACK PRAWN BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	1	30	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	2	6	SHOOTING	SAN DIEGO	CA	SI	LETHARGIC AND SLIGHTLY THIN. VERY WEAK. BULLET FOUND IN DIAGNOSTIC RADIOGRAPHS, LOCATED NEAR THE SPINE AT THE NECK, DORSALLY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	2	6	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	NSI	DETERRENCE USED TO SCARE OFF 5 SEA LIONS FEEDING ON CATCH. NO INJURIES REPORTED. OBSERVER PROGRAM	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	2	7	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	SEA LION WITH FISHING LURE IN THE LOWER RIGHT SIDE OF MOUTH. ATTEMPTED A RESCUE, BUT EVADED THE TEAM.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	2	7	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	2	7	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	2	7	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	2	8	SHOOTING	PIERCE	WA	DEAD	PENETRATING WOUND IN CHEEK WITH TRACKING HEMORRHAGE. HEMORRHAGE TRACKED TO BULLET IN MUSCLE JUST ANTERIOR TO C4 VERTRABRAE.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	2	13	MARINE DEBRIS	MARIN	CA	SI	MARINE DEBRIS INGESTION; BUBBLE WRAP IN STOMACH AND DOMOIC ACID TOXICITY. ANIMAL ORIGINALLY STRANDED IN SAN LUIS OBISPO ON 1/7/18 AND RELEASED ON 1/26/18 AT CHIMNEY ROCK POINT REYES NATIONAL SEASHORE. ANIMAL WAS RESIGHTED AT DRAKES BEACH ON 2/13 AND RESTRANDED ON 2/17 IN POINT REYES NATIONAL SEASHORE. ANIMAL WAS EUTHANIZED.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	2	14	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	2	17	SHOOTING	SAN DIEGO	CA	DEAD	UNRESPONSIVE THIN AND LETHARGIC ANIMAL FOUND ON BEACH. BULLETS FOUND UPON X-RAY IN HIS LOWER RIGHT JAW.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	2	21	MARINE DEBRIS	SAN DIEGO	CA	SI	ANIMAL HAD A RUBBER BAND AROUND ITS MOUTH, SECURING THE MOUTH CLOSED. RUBBER BAND WAS REMOVED ON SITE AND THE ANIMAL WAS RELEASED IMMEDIATELY AFTER.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	3	9	SHOOTING	GRAYS HARBOR	WA	DEAD	PENETRATING PUNCTURE WOUNDS AT BOTH SIDES OF CHEST, ABLE TO TRACK AT LEAST ONE WOUND INTO CHEST CAVITY AND THROUGH LUNG. SMALL 1-2CM BULLET (PELLET) RECOVERED FROM INSIDE OF CHEST CAVITY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	3	12	OIL / TAR	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH OIL/TAR ON BODY. OUTCOME UNKNOWN.	SI	P9	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	3	29	HOOK AND LINE FISHERY	ORANGE	CA	SI	EMACIATED AND DEHYDRATED ANIMAL WITH MULTIPLE FISH HOOKS. LOCATION OF HOOKS NOT REPORTED. OUTCOME UNKNOWN. BASED ON ANIMAL'S CONDITION, ASSUMPTION IS THAT HOOKS WERE LOCATED IN HEAD / MOUTH, POSSIBLY INTERFERING WITH FEEDING.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	4	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	4	10	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	4	10	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	11	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	13	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	FISHING LURE HANGING FROM MOUTH. APPEARS TO HAVE SWALLOWED HOOK. THIN. VERY ACTIVE AND AGGRESSIVE. .22 GAUGE BULLET FOUND ON X-RAY. LOCATED TO THE LEFT OF THE SPINE, MID-BODY, HALF-WAY DOWN THE BODY IN LENGTH. TWO ANIMALS DISTURBED DURING RESCUE. NO DETAILS ON WHETHER FINAL CONDITION WAS DEAD OR RELEASED POST-TREATMENT. ASSUMED TO BE A SERIOUS INJURY BASED ON DETAILS PROVIDED.	SI	P2	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	17	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	17	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	4	18	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	19	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	19	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	20	HOOK AND LINE FISHERY	ORANGE	CA	SI	FISH HOOK IN RIGHT SIDE OF MOUTH. ANIMAL EMACIATED AND DEHYDRATED.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	21	SHOOTING	CLATSOP	OR	DEAD	ANIMAL WITH EXCELLENT BODY CONDITION WITH OBVIOUS HEMORRHAGE PATTERN ON HEAD AND NECK - LIKELY SHOOTING.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	24	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	4	24	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	24	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	24	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	24	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	4	25	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	28	HOOK AND LINE FISHERY	ORANGE	CA	SI	EMACIATED AND DEHYDRATED ANIMAL WITH FISH HOOK IN MOUTH. OUTCOME UNKNOWN.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	4	28	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	1	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	1	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	1	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	5	1	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	5	2	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	5	3	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	ANIMAL KILLED IN GEAR.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	5	3	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	5	3	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	3	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	5	8	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	8	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	8	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	8	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	8	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	9	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL DESCRIBED AS HAVING INTERACTED WITH HOOK AND LINE FISHERY. NO DETAILS ON INJURY TYPE OR SEVERITY, OR OUTCOME. ASSUMING HOOKS WERE IN OR NEAR MOUTH DUE TO CONDITION OF ANIMAL.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	9	SHOOTING	PACIFIC	WA	DEAD	BULLET RETRIEVED FROM A SEA LION WITH EXCELLENT BODY CONDITION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	9	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	UNDERWEIGHT PUP WITH FISHING HOOK IN NOSE TRANSFERRED TO CAPTIVE DISPLAY FACILITY.	CAPTIVITY	P5B	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	5	9	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	11	SHOOTING	PACIFIC	WA	DEAD	ANIMAL SHOT IN HEAD; BULLET/Pellet FRAGMENTS RETRIEVED.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	14	SHOOTING	PACIFIC	WA	DEAD	BULLET RECOVERED FROM A SEA LION WITH EXCELLENT BODY CONDITION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	15	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	22	VESSEL STRIKE	CLACKAMAS	OR	DEAD	ANIMAL HAD PROPELLER CUTS ON LATERAL MID-BODY AND ONE CUT BEING QUITE DEEP AT THE FOREFLIPPER/FOREARM; THIS DEEP CUT WAS ASSOCIATED WITH BONE DAMAGE, INFECTION, AND NECROSIS AND IS LIKELY THE CUT THAT CONTRIBUTED TO THE SEA LION'S DEATH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	23	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL DESCRIBED AS HAVING INTERACTED WITH HOOK AND LINE FISHERY. NO DETAILS ON INJURY TYPE OR SEVERITY, OR OUTCOME. ASSUMING HOOKS WERE IN OR NEAR MOUTH DUE TO CONDITION OF ANIMAL.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	23	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL DESCRIBED AS HAVING INTERACTED WITH HOOK AND LINE FISHERY. NO DETAILS ON INJURY TYPE OR SEVERITY, OR OUTCOME. ASSUMING HOOKS WERE IN OR NEAR MOUTH DUE TO CONDITION OF ANIMAL.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	24	SHOOTING	CLATSOP	OR	DEAD	ANIMAL WITH EXTENSIVE HEMORRHAGE CLEARLY SHOT MID-ABDOMEN. ANIMAL ALSO HAD GILLNET IN THROAT, WHICH WAS PACKED WITH PINKISH REGURGITATION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	5	24	MARINE DEBRIS	SANTA BARBARA	CA	SI	ANIMAL ENTANGLED IN LINE OF UNKNOWN TYPE, TREATED AT REHAB FACILITY.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	5	25	GILLNET FISHERY	SAN DIEGO	CA	SI	MONOFILAMENT NET AROUND NECK, TIGHTLY CUTTING INTO SKIN. 15 ANIMALS WERE DISTURBED DURING THE RESCUE. NO DETAILS ON OUTCOME.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2018	5	28	HOOK AND LINE FISHERY	ORANGE	CA	NSI	SUNKEN LEFT EYE, FISH HOOK IN CHEST AND LEFT REAR FLIPPER.	NSI	P5D	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	5	31	HARASSMENT	SAN DIEGO	CA	SI	HUMAN-INDUCED ABANDONMENT. TEAM OBSERVED THE PUBLIC APPROACHING AND TOUCHING THE PUP ON 5/31/18. ABANDONED NEONATAL PUP. DEEMED NON-RELEASEABLE AND TRANSFERRED TO PUBLIC DISPLAY FACILITY.	CAPTIVITY	P14	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	6	1	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	FISHING HOOK AND LINE IN LEFT FLIPPER, REMOVED AND RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	6	13	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT ANIMAL WITH TREBLE HOOK IN MOUTH.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	6	14	GILLNET FISHERY	SAN LUIS OBISPO	CA	SI	MALNOURISHED ANIMAL FOUND ON BEACH WITH GREEN NETTING AROUND NECK, PATIENT WAS LETHARGIC AND THIN WITH DIAGNOSED DOMOIC ACID TOXICITY. OUTCOME UNKNOWN.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	6	18	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	6	21	SHOOTING	SAN DIEGO	CA	SI	EMACIATED, LETHARGIC. SUSPICIOUS WOUND ABOUT THE SIZE OF A HALF DOLLAR FOUND OVER RIGHT SHOULDER. GUNSHOT WOUND. BULLETS FOUND IN SKULL UPON XRAY PRIOR TO NECROPSY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	6	21	SCIENTIFIC RESEARCH	OFFSHORE	CA	DEAD	ANIMAL KILLED IN SCIENTIFIC RESEARCH TRAWL.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	6	25	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	6	27	UNIDENTIFIED FISHERY INTERACTION	SAN LUIS OBISPO	CA	SI	ACTIVE LESION AROUND NECK SUGGESTING ENTANGLEMENT, LETHARGIC AND EMACIATED. NO OTHER DETAILS, OUTCOME UNKNOWN.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	7	2	UNIDENTIFIED FISHERY INTERACTION	SANTA CRUZ	CA	SI	SURFERS DISTENTANGLED ANIMAL FROM GREEN NYLON NETTING. ONE SURFER WAS BITTEN. NO DETAILS ON ANIMAL'S CONDITION.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2018	7	5	VESSEL STRIKE	MONTEREY	CA	DEAD	POSSIBLE BOAT STRIKE - GASH ON BODY ABOVE RIGHT FLIPPER; BLOOD BY FLIPPER.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	7	6	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	SI	ANIMAL HAD A GAFF IN HIS FACE. HE WAS POLE SEDATED, JUMPED IN THE WATER, AND SOMETIME DURING THE RESCUE EFFORTS THE GAFF FELL OFF. ANIMAL WAS RELEASED ON SITE.	SI	P9	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	7	11	HOOK AND LINE FISHERY	SAN DIEGO	CA	DEAD	MONOFILAMENT FISHING LINE WAS WRAPPED AROUND THE NECK IN A SINGLE LOOP (NO LONG PIECES TRAILING) WITH AN ASSOCIATED LACERATION WHICH EXTENDS INTO THE MUSCLE LAYER.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	7	11	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	DEAD	UNKNOWN FISHERY___ MESSAGE CAME THROUGH TO NOAA WCR NMFS-LONG BEACH FROM PRIVATE CITIZEN. PHOTOS DETERMINED SPECIES, ESTIMATED LENGTH, AND HUMAN INTERACTION (LINE AROUND NECK). PHOTOS ATTACHED TO THIS RECORD.___	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	7	16	VESSEL STRIKE	VENTURA	CA	SI	SEVERELY INJURED SEA LION WITH EXPOSED SKULL. INJURIES CONSISTENT WITH A VESSEL STRIKE.	SI	P15	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	7	19	GILLNET FISHERY	SAN LUIS OBISPO	CA	SI	PATIENT WAS FOUND WITH MONOFILAMENT NETTING CUTTING INTO NECK. PEOPLE SURROUNDING THE PATIENT ON THE BEACH, AND ANIMAL LETHARGIC. ENTANGLEMENT FILED AWAY AT TMMC. ANIMAL ALSO HAD DOMOIC ACID TOXICITY. NO DETAILS ON OUTCOME.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	7	19	VESSEL STRIKE	ORANGE	CA	SI	PROPELLER WOUND TO FACE, SHARK BITE ON RIGHT FLIPPER. NO DETAILS ON OUTCOME.	SI	P15	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	7	26	UNIDENTIFIED FISHERY INTERACTION	SANTA BARBARA	CA	SI	ENTANGLEMENT SCAR AROUND HEAD, LOWER JAW AND TEETH MISSING. EUTHANIZED ON SITE.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	7	27	UNIDENTIFIED FISHERY INTERACTION	VENTURA	CA	SI	ENTANGLED ANIMAL SEEN, ATTEMPTED CAPTURE FAILED BECAUSE ANIMAL SWAM AWAY. AMOUNT AND CONFIGURATION OF ENTANGLING GEAR UNKNOWN.	SI	P6	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	8	1	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	FISHING HOOK EMBEDDED IN REAR LEFT FLIPPER. LINE EXTENDING FROM HOOK WRAPPED AROUND NATIONAL MARINE FISHERIES SERVICE TAG ON FRONT LEFT FLIPPER. TAG REMOVED DUE TO ENTANGLEMENT AND HOOK REMOVED. RETAGGED AND RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	8	1	HARASSMENT	MONTEREY	CA	SI	_HARASSMENT_MALNUTRITION, LEPTOSPIROSIS_ PATIENT FOUND LETHARGIC, UNRESPONSIVE, AND IN A BAD LOCATION. REPORTED THAT THE PATIENT WAS SHOT BY A PAINTBALL GUN AND A PASSERBY WAS FLICKING CIGARETTES AT PATIENT._LEPTOSPIROSIS_	SI	P9	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	8	2	GILLNET FISHERY	SAN FRANCISCO	CA	DEAD	SCAR AROUND NECK FROM PREVIOUS ENTANGLEMENT. NO MONOFILAMENT PRESENT WHEN SCAR WAS EXAMINED.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	8	2	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	EMACIATED AND LETHARGIC ANIMAL FOUND WITH HOOK IN THE MOUTH AND IN THE HIND FLIPPER.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	8	5	MARINE DEBRIS	SAN LUIS OBISPO	CA	SI	PATIENT WAS FOUND WITH ENTANGLEMENT AROUND NECK, POTENTIALLY A PACKING STRAP/ ZIP TIE. PATIENT WAS NOTED TO BE LETHARGIC AND DRINKING FROM TIDEPOLS WITH PEOPLE AND DOGS PRESENT.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	8	6	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	8	9	LIMITED ENTRY SABLEFISH HOOK AND LINE	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	8	10	UNIDENTIFIED FISHERY INTERACTION	SANTA CRUZ	CA	SI	MALNOURISHED ANIMAL FOUND WITH LARGE ENTANGLEMENT SCAR AROUND NECK.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	8	11	UNIDENTIFIED FISHERY INTERACTION	SAN LUIS OBISPO	CA	SI	MALNOURISED ANIMAL WITH ENTANGLEMENT WOUND ON NECK.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	8	14	SHOOTING	MENDOCINO	CA	DEAD	BULLET HOLE IN SIDE OF ANIMAL AND ASSOCIATED INJURIES TO INTERNAL ORGANS.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	8	15	SHOOTING	SAN DIEGO	CA	SI	COMATOSE, FOAMING AT THE MOUTH. GOOD WEIGHT AND BODY CONDITION. REPORTED BY LIFE GUARDS THAT SHE CAME ONTO THE BEACH AT 7PM ON 8/14/2018. RESCUED AT 9AM ON 8/15/2018. BULLET FOUND IN SKULL ON X-RAY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	8	15	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	8	18	HOOK AND LINE FISHERY	SANTA BARBARA	CA	SI	SEA LION ENTANGLED IN LINE SEDATED AND DISENTANGLED. NO FURTHER DETAILS.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	8	21	LIMITED ENTRY SABLEFISH HOOK AND LINE	OFFSHORE	OR	NSI	DETERRENCE USED TO SCARE OFF 5 SEA LIONS FEEDING ON CATCH. NO INJURIES REPORTED. OBSERVER PROGRAM	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	8	24	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	MONOFILAMENT LINE WRAPPED AROUND NECK. LINE REMOVED AND ANIMAL RELEASED ON SITE.	NSI	P7B	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	8	24	MARINE DEBRIS	SAN DIEGO	CA	SI	THIN ROPE EMBEDDED AROUND NECK. ROPE WAS REMOVED AND ANIMAL RELEASED ON SITE. GOOD BODY CONDITION.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	8	24	LIMITED ENTRY SABLEFISH HOOK AND LINE	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	8	31	SHOOTING	LANE	OR	DEAD	HOLE IN RIGHT ABDOMEN APPEARS TO BE A BULLET EXIT WOUND; END OF RIGHT FRONT FLIPPER APPEARS TORN AS IF SHOT OFF; TOP OF HEAD "SCALPED"; SKULL EXPOSED TO BARE BONE.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	9	4	SHOOTING	LOS ANGELES	CA	NSI	SHOT WITH PAINT BALL GUN. NO DETAILS ON ANIMAL CONDITION.	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	9	8	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	PATIENT NOTED TO HAVE FISHING NET HANGING OUT OF MOUTH WITH A HOOK EMBEDDED IN THE MOUTH. THE PATIENT WAS ALSO LETHARGIC, EMACIATED, AND UNRESPONSIVE AT THE TIME OF RESCUE. OUTCOME UNKNOWN.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	9	10	GILLNET FISHERY	SAN MATEO	CA	DEAD	ENTANGLED AROUND THE NECK. SKULL, VIBRISSAE, BACULUM AND ENTANGLEMENT COLLECTED FOR CAS ARCHIVES.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	9	11	GILLNET FISHERY	SAN LUIS OBISPO	CA	SI	PATIENT FOUND WITH MONOFILAMENT NETTING AROUND NECK CUTTING INTO THE SKIN, BODY CONDITION WAS NOTED TO BE GOOD AND THE PATIENT WAS ALERT AND ACTIVE. PEOPLE WERE HARASSING THE PATIENT ON THE BEACH. OUTCOME UNKNOWN.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	9	14	GILLNET FISHERY	VENTURA	CA	SI	ON BOAT DOCK IN CHANNEL ISLANDS HARBOR WITH GILLNET AROUND NECK. SEDATED REMOTELY, REMOVED GILLNET AND RELEASED IMMEDIATELY FOLLOWING DISENTANGLEMENT.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2018	9	15	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	MANOURISHED PATIENT FOUND WITH FISH HOOK AND CLEAR LINE COMING OUT OF MOUTH. OUTCOME UNKNOWN.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	9	25	SHOOTING	KING	WA	DEAD	RADIOGRAPH CONFIRMED SEA LION WAS SHOT. THREE PROJECTILES RECOVERED.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	10	1	HOOK AND LINE FISHERY	MONTEREY	CA	SI	ANIMAL FOUND WITH GREEN MONOFILAMENT NETTING EMBEDDED IN TISSUE AROUND NECK. OUTCOME UNKNOWN.	SI	P8A	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	10	3	CATCH SHARES HOOK AND LINE	OFFSHORE	OR	SI	ANIMAL BROKE LINE AND HAD TRAILING GEAR OF UNKNOWN LENGTH. OBSERVER PROGRAM	SI	P6	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	10	4	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	10	7	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	10	8	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH HOOK AND LINE FISHERY INTERACTION TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	10	12	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	LETHARGIC ANIMAL HAD LARGE GAFF HOOK IN RIGHT UPPER LIP. GAFF WAS REMOVED. WAS ABLE TO USE REAR FLIPPERS. RELEASED ON SITE. OUTCOME UNKNOWN.	SI	P9	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	10	12	CATCH SHARES HOOK AND LINE	OFFSHORE	OR	NSI	DETERRENCE USED TO SCARE OFF 5 SEA LIONS FEEDING ON CATCH. NO INJURIES REPORTED. OBSERVER PROGRAM	NSI	P9	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	10	15	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	ANIMAL WITH LEFT FRONT FLIPPER FRACTURE DESCRIBED AS HAVING INTERACTED WITH HOOK AND LINE FISHERY. NO FURTHER DETAILS.	SI	P10	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	10	16	MARINE DEBRIS	SAN MATEO	CA	SI	PATIENT FOUND WITH A BLACK, BELT-LIKE ENTANGLEMENT AROUND THE LOWER NECK/ CHEST REGION. ENTANGLEMENT WAS SEVERELY CUTTING INTO THE PATIENT. ANIMAL WAS EUTHANIZED.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	10	19	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	10	25	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	10	26	MARINE DEBRIS	SAN DIEGO	CA	SI	SWIM GOGGLES STUCK AROUND NECK OF ANIMAL. GOGGLES REMOVED AND ANIMAL RELEASED ON SITE. NO DETAILS ON SEVERITY OF INJURY.	NSI	P7B	0.00	N	N



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	10	27	HOOK AND LINE FISHERY	MONTEREY	CA	DEAD	PATIENT FOUND WITH A NECK ENTANGLEMENT SCAR AND FISH HOOK IN SHOULDER, BUT FRESHLY DEAD AT THE TIME OF ARRIVAL.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	10	27	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	10	29	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	10	29	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	10	31	UNIDENTIFIED FISHERY INTERACTION	MENDOCINO	CA	SI	PATIENT FOUND WITH AN BLACK FISHING LINE ENTANGLED AROUND NECK. ANIMAL WAS ALSO LETHARGIC AND MODERATELY UNDERWEIGHT WITH CONFOUNDING LEPTOSPIROSIS AND SEPTICEMIA.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	10	31	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	11	5	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	11	7	SHOOTING	SANTA CRUZ	CA	DEAD	ANIMAL WITH MULTIPLE GUNSHOT PELLETS IN HEAD FOUND DURING NECROPSY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	11	7	SHOOTING	KING	WA	DEAD	CARCASS HAD PUNCTURE WOUNDS AND GASH ON HEAD. STOMACH WAS FULL. X-RAY REVEALED PROJECTILES.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	11	8	GILLNET FISHERY	KING	WA	DEAD	VISUAL EXAMINATION SHOWED THE HEAD HAD BEEN CUT OFF; NO OTHER INJURIES SEEN. EXAMINED BY CASEY MCLEAN, ROBIN LINDSEY. _	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	11	11	SHOOTING	KITSAP	WA	DEAD	TRACKING WOUNDS WERE IDENTIFIED FROM THE INSIDE OUT FROM THE ABDOMINAL CAVITY AND ONE FROM THE THORACIC CAVITY. ABDOMINAL CAVITY FULL OF FREE BLOOD. ENTRY OF SHOT THROUGH RIGHT SIDE THORACIC CAVITY- TRACKING WOUND BETWEEN RIBS 5 AND 6; RECOVERED SHOT INSIDE PERICARDIAL SAC; CLOTTED BLOOD. TRACKING WOUND INTO ABDOMINAL CAVITY. #1 SHOT RECOVERED FROM PERICARDIAL SAC. #2 RECOVERED FROM RIGHT C1 VERTEBRAE MUSCLE WITH TRACKING HEMORRHAGE. #3 FOUND IN BLUBBER ON DORSAL LEFT SIDE NECK. JUSTIFICATION: RECOVERED SHOT PELLETS FROM PERICARDIUM, AND AROUND VERTEBRA C1-3, EVIDENCE FOR TRACKING INTO ABDOMINAL CAVITY AS WELL. SIGNIFICANT AMOUNT BLOOD AND BLOT IN ABDOMEN AND THORACIC CAVITY. THIS IS THE APPARENT CAUSE THE DEATH OF THIS SEA LION.____	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	11	13	SHOOTING	KING	WA	DEAD	3/4 INCH DIAMETER PUNCTURE SEEN ON BACK AND NUMEROUS SMALL PUNCTURE WOUNDS ON LEFT SIDE AND FORE FLIPPER. SHOT PELLETS RECOVERED FROM BODY ON NECROPSY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	11	14	SHOOTING	KITSAP	WA	DEAD	X-RAY SHOWED THREE TYPES OF PROJECTILE IN HEAD AND NECK. SMALL SHOT AND ON PROJECTILE FROM OLD INJURIES. NOT ABLE TO RECOVER PROJECTILE NEAR C2 VERTEBRAE. PROJECTILE RECOVERED FROM LEFT LUNG. MULTIPLE PERFORATIONS IN COLON AND SMALL INTESTINE- 7 VISUALIZED. BASED ON THE TRACKING HOLES INTO THORAX AND LOWER ABDOMEN AS WELL AS THE EXTENSIVE HEMORRHAGE IN INTO BOTH CAVITY, THE CAUSE OF DEATH IS APPARENT.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	11	14	SHOOTING	KING	WA	DEAD	SKULL AND NECK RADIOGRAPH CONFIRM THREE DIFFERENT TYPES OF PROJECTILES IN HEAD AND NECK.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	11	16	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	11	16	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2018	11	17	SHOOTING	SAN DIEGO	CA	DEAD	BULLETS WERE FOUND ON X-RAY, ONE BULLET AT THE BASE OF THE SKULL AND ONE BULLET ABOVE THE SHOULDER.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	11	18	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	11	20	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018	11	22	SHOOTING	KING	WA	DEAD	CARCASS FOUND FLOATING AND SECURED TO DOCK WITH ROPE. DUE TO MULTIPLE TRACKING WOUNDS BASED ON EXTERNAL EXAM, CAUSE OF DEATH ATTRIBUTED TO SHOOTING.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	11	22	SHOOTING	SAN DIEGO	CA	DEAD	TWO BULLETS FOUND ON XRAY, ONE ON THE RIGHT SIDE OF THE NECK/SHOULDER AND ONE ON THE RIGHT SIDE OF THE MIDBODY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	11	24	SHOOTING	KING	WA	DEAD	RETRIEVED SHOT PELLET OUT OF C2 VERTEBRAE WHICH WAS FRACTURED AND THERE WAS A TRACKING HEMORRHAGE AROUND LOCATION. THIS APPEAR TO BE SIGNAFICANT TO CAUSE INJURY AND POSSIBLY CAUSE OF DEATH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	11	26	SHOOTING	MARIN	CA	DEAD	BULLET WOUNDS. SHOT SIX TIMES IN THE RIGHT SIDE AROUND THE SHOULDER AND RIBS AREA. LEFT SIDE BRAND V370. NO TAGS PRESENT IDENTIFIED AS ANIMAL THAT WAS BRANDED ON SAN MIGUEL ISLAND AS A PUP IN 2011.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	11	28	SHOOTING	MASON	WA	DEAD	TRACKING WOUND FROM SMALL ROUND HOLE IN BACK LEFT SKULL INTO LEFT FRONTAL LOBE. PELLET FOUND IN BRAIN TISSUE WITH SURROUNDING HEMORRHAGE. GOOD BODY CONDITION, STOMACH FULL OF FOOD. CAUSE OF MORTALITY DUE TO GUNSHOT BUT DEATH WAS NOT IMMEDIATE-IT SURVIVED LONG ENOUGH TO INHALE A LARGE AMOUNT OF SAND, GRAVEL AND ROCKS.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	12	4	SHOOTING	KING	WA	DEAD	RADIOGRAPHS CONFIRMED ANIMAL WAS SHOT. NO FURTHER DETAILS.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	12	4	SHOOTING	KING	WA	DEAD	RADIOGRAPH OF HEAD CONFIRMED ANIMAL WAS SHOT.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	12	8	MARINE DEBRIS	SAN DIEGO	CA	SI	SWIMMING GOGGLES ENTANGLED AROUND HEAD.	SI	P8A	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2018	12	12	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	12	12	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018	12	20	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2018			MIDWATER TRAWL ROCKFISH EM	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2018			CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	1	2	SHOOTING	PACIFIC	WA	DEAD	EXPOSED SKULL AND LARGE SUSPICIOUS HOLE DORSALLY ABOVE LEFT SCAPULA CONSISTENT WITH SHOOTING.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	1	3	SHOOTING	PIERCE	WA	DEAD	RECOVERY OF THE BULLET FROM BRAIN AND THE MARKED HEMORRHAGE IN SKULL CONFIRM THE SEA LION WAS SHOT WHILE STILL ALIVE.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	1	7	GILLNET FISHERY	SAN DIEGO	CA	SI	GILL NET AROUND NECK AND UNDER EAR. NET REMOVED AND ANIMAL WAS RELEASED ON SITE.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2019	1	9	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	1	9	HOOK AND LINE FISHERY	ORANGE	CA	SI	EMACIATED, DEHYDRATED ANIMAL WITH FISH HOOK IN MOUTH. NO DETAILS ON WHETHER HOOK WAS INTERNAL / EXTERNAL.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	1	13	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT ANIMAL WITH LINE AND HOOKS AROUND BODY.	SI	P6	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	1	15	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	1	16	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH FISHING LINE AROUND NECK.	SI	P6	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	1	28	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	FISH HOOK IN LOWER RIGHT JAW/CHIN, CAME OUT WHEN NETTED. EXCELLENT BODY CONDITION. TAGGED AND RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	1	30	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	2	4	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	2	4	GILLNET FISHERY	VENTURA	CA	SI	ANIMAL PHOTOGRAPHED WITH GILLNET CUTTING INTO NECK IN TWO SEPARATE CIRCUMFERENTIAL BANDS, SUBCUTANEOUS LAYER EXPOSED, NET MATERIAL DEEPLY-EMBEDDED. LOOKS LIKE AN ADULT FEMALE IN GOOD BODY CONDITION. PHOTO TAKEN DURING FIELD WORK AT SAN NICOLAS ISLAND. PHOTO REVIEWED BY J. CARRETTA.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	2	5	HOOK AND LINE FISHERY	ORANGE	CA	SI	DEHYDRATED AND EMACIATED ANIMAL WITH HOOK IN EYELID. SWOLLEN NECK.	SI	P5B	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	2	20	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	2	20	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	2	20	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	3	2	SHOOTING	MONTEREY	CA	DEAD	BULLET RECOVERED.	DEAD	P9	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	3	4	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	3	6	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	3	6	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	3	9	CATCH SHARES BOTTOM TRAWL	OFFSHORE	WA	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	3	9	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH FISH HOOK IN FLIPPER.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	3	13	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	3	16	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	3	17	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	3	20	MARINE DEBRIS	ORANGE	CA	SI	THICK RUBBER-BAND AROUND MUZZLE OF EMACIATED ANIMAL.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	3	22	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	3	22	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	3	24	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	EMACIATED ANIMAL WITH FISH HOOK IN LOWER LIP.	SI	P5B	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	3	26	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	3	31	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	3	31	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	HOOK EMBEDDED ABOVE RIGHT EYE. FISHING LURE WITH HOOK IN BOTTOM RIGHT CORNER OF MOUTH. SMALL PUNCTURE WOUND OVER LEFT HIP.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	1	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	ANIMAL HAD A FISHING HOOK WITH LINE ATTACHED IN THE LEFT SIDE OF HIS NECK, BUT WAS OTHERWISE HEALTHY. RELEASED ON SITE ONCE THE HOOK AND LINE WERE REMOVED.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	4	2	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT ANIMAL WITH FISHING LINE ENTANGLEMENT AND SEVERED RIGHT EAR.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	3	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	4	5	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	5	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	5	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	5	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	4	14	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	4	14	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	4	14	HOOK AND LINE FISHERY	VENTURA	CA	SI	UNDERWEIGHT ANIMAL WITH FISHING HOOK IN FOREFLIPPER TRANSFERRED TO REHAB FACILITY. OUTCOME UNKNOWN.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	18	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	4	18	HOOK AND LINE FISHERY	ORANGE	CA	SI	EMACIATED ANIMAL WITH FISH HOOK IN MOUTH.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	18	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	MALNOURISHED ANIMAL WITH FISH HOOK IN MOUTH.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	23	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	24	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	4	24	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	24	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	24	GILLNET FISHERY	SAN DIEGO	CA	SI	ANIMAL WITH GILLNET DOUBLE-WRAPPED AROUND NECK AND HEAD. GEAR REMOVED BY RESPONDERS.	NSI	P7B	0.00	Y	N



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	4	25	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	4	25	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	25	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	25	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	30	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	30	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	30	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4	30	SHOOTING	CLALLAM	WA	DEAD	A CLEAR BULLET TRAJECTORY WAS FOUND FROM ABOVE THE RIGHT EYE INTO THE BRAIN, THOUGH NO BULLET WAS FOUND. BULLET HOLE IN SKULL MEASURED APPROXIMATELY 5MM IN DIAMETER, AND HEMORRHAGING WAS VISIBLE IN ALL PRECEDING LAYERS OF FLESH, INCLUDING THROUGH THE SKIN.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	4		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	4		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	1	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	1	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	1	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	1	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	1	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	1	CA LOBSTER TRAP / POT ENTANGLEMENT	SANTA BARBARA	CA	SI	SEA LION ENTANGLED IN 40 KG OF LOBSTER GEAR SEDATED AND GEAR REMOVED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	2	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	4	GILLNET FISHERY	SANTA BARBARA	CA	SI	PINK MONOFILAMENT GILLNET ENTANGLED ON HEAD, SNOUT AND THROUGH MOUTH. 4 CM LACERATION ON LEADING EDGE OF RIGHT FRONT FLIPPER.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	5	6	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	LARGE SALMON FLASHER LURE HANGING OUT OF MOUTH WITH FISHING LINE. PROBABLE HOOK IN THROAT. SUCCESSFULLY RESCUED FROM BOAT AFTER DAYS OF BEING ON WATCH AND UNSUCCESSFUL ATTEMPTS AT RESCUE. FLASHER AND LINE CAME OUT DURING RESCUE AND WERE RETAINED, BUT HOOK LIKELY REMAINS IN THROAT.	SI	P2	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	7	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	7	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	7	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	8	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	5	8	SEA CUCUMBER BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	5	8	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	5	8	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	8	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	10	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	FISH HOOK IN LIP OF MALNOURISHED ANIMAL.	SI	P5B	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	11	SHOOTING	SANTA CRUZ	CA	DEAD	ANIMAL FOUND WITH GUNSHOT WOUND TO HEAD, CONFIRMED VIA RADIOGRAPHY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	13	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	5	14	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	14	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	14	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	14	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	14	AUTHORIZED MMPA SEC. 120 REMOVAL	WILLIAMETTE FALLS	OR	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	14	HOOK AND LINE FISHERY	ORANGE	CA	SI	EMACIATED ANIMAL WITH FISHING HOOKS IN REAR FLIPPERS. ANIMAL REPORTED AS BEING INSIDE A SLEEPING BAG, ACCOMPANIED BY HUMAN.	SI	P1	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	5	15	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	15	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	15	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	15	AUTHORIZED MMPA SEC. 120 REMOVAL	COLUMBIA RIVER	WA	ALIVE	REMOVAL OF ANIMAL PREYING ON ENDANGERED SALMON IN COLUMBIA RIVER. AUTHORIZED UNDER MMPA SECTION 120. ANIMAL KILLED BY LETHAL INJECTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	16	HOOK AND LINE FISHERY	ORANGE	CA	SI	EMACIATED ANIMAL WITH FISH HOOKS IN FLIPPERS.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	16	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	REPORT INDICATES ANIMAL WITH HOOK IN REAR FLIPPER IN CUSTODY OF LIFE GUARDS. NO FURTHER DETAILS.	NSI	P5D	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	5	17	GILLNET FISHERY	ORANGE	CA	SI	EMACIATED AND DEHYDRATED ANIMAL WAS ENTANGLED IN GILLNET AROUND NECK. THE NETTING HAD BECOME STUCK TO THE BUOY, TRAPPING THE ANIMAL. OUTCOME UNKNOWN.	SI	P7A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	5	17	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT, DEHYDRATED, FISH HOOKS IN FRONT AND REAR FLIPPERS.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	19	SHOOTING	CLATSOP	OR	DEAD	ANIMAL IN EXCELLENT BODY CONDITION. BULLET FRAGMENTS RECOVERED FROM HEAD AND STOMACH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	20	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH FISH HOOK IN JAW.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	26	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI	MALNOURISHED ANIMAL WITH CIRCUMFERENTIAL ENTANGLING WOUND AROUND NECK.	SI	P8A	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	5	27	SHOOTING	MONTEREY	CA	DEAD	SILVER AND ORANGE FLASHER ON MONOFILAMENT LINE HANGING FROM MOUTH. SMALL REGIONS OF ALOPECIA. BULLET FRAGMENT FOUND BY CAS DURING PROCESSING OF THE SKULL, NOT APPARENT DAMAGE TO THE SKULL, BUT THE PROJECTILE HAD A FLAT SIDE WHICH SUGGESTED IT RESTED AGAINST BONE AT SOME POINT.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	28	MARINE DEBRIS	SAN DIEGO	CA	SI	DIVE MASK AROUND NECK OF DEHYDRATED AND MALNOURISHED ANIMAL. CONSTRICTING WOUNDS TO NECK.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	5	28	HOOK AND LINE FISHERY	SAN LUIS OBISPO	CA	SI	TANGLED FISHING LINE STUCK IN RIGHT UNDERSIDE, ANTERIOR TO FRONT RIGHT FLIPPER.	SI	P6	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	2	SHOOTING	MONTEREY	CA	DEAD	MODERATELY UNDERWEIGHT, LEFT EYE INJURY FROM GUNSHOT, AND BULLET IN NECK. (BULLETS IN HEAD AND NECK, NO BULLETS RECOVERED BUT FRAGMENTS FOUND UPON NECROPSY.)	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	5	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH 3 FISH HOOKS, BUT DETAILS LACKING ON HOOK PLACEMENT OR INJURY SEVERITY.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	7	UNIDENTIFIED HUMAN INTERACTION	SAN LUIS OBISPO	CA	DEAD	EMACIATED ANIMAL THAT DIED. BILATERAL OCULAR TRAUMA AND CRANIAL FRACTURE ARE SUGGESTIVE OF RECENT INJURY THAT WAS LIKELY ANTHROPOGENIC.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	8	MARINE DEBRIS	SAN DIEGO	CA	SI	ENTANGLEMENT AROUND NECK. WHITE PLASTIC WRAP, BALLOON RIBBON, AROUND NECK. GOOD BODY CONDITION. CUT THE ENTANGLEMENT AND RELEASED ON SITE.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	6	9	HOOK AND LINE FISHERY	SAN LUIS OBISPO	CA	SI	ENTANGLED MALNOURISHED, ABSCESS, AND TRAILING LINE FROM ANUS AND ACTIVELY BLEEDING. REPORTING PARTY REPORTED BLOOD AND LINE FROM THE ANUS AS WELL AS LINE COMING FROM THE MOUTH, BUT RESCUERS ONLY SAW LINE IN THE MOUTH. FINAL OUTCOME UNKNOWN.	SI	P2	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	11	SHOOTING	CLATSOP	OR	DEAD	ANIMAL HAD EXCELLENT BODY CONDITION EXCEPT FOR HEMORRHAGE BENEATH A HOLE IN THE SHOULDER AREA, WHICH TRACKED INTO ANTERIOR THORAX; HEMORRHAGE ON AND BEHIND HEAD, NECK (SUBSTANTIAL AROUND PELVIC AREA AND PENIS). ZYGOMATIC ARCH BROKEN IN TWO PLACES WITH EXTENSIVE HEMORRHAGE ON HEAD AND MANDIBLE. INJURIES CONSISTENT WITH SHOOTING EVENT.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	6	11	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	EMACIATED AND MULTIPLE SMALL FISHHOOKS IN ANIMAL (AT LEAST 1 IN MOUTH/NOSE AND 1 IN ABDOMEN).	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	14	HOOK AND LINE FISHERY	SANTA BARBARA	CA	SI	ENTANGLED CSL PUP RESCUED DUE TO BEING THIN AND ENTANGLED IN PLASTIC FISHING LINE. OUTCOME UNKNOWN.	SI	P7B	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	15	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	ENTANGLED CSL HAS 2 FISH HOOKS - ONE IN HEAD AND ONE ABOVE LEFT FRONT FLIPPER. REPORTING PARTY CUT THE FISHING LINE. ONLY ONE HOOK OBSERVED BY RESPONDERS, AND NO HOOKS/FISHING GEAR VISIBLE IN ANIMAL, NET, CARRIER, OR ON BEACH AFTER RESCUE. UNCERTAIN HOW/WHERE HOOKS WERE LOST IN THE PROCESS OF RESCUE, AND NO DETAILS OF HOOKS GATHERED. ALSO EMACIATED AND ABSCESS. FINAL OUTCOME UNKNOWN.	SI	P5C	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	17	MARINE DEBRIS	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH ROPE AROUND NECK.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	19	HOOK AND LINE FISHERY	ORANGE	CA	SI	DEHYDRATED AND UNDERWEIGHT ANIMAL WITH FISH HOOKS IN MOUTH.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	22	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	MODERATELY UNDERWEIGHT, AND FISH HOOK EMBEDDED IN RIGHT REAR FLIPPER ON THE LATERAL ASPECT. RIGHT CAUDAL SIDE OF ABDOMEN SMALL (5X5MM LACERATION/ TRAUMA; POSSIBLE BITE WOUND).	SI	P5D	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	24	SHOOTING	SONOMA	CA	DEAD	BULLET HOLES FOUND DURING PREPARATION OF SKULL.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	24	HARASSMENT	MONTEREY	CA	SI	ILLEGAL PICKUP/HARASSMENT MATERNAL SEPARATION (SUSPECT DOMOIC ACID TOXICITY MOTHER). BOYFRIEND OF REPORTING PARTY PICKED ANIMAL UP OFF OF ROCKS AND MOVED IT TO THE BEACH.	SI	P14	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	24	HOOK AND LINE FISHERY	MONTEREY	CA	SI	ENTANGLEMENT PUBLIC CUT SOME OF THE FISHING LINE OFF, REDUCING IT FROM ~20' LONG TO ~6' LONG. ANIMAL EMACIATED.	SI	P6	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	24	HARASSMENT	MONTEREY	CA	SI	MILDLY UNDERWEIGHT, PUBLIC MEMBERS REPORTEDLY HANDLING PUP, ABANDONED BY A DAM. SUSPECTED TO BE AFFECTED BY DOMOIC ACID TOXICITY DUE TO UNUSUAL BIRTHING LOCATION. PUP WAS MONITORED OVER MULTIPLE DAYS AND WAS SEEN DECLINING IN HEALTH. DECISION MADE TO PICK UP PUP SINCE MOTHER NOT SEEN OVER A WEEK. HARASSED MATERNAL SEPARATION.	SI	P14	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	6	26	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	ENTANGLEMENT - REPORTED HOOK/LINE, NO LONGER ATTACHED DURING RESCUE, PROBABLE RP REMOVAL PRE-RESPONSE. MODERATELY UNDERWEIGHT.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	6	27	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	6	29	VESSEL STRIKE	SAN LUIS OBISPO	CA	SI	MODERATELY UNDERWEIGHT AND SEVERE PROPELLER WOUNDS (VERY DEEP AND EXTENDS INTO MUSCLE AND UNDERLYING LUMBAR VERTEBRA).	SI	P15	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	6	29	GILLNET FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL ENTANGLED IN FISHING NET.	SI	P6	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	7	2	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH FISH HOOK IN MOUTH.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	7	3	OIL / TAR	MONTEREY	CA	SI	EMACIATED AND OIL/TAR IN BOTH AXILLA ON DORSAL ASPECT.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	7	6	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	HOOK ON RIGHT FRONT FLIPPER. REMOVED AND RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	7	8	MARINE DEBRIS	MONTEREY	CA	DEAD	BLACK LINE (BUNGEE CORD) ENTANGLEMENT AROUND NECK. LARGE LACERATION BELOW ENTANGLEMENT. POOR BODY CONDITION. CARCASS STRANDED AT MONTEREY BAY AQUARIUM AND WAS RECOVERED BY MBA DIVERS.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	7	8	HOOK AND LINE FISHERY	MONTEREY	CA	SI	MONOFILAMENT ENTANGLEMENT CIRCUMFERENTIAL AROUND NECK. MULTIPLE SECTIONS OF WOUND EPITHELIALIZED OVER MONOFILAMENT. MODERATELY UNDERWEIGHT.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	7	10	HOOK AND LINE FISHERY	MONTEREY	CA	SI	MODERATELY UNDERWEIGHT, HARSH LUNG SOUNDS, FAVORING RIGHT FRONT FLIPPER (HOOK EMBEDDED IN SKIN OVER CAUDAL PELVIS, CAUGHT IN NET ON CAPTURE AND HOOK WAS CUT/REMOVED). OUTCOME UNKNOWN.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	7	12	GILLNET FISHERY	SAN DIEGO	CA	SI	PINK GILL-NET AROUND NECK. DEEPLY EMBEDDED. RAW AND BLEEDING. GOOD WEIGHT.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	7	13	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	7	13	VESSEL STRIKE	SANTA CRUZ	CA	SI	MULTIPLE LACERATIONS TO CHEST AND RIGHT FRONT FLIPPER. MILDLY UNDERWEIGHT ANIMAL HAD PNEUMONIA, AS DETERMINED VIA RADIOGRAPH.	SI	P9	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	7	16	HOOK AND LINE FISHERY	SAN LUIS OBISPO	CA	SI	EMACIATED AND PNEUMONIA. STRANDED INSIDE BOUNDARY OF A POWER PLANT. THERE WAS A LARGE (~15CM) FISHING LURE THAT RESEMBLED A SQUID WITHIN THE BODY OF THE STOMACH FOUND DURING POST-MORTEM EXAMINATION. IT DID NOT HAVE ANY FISHING LINE OR A HOOK ASSOCIATED WITH IT, SO PRESUMED INGESTION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	7	26	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	FISHING HOOK IN LEFT CHEEK WITH FISHING LINE WRAPPED AROUND TAG ON LEFT FLIPPER. GOOD BODY CONDITION. FISHING HOOK AND LINE REMOVED AND ANIMAL WAS RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	7	27	SHOOTING	SAN DIEGO	CA	SI	DEHYDRATED, THIN, WEAK, SUNKEN EYES, AND LETHARGIC. BULLET FOUND DORSAL SIDE, DIRECTLY BEHIND THE SKULL; BULLET FRAGMENTS FOUND LEFT DORSAL SIDE BEHIND SHOULDER BLADE. PROLAPSED PENIS AND NO USE OF REAR FLIPPERS; SUSPECT PARALYSIS.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	7	28	HOOK AND LINE FISHERY	VENTURA	CA	DEAD	FRESH DEAD CSL WITH GAFF THRU LEFT SIDE OF BODY AND UPPER FLIPPER. SEVERE DAMAGE TO NECK AREA- POSSIBLE PREDATION. GAFF COLLECTED.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	7	30	HOOK AND LINE FISHERY	LOS ANGELES	CA	NSI	FISHING LINE AROUND TAG. ANIMAL RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	8	1	SHOOTING	MONTEREY	CA	SI	EMACIATED, REPORTED SEIZURES AND LARGE ABSCESS IN RIGHT HIP AREA. POST-MORTEM EXAMINATION FOUND TWO BUCKSHOT BULLETS OR METAL BBS RECOVERED FROM THE FASCIA LAYER JUST BELOW THE SKIN. ONE BEING ON THE NECK AND THE OTHER BEING ON THE STERNUM. ABSCESS, MALNUTRITION, GUNSHOT TRAUMA.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	8	4	SHOOTING	MONTEREY	CA	SI	EMACIATED, LETHARGIC, KEEPING ONE EYE CLOSED. RADIOGRAPHS SHOW NUMEROUS METALLIC PELLETS THROUGHOUT ENTIRE HEAD CONSISTENT WITH SHOTGUN BLAST; BOTH EYES SEVERELY DAMAGED LIKELY DUE TO THIS ETIOLOGY, AS WELL AS FRACTURED LEFT CANINE TOOTH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	8	10	SHOOTING	SANTA CLARA	CA	SI	MILDLY UNDERWEIGHT WITH ENTANGLEMENT AROUND MANDIBLE. RADIOGRAPHS SHOWED BULLET IN PARAVERTEBRAL LUMBAR MUSCLE.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	8	13	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	SMALL FISHING HOOK IN GAPE OF MOUTH ON RIGHT SIDE. HOOK REMOVED. ANIMAL NOT TAGGED DUE TO THE STRESS LEVEL OF THE ANIMAL. RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	8	16	SHOOTING	THURSTON	WA	DEAD	MULTIPLE PELLETS IN L SIDE HEAD AND NECK, PENETRATING BRAIN. PREMORTEM, TRACKING HEMORRHAGE ASSOCIATED. PARTIALLY DIGESTED SALMON GILLS BLOCKING ESOPHAGUS. CHINOOK SALMON COMMERCIAL FISHING OPEN FOR SQUAXIN ISLAND TRIBE IN THE REGION DURING THIS TIME PERIOD. PELLETS RECOVERED AND TURNED OVER TO OLE ON 06-NOV-19	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	8	24	MARINE DEBRIS	SAN DIEGO	CA	SI	BAND WRAPPED AROUND NECK. CUT AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	8		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	8		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9	8	WEST COAST GROUND FISH FISHERY	UNKNOWN	UNKNOWN	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	9	15	GILLNET FISHERY	SAN DIEGO	CA	SI	GILLNET AROUND NECK. CUT AND REMOVED. RELEASED ON SITE.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2019	9	30	WEST COAST GROUND FISH FISHERY	UNKNOWN	UNKNOWN	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	9	30	WEST COAST GROUND FISH FISHERY	UNKNOWN	UNKNOWN	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	9	30	WEST COAST GROUND FISH FISHERY	UNKNOWN	UNKNOWN	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	10	2	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	10	3	CATCH SHARES BOTTOM TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	10	3	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	10	3	SHOOTING	SAN FRANCISCO	CA	SI	TRAUMA TO LEFT EYE. MODERATELY UNDERWEIGHT. RADIOGRAPHS SHOWED BUCKSHOT IN SKULL.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	10	7	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	10	9	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	HOOD EMBEDDED IN LEFT FRONT FLIPPER. REMOVED AND RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	10	9	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	GREAT BODY CONDITION. FISH NET AND TWINE AROUND THE NECK. FISH HOOK AND LINE IN LIP. BOTH REMOVED AND ANIMAL RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	10	12	SHOOTING	KING	WA	DEAD	PROJECTILES FOUND IN SKULL DURING NECROPSY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	10	13	SHOOTING	SONOMA	CA	SI	ANIMAL WITH GOOD BODY CONDITION HOPPED ONTO PRIVATE BOAT OFFSHORE. RESPONDERS FOUND BULLET FRAGMENT LODGED IN LIP. MATERIAL REMOVED. UNKNOWN IF ADDITIONAL MATERIAL REMAINED IN ANIMAL. THE FACT THAT PRIVATE CITIZENS WERE ABLE TO HANDLE AND REMOVE MATERIAL FROM A WILD SEA LION WITHOUT TYPICAL VETERINARY PROTOCOLS SUGGESTS THE ANIMAL WAS HEALTH COMPROMISED. SERIOUS INJURY DESIGNATION.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	10	15	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT ANIMAL WITH FISH HOOKS IN MOUTH AND RIGHT REAR FLIPPER.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	10	16	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	10	21	SHOOTING	SAN MATEO	CA	SI	SUPERFICIAL LACERATION PRESENT OVER RIGHT EYE, SEVERAL LACERATIONS OVER VENTRUM, MILDLY UNDERWEIGHT, DISORIENTED, AGGRESSIVE. RADIOGRAPHS SHOWED SHOTGUN PELLETS IN LEFT PELVIC LIMB FLIPPER. DOMOIC ACID TOXICITY, GUNSHOT TRAUMA, SHARK BITE TRAUMA.	SI	P9	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	10	22	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	KILLED IN GEAR	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	10	24	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	10	27	SHOOTING	KITSAP	WA	DEAD	PENETRATING WOUNDS ON LEFT SIDE OF BODY ABLE TO TRACK 5 ENTRANCE WOUNDS ALL TRACKING FORWARD INTO CHEST AND NECK. ONE GRAZED ON BACK. CONFIRMED SEA LION WAS SHOT VIA EXTERNAL/ INTERNAL EXAM/ RADIOGRAPHS AND BULLET RECOVERED. BASED ON THE EXTENSIVE HEMORRHAGE AND BLOOD LOSS SHOOTING WAS DETERMINED TO BE CAUSE OF DEATH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	11	2	SHOOTING	KITSAP	WA	DEAD	ANIMAL WITH TRACKING WOUNDS AND HEMORRHAGING. BULLET / PELLET FRAGMENTS RECOVERED FROM BRAIN.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	11	6	HAKA MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL ENTANGLED IN NET, BROUGHT ON DECK AND ANIMAL EXITED VESSEL UNDER ITS OWN POWER. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	11	7	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019	11	17	MARINE DEBRIS	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL ENTANGLED IN PACKING STRAP. NO NARRATIVE REGARDING WHETHER CONSTRICTING OR NOT, BUT ANIMAL'S CONDITION SUGGESTS THIS MAY BE THE CASE.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	11	24	SHOOTING	CLATSOP	OR	DEAD	THERE WAS A PELLET (BIRDSHOT) HOLE IN SKULL VENTRAL TO RIGHT SUPRAORBITAL PROCESS (MAY HAVE BEEN WHAT ULTIMATELY LED TO TWISTED INTESTINES); HISTOPATHOLOGY SUPPORTED TRAUMA AS COD - NO CO-MORBIDITIES, GOOD BODY CONDITION.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	11	25	SHOOTING	KING	WA	DEAD	CSL STRANDED 11/25, SECURED UNTIL NECROPSY 11/27. GOOD ABDOMEN BLUBBER THICKNESS. BULLET TRAJECTORY TRACED FROM DORSAL ENTRY WOUND AND PROJECTILE RECOVERED IN RIBCAGE. VERTEBRAE FRACTURED, CAVITY FILLED WITH BLOOD, WOUND IN LUNG. FISH IN STOMACH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	11	30	MARINE DEBRIS	SAN DIEGO	CA	SI	HEALTHY PUP WITH A TRAP (ZIP TIES) AROUND ITS NECK. DISENTANGLED AND RELEASED ON SITE.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	12	1	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	FISHING LINE AND HOOK IN MOUTH. WEIGHTED LURE WAS ATTACHED BUT WAS REMOVED BY PUBLIC BEFORE SEAWORLD ARRIVED. THE FISHING LINE FELL OUT OR WAS SWALLOWED DURING RESCUE. LETHARGIC, DISORIENTED ON THE DOCK, SUSPECT DOMOIC ACID TOXICOSIS.	SI	P5C	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	12	2	SHOOTING	MONTEREY	CA	DEAD	SMALL BUCKSHOT PELLET FOUND IN FACE DURING POST-MORTEM EXAMINATION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	12	4	SHOOTING	PACIFIC	WA	DEAD	ANIMAL HAD EXCELLENT BODY CONDITION; THERE WAS HEMORRHAGE AND CLOTTED BLOOD ON THE DORSAL PELVIC REGION WITH A DISTINCT HOLE IN THE LATERAL PELVIC TISSUE POSSIBLY ASSOCIATED WITH A VENTRAL EXIT WOUND AROUND THE PENILE AREA (SOMEWHAT OBSCURED BY GULL SCAVENGING IN THIS AREA); THERE WAS FOAM IN THE TRACHEA AND BRONCHI; SCRAPE MARKS ON THE FOREFLIPPERS AND ODD INDENTATIONS ON THE HIND FLIPPERS--HARD TO DISTINGUISH FROM LESIONS; TISSUES WERE SLIGHTLY TACKY TO THE TOUCH AND LYMPH NODES MOTTLED AND A LITTLE ABNORMAL--SUSPECTED ILLNESS, BUT IT WAS NOT CAUSE OF DEATH.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	12	17	MARINE DEBRIS	KING	WA	SI	SEA LION TRAPPED ON FLOTATION BARREL SUPPORTING SECURITY FENCE AT SHIPYARD. OBSERVED THE SEA LION'S PENILE OPENING WAS IMPALED ON A 2" DIAMETER METAL BOLT. ADMINISTERED SEDATIVE AND REVERSAL DRUG. THE TEAM LIFTED THE HIND QUARTERS AND RELEASED THE ANIMAL. AFTER 2 MINUTES, HE WAS OBSERVED SWIMMING NORMALLY AND HAULING OUT ON ANOTHER BARREL.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019	12	21	SHOOTING	SAN DIEGO	CA	SI	VERY LARGE MALE, VERY THIN, QUIET, ALERT, RESPONSIVE, DEHYDRATED. HAS AN INJURY TO THE TOP OF HIS HEAD AND A CLOUDY RIGHT EYE. POST MORTEM X-RAY SHOWED TWO BULLETS IN HEAD.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2019	12	22	UNIDENTIFIED HUMAN INTERACTION	MENDOCINO	CA	SI	MODERATELY UNDERWEIGHT, SUPERFICIAL ABRASION CAUDAL TO RIGHT SHOULDER, HEART MURMUR. RADIOGRAPHS SHOWED A SINGLE METALLIC FOREIGN BODY PRESENT IN DORSAL SUBCUTANEOUS CERVICAL REGION, NO EVIDENCE OF TRAUMA OR FRACTURES.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2019	12	25	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	GOOD BODY CONDITION. SINGLE STRAND OF LINE AROUND NECK, SUPERFICIAL BUT MODERATELY DEEP. LINE WAS CUT OUT, WOUND WAS CLEANED, ANIMAL WAS TAGGED AND RELEASED.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2019			CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	WA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019			CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019			CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2019			CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2020	1	6	SHOOTING	PIERCE	WA	DEAD	HOLE IN HEAD, FRAGMENT FOUND UPON NECROPSY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	1	24	VEHICLE COLLISION	COLUMBIA RIVER	OR	SI	ANIMAL HIT BY VEHICLE, DISPATCHED BY LAW ENFORCEMENT.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	2	21	GILLNET FISHERY	MONTEREY	CA	SI	UNDERWEIGHT ANIMAL DESCRIBED WITH 'CERVICAL ENTANGLEMENT' IN NET MATERIAL.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2020	2	23	MARINE DEBRIS	SAN DIEGO	CA	SI	ANIMAL DESCRIBED WITH CONSTRICTING ENTANGLEMENT CUTTING INTO NECK. NARRATIVE DESCRIBES ANIMAL BEING 'RESCUED'.	NSI	P7B	0.00	N	N
CALIFORNIA SEA LION	U.S.	2020	2	26	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	DEAD	CARCASS OFFSHORE ENTANGLED IN ROPES AND NET.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2020	2	28	HOOK AND LINE FISHERY	SANTA CRUZ	CA	DEAD	2 HOOKS FOUND ON FRESH DEAD ANIMAL - ONE UNDER RIGHT FLIPPER AND ONE ON NECK PLASTIC AND CARDBOARD SALMON TAGS.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	2	29	SHOOTING	PACIFIC	WA	DEAD	EXCELLENT BODY CONDITION; BULLET AND BULLET FRAGMENTS WERE RECOVERED FROM WOUND IN NECK. HISTOPATHOLOGY SUPPORTS GUNSHOT WOUND WITH NO OTHER MAJOR DISEASE CONTRIBUTOR.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	3	13	VESSEL STRIKE	MONTEREY	CA	DEAD	LARGE STRAIGHT CUT ON BACK CONSISTENT WITH VESSEL STRIKE TRAUMA.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	3	26	HOOK AND LINE FISHERY	MONTEREY	CA	SI	UNDERWEIGHT LETHARGIC ANIMAL WITH FISH HOOK IN FLIPPER. NO FURTHER DETAILS.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	4	20	SHOOTING	MONTEREY	CA	SI	LETHARGIC, MODERATELY UNDERWEIGHT, BULLET/BUCKSHOT PELLETT FOUND IN MUSCLE ON CREST, LACERATIONS ON CAUDAL ABDOMEN WITH FIBROUS MATERIAL PRESENT WITHIN WOUNDS.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	4	26	SHOOTING	SAN FRANCISCO	CA	SI	HEAD WEAVING, SHIVERING, MODERATELY UNDERWEIGHT, BUCKSHOT AND PUNCTURE WOUND, MODERATE SWELLING OF JAW. NO DETAILS ON FINAL OUTCOME.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	5	3	GILLNET FISHERY	SANTA BARBARA	CA	SI	THIN SUB-ADULT STRANDED ON BEACH WITH GILL NET AROUND HEAD AND NECK. RESCUED, DISENTANGLED AND RELEASED AT LESS POPULATED LOCATION ON SAME DAY. FINAL OUTCOME UNKNOWN. ASSUMED TO BE A SERIOUS INJURY DUE TO DECLINE IN HEALTH (WEIGHT REDUCTION) AND UNCERTAINTY REGARDING FATE.	SI	P7B	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2020	5	8	MARINE DEBRIS	MONTEREY	CA	DEAD	PHOTOS SHOW BLACK LINE ENTANGLEMENT AROUND NECK. MODERATE DECOMPOSITION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	5	10	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	DEAD	DID NOT RESPOND DUE TO COVID-19 PANDEMIC. LEVEL A COMPLETED USING INFORMATION AND PHOTOS PROVIDED BY REPORTING PARTY. ANIMAL ENTANGLED AROUND NECK IN YELLOW ROPE STUCK ON PIER. ANIMAL APPEARS TO HAVE DIED VIA HANGING WHEN THE TIDE WENT OUT.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2020	5	19	SHOOTING	SAN FRANCISCO	CA	DEAD	SHOT IN THE HEAD AT LEAST TWICE. THREE HOLES TOTAL IN SKIN. ONE HOLE IN THE BONE AT THE TOP OF THE CRANIUM AND ONE MANDIBLE BROKEN COMPLETELY IN HALF.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	5	22	SHOOTING	SANTA CRUZ	CA	DEAD	ANIMAL HAD SMALL HOLE ON LEFT SIDE ON HEAD ABOVE THE EYE (~1 CM DIAMETER). WHEN SMALL HOLE WAS PROBED A FRACTURE IN THE SKULL WAS FOUND.	DEAD	NA	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	5	24	SHOOTING	SANTA CLARA	CA	DEAD	BULLET / PELLET EXTRACTED FROM FACE. FACE WAS MORE DECOMPOSED THAN THE REST OF THE BODY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	5	25	MARINE DEBRIS	MONTEREY	CA	SI	MODERATELY UNDERWEIGHT, LARGE PLASTIC BUCKET LID TYPE ENTANGLEMENT AROUND NECK, ABSCESS ON RIGHT SIDE OF FACE. ALIVE. FINAL OUTCOME UNKNOWN.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	5	28	GILLNET FISHERY	SAN DIEGO	CA	SI	GILLNET AROUND NECK OF ANIMAL- ROLLING, CAUSING TRAUMA. STARTING TO BECOME EMBEDDED. ANIMAL IS ALSO THIN AND DEHYDRATED. ANIMAL TAKEN INTO CUSTODY BY OCEANSIDE LIFEGUARDS AND PICKED UP BY SEAWORLD SAN DIEGO RESCUE TEAM AT OCEANSIDE PIER, MAIN LIFEGUARD STATION. FINAL OUTCOME UNKNOWN.	SI	P1	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2020	5	29	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI	SUCCESSFUL DISENTANGLEMENT OF GREEN LINE FROM FLIPPER TAG WHICH WAS DRAGGING ADDITIONAL FISHING LINE, ANIMAL IN GOOD BODY CONDITION, NO OBVIOUS INJURIES.	NSI	P7B	0.00	Y	N
CALIFORNIA SEA LION	U.S.	2020	6	1	SHOOTING	CLALLAM	WA	SI	PARALYZED SEA LION WITH GUNSHOT WOUND EUTHANIZED. PHOTOS SHOW LOCATIONS OF SHOTS ON BODY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	6	4	HARASSMENT	SAN DIEGO	CA	SI	PUP ESTIMATED TO BE LESS THAN 48 HRS OLD WAS RELOCATED TO DIFFERENT AREA OF ROOKERY AFTER PEOPLE SAT WITH ANIMAL FOR PHOTOS AND CONTINUED TO HARASS IT. MATERNAL SEPARATION ASSUMED.	SI	P14	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	6	11	HOOK AND LINE FISHERY	SAN MATEO	CA	SI	MODERATELY UNDERWEIGHT WITH FISH HOOKS IN FLIPPER AND ROOF OF MOUTH.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	6	14	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL WITH FISHHOOK IN MOUTH AND SCAPULA.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	6	24	SHOOTING	SAN FRANCISCO	CA	SI	LETHARGIC ANIMAL WITH METAL PELLETS FOUND IN HEAD AND NECK.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	7	2	MARINE DEBRIS	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL DESCRIBED AS ENTANGLED, BUT NO DESCRIPTION OF MATERIAL, NOR HEALTH STATUS. ASSUMED SERIOUS INJURY DUE TO BODY CONDITION.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	7	7	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI	ANIMAL ENTANGLED IN NET AROUND HEAD AND NECK RESCUED AND DISENTANGLED.	NSI	P7B	0.00	Y	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	7	11	SHOOTING	SAN FRANCISCO	CA	SI	PALPABLE BUCKSHOT OVER LEFT LATERAL SIDE OF HEAD. LEFT EYE INJURED AND SHUT.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	7	12	GILLNET FISHERY	MONTEREY	CA	SI	UNDERWEIGHT ANIMAL WITH GILLNET ENTANGLEMENT AND LACERATION AROUND NECK. NET ALSO IN MOUTH.	SI	P8A	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2020	7	18	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	THIN ANIMAL WITH WOUND ON NECK, 7 FISHING HOOKS IN/ON BODY: ONE ON RIGHT FLIPPER, BACK, INSIDE JAW, DOWN THROAT. LATER VETS REMOVED TWO HOOK FROM STOMACH, AND 1 FROM ESOPHAGUS. FINAL OUTCOME UNKNOWN.	SI	P2	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	8	5	SHOOTING	SONOMA	CA	DEAD	WOUND ON BACK EXPLORED SUPERFICIALLY AND FOUND TO HAVE TRACKED DOWN TO A BROKEN VERTEBRAL PROCESS. NO PROJECTILE RECOVERED DUE TO THE LACK OF NECROPSY RESOURCES AND LOCATION.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	8	5	MARINE DEBRIS	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL ENTANGLED IN UNKNOWN MATERIAL.	SI	P1	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	8	6	SHOOTING	SAN LUIS OBISPO	CA	SI	LETHARGIC, MODERATELY UNDERWEIGHT, PUNCTURE WOUND ON RIGHT PELVIC LIMB FLIPPER, BULLET FOUND IN MOUTH AREA. BAD LOCATION - FOUND ON ROADWAY UNDER PARKED CAR.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	8	10	SHOOTING	MENDOCINO	CA	DEAD	SMALL ROUND PROJECTILE FOUND DURING SKULL PROCESSING.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	8	18	GILLNET FISHERY	VENTURA	CA	DEAD	REAR FLIPPER-30CM FISHING LINE/NET AROUND NECK WITH LARGE WOUND ON NECK. MODERATELY DECOMPOSED.	DEAD	NA	1.00	Y	Y
CALIFORNIA SEA LION	U.S.	2020	8	27	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	MONOFILAMENT LINE DEEPLY EMBEDDED AROUND NECK.	SI	P8A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	8	29	SHOOTING	SAN MATEO	CA	SI	LETHARGIC, COUGHING UP THICK MUCOUS, DISTENDED ABDOMEN, BULLET FOUND IN NECK	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9	9	SHOOTING	MONTEREY	CA	SI	TRACKING WITH HEAD ONLY, 2 CM PUNCTURE WOUND OVER LEFT SHOULDER DUE TO GUNSHOT, ALERT AND RESPONSIVE.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9	21	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	HOOK THROUGH NOSE/MUZZLE. RELEASED ON SITE AFTER REMOVING.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2020	9	25	SHOOTING	ISLAND	WA	DEAD	TWO BULLETS FOUND IN HEAD DURING NECROPSY.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	9	29	SHOOTING	KING	WA	DEAD	CARCASS FOUND AND BULLETS IDENTIFIED IN SKULL VIA RADIOGRAPHY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	9		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10	1	SHOOTING	KING	WA	DEAD	CARCASS WITH BULLETS FOUND IN SKULL VIA RADIOGRAPHY.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10	2	SHOOTING	MONTEREY	CA	SI	LIVE ANIMAL TRACKING WITH HEAD ONLY, SEVERE HIND FLIPPER WOUNDS AND BULLET FOUND IN LUNG.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10	12	SHOOTING	KING	WA	DEAD	RADIOGRAPHY CONFIRMS THREE PROJECTILES IN SKULL.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10	19	SHOOTING	JEFFERSON	WA	DEAD	RADIOGRAPH CONFIRMED SEA LION WAS SHOT.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10	25	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	HOOK AND TRAILING LINE FROM RIGHT FRONT FLIPPER. REMOVED AND RELEASED ON SITE.	NSI	P5C	0.00	N	N
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	10		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11	8	SHOOTING	KING	WA	DEAD	RADIOGRAPHY CONFIRMS SHOOTING.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11	25	HOOK AND LINE FISHERY	MONTEREY	CA	SI	LETHARGIC, EMACIATED, FISHING HOOK EMBEDDED IN THE SKIN OF THE FACE.	SI	P5B	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	11		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	12	4	SHOOTING	KITSAP	WA	DEAD	CONFIRMED SHOT ON X-RAYS LARGE FRAGMENTED PROJECTILE TRACKING FROM NASAL AREA INTO SKULL.	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	12	14	HOOK AND LINE FISHERY	ORANGE	CA	SI	A TAGGED ANIMAL WITH FISH HOOK IN ITS MOUTH WAS REPORTED IN THE BACK OF NEWPORT HARBOR SITTING ON KAYAK RENTALS. OUTCOME UNKNOWN.	SI	P5A	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020	12	17	SHOOTING	SAN FRANCISCO	CA	SI	LETHARGIC, MODERATELY UNDERWEIGHT, GUNSHOT WOUNDS TO ORAL CAVITY, NECK AND RIGHT PELVIC LIMB.	SI	P12	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020			TROLL FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020			TROLL FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
CALIFORNIA SEA LION	U.S.	2020			TROLL FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020			TROLL FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
CALIFORNIA SEA LION	U.S.	2020			TROLL FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2016	2	16	GILLNET FISHERY	SAN DIEGO	CA	DEAD	DEEP LACERATIONS WERE FOUND ON RIGHT AND LEFT PECTORAL FIN INSERTIONS. SUPERFICIAL LACERATIONS (EXPOSING BLUBBER BUT NOT MUSCLE) AND IMPRESSIONS WERE FOUND CIRCUMVENTING THE HEAD AND CRISS-CROSS ON THE VENTRUM BETWEEN THE PECTORAL FINS. ADDITIONAL IMPRESSIONS WERE FOUND ANTERIOR TO THE DORSAL FIN CIRCUMVENTING CAUDALLY. NO GEAR WAS FOUND ON THE ANIMAL. MARKS ON ANIMAL ARE CONSISTENT WITH GILLNET INTERACTION.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2016	2	17	HOOK AND LINE FISHERY	SAN DIEGO	CA	SI	NECROPSY REVEALED DEEP PENETRATING CHRONIC ENTANGLEMENT AROUND THE FLUKE, THE TISSUE WAS NECROTIC. IN ADDITION, THERE WERE DEEP CHRONIC LACERATIONS THROUGH THE MOUTH. SOME LINE WAS RECOVERED FROM WITHIN THE FLUKE TISSUE, NO GEAR WAS FOUND IN THE MOUTH. ANIMAL WAS INITIALLY FOUND ALIVE BY SWIMMERS AND EXPIRED PRIOR TO ARRIVAL OF SEA WORLD PERSONNEL.	DEAD	NA	1.00	N	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2016	7	2	UNIDENTIFIED FISHERY INTERACTION	VENTURA	CA	SI	DOLPHIN IN GOOD CONDITION - NO OBVIOUS SIGNS OF TRAUMA OTHER THAN A TEAR ON THE RIGHT FLIPPER, POSSIBLY FROM LINE AND MARKS ON ROSTRUM/MELON THAT APPEAR TO BE FROM A PRIOR OR RECENT ENTANGLEMENT.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2016	12	17	GILLNET FISHERY	SAN DIEGO	CA	DEAD	LINEAR IMPRESSIONS ON HEAD, BODY, VENTRUM SLICED OPEN.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2017	1	6	GILLNET FISHERY	SANTA BARBARA	CA	DEAD	FLUKE CLEANLY AMPUTATED AT PEDUNCLE	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2017	4	19	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	DEAD	LINE ENTANGLEMENT SCAR ON ROSTRUM AND CRANIAL TRAUMA FROM UNKNOWN SOURCE.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2017	6	6	GILLNET FISHERY	SAN DIEGO	CA	DEAD	MULTIPLE LINEAR IMPRESSIONS ON PECTORAL FINS, ROSTRUM, DORSAL FIN, VENTRUM, AND PEDUNCLE. TAIL STOCK SEVERED, FLUKES MISSING.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2017	6	9	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2017	6	16	GILLNET FISHERY	ORANGE	CA	DEAD	FLUKES CUT OFF.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2017	8	2	CA SPOT PRAWN TRAP FISHERY	VENTURA	CA	DEAD	ANIMAL OBSERVED DEAD BY CDFW WARDEN WITH FLOAT AND LINE WRAPPED AROUND IT. GEAR POSITIVELY-IDENTIFIED THROUGH LICENSE NUMBER ON GEAR. ANIMAL WAS IDENTIFIED AS GENERIC 'COMMON DOLPHIN', BUT THE LONG-BEAKED SPECIES IS THE PREDOMINANT SPECIES IN THIS AREA. ANIMAL DISENTANGLED FROM GEAR AND SET ADRIFT.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2017	11	26	UNIDENTIFIED FISHERY INTERACTION	LOS ANGELES	CA	DEAD	GAFF HOOK USED TO REMOVE ANIMAL FROM FISHING GEAR. ANIMAL HAD STOMACH FULL OF MARKET SQUID.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2018	3	2	GILLNET FISHERY	SAN DIEGO	CA	DEAD	ONE OF THREE DOLPHINS FOUND FLOATING 3 MILES OFFSHORE BY U.S. BORDER PATROL. ANIMALS HAD LINEAR MARKS CONSISTENT WITH A MULTIFILIAMENT GILLNET ENTANGLEMENT. MESH SIZE WAS APPROXIMATELY 8 CM UNSTRETCHED, POSSIBLY SMALL-MESH DRIFT GILLNET ORIGIN.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2018	3	2	GILLNET FISHERY	SAN DIEGO	CA	DEAD	ONE OF THREE DOLPHINS FOUND FLOATING 3 MILES OFFSHORE BY U.S. BORDER PATROL. ANIMALS HAD LINEAR MARKS CONSISTENT WITH A MULTIFILIAMENT GILLNET ENTANGLEMENT. MESH SIZE WAS APPROXIMATELY 8 CM UNSTRETCHED, POSSIBLY SMALL-MESH DRIFT GILLNET ORIGIN.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CA-OR-WA	2018	3	2	GILLNET FISHERY	SAN DIEGO	CA	DEAD	ONE OF THREE DOLPHINS FOUND FLOATING 3 MILES OFFSHORE BY U.S. BORDER PATROL. ANIMALS HAD LINEAR MARKS CONSISTENT WITH A MULTIFILIAMENT GILLNET ENTANGLEMENT. MESH SIZE WAS APPROXIMATELY 8 CM UNSTRETCHED, POSSIBLY SMALL-MESH DRIFT GILLNET ORIGIN.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2018	3	3	GILLNET FISHERY	SAN DIEGO	CA	DEAD	ANIMAL BEACH-STRANDED IN SAME AREA AS 3-2-2018 CASES, WITH SIMILAR LINEAR NET MARK IMPRESSIONS.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2018	3	8	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2018	8	8	GILLNET FISHERY	SAN DIEGO	CA	DEAD	FLUKES CUT OFF.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2018	11	5	UNIDENTIFIED FISHERY INTERACTION	PACIFIC	WA	DEAD	ROSTRUM AND MANDIBLES BROKEN; NO SIGNIFICANT FINDINGS ON HISTOPATHOLOGY. THE ANIMAL HAD EXCELLENT BODY CONDITION. LOOKS AS THOUGH ANIMAL EXSANGUINATED; INDENTATIONS ON RIGHT FLIPPER AND ALONG PEDUNCLE; NO SIGNIFICANT PATHOLOGY.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2019	2	1	GILLNET FISHERY	SAN DIEGO	CA	DEAD	ONE OF TWO DOLPHINS STRANDING DEAD ON CONSECUTIVE DAYS IN SAME AREA WITH ENTANGLEMENT EVIDENCE.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2019	2	2	GILLNET FISHERY	SAN DIEGO	CA	DEAD	ONE OF TWO DOLPHINS STRANDING DEAD ON CONSECUTIVE DAYS IN SAME AREA WITH ENTANGLEMENT EVIDENCE.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2019	2	15	GILLNET FISHERY	SAN DIEGO	CA	DEAD	TWO 0.5 WIDE IMPRESSIONS CROSSING OVER ROSTRUM. CONSISTENT WITH GILLNET ENTANGLEMENT.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2019	4	29	GILLNET FISHERY	SANTA BARBARA	CA	DEAD	INCISIONS FROM AXILLARY TO ANUS EXPOSING ABDOMINAL CAVITY. CONSISTENT WITH INJURIES RESULTING FROM CUTTING ANIMAL OUT OF NET.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2019	5	24	GILLNET FISHERY	VENTURA	CA	DEAD	MISSING FLUKE, CUT OFF.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2019	6	16	GILLNET FISHERY	SANTA BARBARA	CA	DEAD	FLUKES CUT OFF AND LINEAR IMPRESSIONS AROUND MANDIBLE. LEVEL A DATA COLLATED THROUGH PHONE CONVERSATION AND PHOTOS SENT BY REPORTING MARINER.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2019	6	22	GILLNET FISHERY	SAN DIEGO	CA	DEAD	TWO LINEAR IMPRESSIONS ACROSS RIGHT TAIL STOCK, FULL STOMACH, AND ROBUST BODY CONDITION INDICATE THIS TO BE A FISHERY INTERACTION. LACTATING.	DEAD	NA	1.00	Y	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2019	7	17	GILLNET FISHERY	SAN DIEGO	CA	DEAD	LINEAR IMPRESSIONS ACROSS ROSTRUM, HEAD,DORSAL FIN, AMPUTATED FLUKES.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2019	8	9	GILLNET FISHERY	SAN DIEGO	CA	DEAD	AMPUTATION OF LEFT FLUKE LOBE. LINEAR IMPRESSIONS ACROSS MANDIBLE, ROSTRUM, PECTORAL AND DORSAL FIN.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2019	8	16	GILLNET FISHERY	SAN DIEGO	CA	DEAD	LINEAR IMPRESSIONS ALONG VENTRAL ROSTRUM, PECTORAL AND DORSAL FINS, ACROSS FLANK, AND BOTH FLUKE LOBES AMPUTATED.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2020	1	17	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2020	1	17	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2020	5	3	GILLNET FISHERY	SANTA BARBARA	CA	DEAD	MODERATELY DECOMPOSED ANIMAL WITH FLUKES CUT OFF, CHARACTERISTIC OF ANIMAL CUT OUT OF NET.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2020	5	18	GILLNET FISHERY	SANTA BARBARA	CA	DEAD	MODERATELY DECOMPOSED ANIMAL WITH FLUKES CUT OFF, CHARACTERISTIC OF ANIMAL CUT OUT OF NET.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, LONG-BEAKED	CALIFORNIA	2020	5	26	GILLNET FISHERY	SANTA BARBARA	CA	DEAD	MODERATELY DECOMPOSED ANIMAL WITH FLUKES CUT OFF, CHARACTERISTIC OF ANIMAL CUT OUT OF NET.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2016	10	25	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2016	10	26	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2016	12	5	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2016	12	22	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	1	6	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	1	7	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	1	7	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	1	7	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	1	8	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	1	8	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	1	18	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	3	7	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	5	4	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	11	10	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	11	12	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	11	14	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	11	14	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	11	19	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	12	1	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	12	1	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	12	1	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2017	12	1	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2018	1	13	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2018	6	5	GILLNET FISHERY	VENTURA	CA	DEAD	TAIL APPEARED TO BE CUT OFF, SUSPECTED GILLNET INTERACTION.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2018	12	9	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2019	1	11	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2019	1	11	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2019	1	13	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2019	1	13	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2019	1	13	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2019	1	21	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2019	1	21	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2019	1	27	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2019	1	27	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2019	11	7	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2020	1	4	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2020	1	12	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, SHORT-BEAKED	CA-OR-WA	2020	1	12	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, UNIDENTIFIED		2018	1	13	MARINE DEBRIS	ORANGE	CA	SI	FISHERMEN DISENTANGLED A LETHARGIC DOLPHIN THAT HAD LINE WRAPPED AROUND AND CUTTING INTO THE FLUKES. CONDITION OF ANIMAL INDICATES A SERIOUS INJURY. ENTANGLING MATERIAL UNKNOWN.	SI	S7B	1.00	N	Y
COMMON DOLPHIN, UNIDENTIFIED		2019	6	16	GILLNET FISHERY	SANTA BARBARA	CA	DEAD	FLUKE BLADES CLEANLY CUT OFF, AS IF WITH A KNIFE. ALSO SEVERAL MONO-FILAMENT NET WOUNDS AND SOME MONO-FILAMENT STILL VISIBLE ON THE ANIMAL. NO STRANDING RESPONSE INITIATED.	DEAD	NA	1.00	Y	Y
COMMON DOLPHIN, UNIDENTIFIED		2019	11	7	GILLNET FISHERY	SANTA BARBARA	CA	SI	LETHARGIC DOLPHIN ENTANGLED IN YELLOW 3/8 IN POLYPRO LINE, ENTANGLED AROUND ITS MOUTH, BACK AND PECTORAL FLIPPERS. IT WAS DRAGGING A MASS OF LINE BEHIND IT. AFTER A FEW HEAD THRASHES BY THE DOLPHIN, AND SOME CUTTING OF THE LINE BY THE CREW, THE DOLPHIN WAS EVENTUALLY FREED FROM THE ROPE ENTANGLEMENT. THE CREW WERE ABLE TO CUT THE ANIMAL FREE AND RELEASE IT UNHARMED.	NSI	S7B	0.00	Y	N
DALL'S PORPOISE	CA-OR-WA	2016	6	19	GILLNET FISHERY	SAN JUAN	WA	DEAD	LACERATION ON FLUKE; LEFT SIDE OF TAIL HAS LINE INDENTATION FROM A NET ENTANGLEMENT; RIGHT SIDE OF FLUKE NOTCH HAS LINE FROM A NET ENTANGLEMENT.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
DALL'S PORPOISE	CA-OR-WA	2019	8		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
FIN WHALE	CA-OR-WA	2017	1	5	VESSEL STRIKE	ALAMEDA	CA	DEAD	ANIMAL FIRST REPORTED OFF YERBA BUENA ISLAND BY USCG. WHEN A VESSEL APPEARED TO HAVE A CARCASS WRAPPED AROUND ITS BOW. THE CARCASS FELL OFF AS THE VESSEL TURNED TO APPROACH THE CHANNEL. CARCASS WAS THEN SEEN AGAIN FLOATING IN OAKLAND HARBOR. FRACTURED RIBS WERE IDENTIFIED VIA NECROPSY AND CAUSE OF DEATH ATTRIBUTED TO VESSEL STRIKE.	DEAD	NA	1.00	N	Y
FIN WHALE	CA-OR-WA	2017	5	12	VESSEL STRIKE	PIERCE	WA	DEAD	FRESHLY-DEAD WHALE FOUND ON THE BOW OF A VESSEL AS IT APPROACHED COMMENCEMENT BAY. THIS WHALE WAS IN GOOD BODY CONDITION. THERE WAS A SIGNIFICANT AMOUNT OF HEMORRHAGE ALONG THE MID-BACK, WHICH WAS DETERMINED TO BE THE IMPACT POINT OF THE SHIP WHILE THE WHALE WAS STILL ALIVE.	DEAD	NA	1.00	N	Y
FIN WHALE	CA-OR-WA	2018	5	16	VESSEL STRIKE	ALAMEDA	CA	DEAD	DEAD WHALE DRAPED ACROSS THE BOW OF A LARGE SHIP ENTERING THE BAY.	DEAD	NA	1.00	N	Y
FIN WHALE	CA-OR-WA	2018	5	22	VESSEL STRIKE	MARIN	CA	DEAD	NECROPSY REPORT AND PHOTOS NOTE EXTENSIVE MUSCLE HEMMORHAGING, FRACTURES TO SKULL, RIBS, AND VERTEBRAE, CONSISTENT WITH VESSEL STRIKE.	DEAD	NA	1.00	N	Y
FIN WHALE	CA-OR-WA	2018	5	24	UNIDENTIFIED FISHERY INTERACTION	SANTA BARBARA	CA	SI	A BALL OF DARK ROPE ON THE BACK POSTERIOR TO BLOWHOLE THAT LEADS TO THE HEAD AND MOUTH AREA. ROPE APPEARED TIGHT (=CONSTRICTING ENTANGLEMENT). AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI	L2	1.00	Y	Y
FIN WHALE	CA-OR-WA	2018	10	8	VESSEL STRIKE	LOS ANGELES	CA	DEAD	CAME IN DEAD ON BOW OF VESSEL. LARGE IMPACT WOUND ON RIGHT SIDE OF BODY BEHIND PECTORAL FLIPPER. JAWS BEGINNING TO TEAR APART.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2016	2	5	UNIDENTIFIED FISHERY INTERACTION	ORANGE	CA	SI (PRORATE)	ENTANGLED IN ROPE, A SINGLE WHITE BUOY. TRAVELING WITH OTHER WHALES SOUTHBOUND. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2016	3	24	VESSEL STRIKE	SAN DIEGO	CA	DEAD	"S" SHAPED LACERATIONS ALONG LEFT LATERAL SIDE AT ABDOMINAL (6) AND PEDUNCLE (6) INDICATE THIS ANIMAL WAS HIT BY A SHIP. ALTHOUGH IT IS NOT CLEAR IF THIS HAPPENED BEFORE OR AFTER DEATH.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2016	4	21	UNIDENTIFIED FISHERY INTERACTION	ORANGE	CA	SI	JUVENILE OR CALF SWIMMING NORTH WITH YELLOW LINE, MULTIPLE WRAPS AROUND TAIL STOCK, OVER FLUKES, 2 WHITE BULLET BUOYS AT BASE OF TAIL STOCK, LINE TRAILING WHALE 50 FEET. EXTENSIVE WRAPS LIKELY TO BECOME CONSTRICTING AS ANIMAL GROWS. CONFIGURATION AND AMOUNT OF GEAR UNKNOWN.	SI	L2	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2016	4	22	UNIDENTIFIED FISHERY INTERACTION	ORANGE	CA	SI (PRORATE)	LINE WRAPPED AROUND THE BASE OF THE FLUKES; WHITE BUOY AT BASE OF TAIL, TRAILING LINE APPEARS TO BE 15-20 FEET LONG, NO FLOATS ATTACHED TO TRAILING LINE [NOT SAME WHALE AS 20160421ER, BASED OFF COMPARISON OF VIDEO TO PHOTOS, BODY SIZE, SWIMMING PATTERN, COLOR PATTERN]. ANIMAL DESCRIBED AS MOVING NORTH AT 2-3KTS AND NOT USING ITS FLUKES VERY MUCH. EVIDENCE OF CONSTRICTING ENTANGLEMENT BASED ON LIMITED USE OF FLUKES.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC - PCFG	2016	7	22	VESSEL STRIKE	LINCOLN	OR	NSI	USCG MOTOR LIFEBOAT STRUCK A GRAY WHALE WHILE TRAVELING AT APPROXIMATELY 10 KNOTS. FOLLOWING COLLISION, WHALE POPPED ITS HEAD ABOVE THE SURFACE AND THEN DOVE. USCG MOTOR LIFEBOATS ARE APPROXIMATELY 45 FT IN SIZE.	NSI	L6C	0.00	N	N
GRAY WHALE	EASTERN N PACIFIC - PCFG	2016	8	1	VESSEL STRIKE	CURRY	OR	DEAD	MULTIPLE DEEP CUTS INTO LEFT THORAX AND ABDOMEN CLEARLY INDICATE PROPELLER WOUNDS. MODERATELY-DECOMPOSED CALF.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2017	1	28	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	LOS ANGELES	CA	SI	TIGHT MULTIPLE WRAPS AROUND TAILSTOCK RIGHT AT THE FLUKE INSERTION WITH 3 LINES CUTTING INTO THE LEADING EDGES OF THE FLUKES AND TRAILING OVER THE TOP OF THE FLUKES. THE REST OF LINES WRAPPED AROUND PEDUNCLE GO UNDER THE TAIL AND TRAIL APPROX. 50-75 FEET BEHIND THE WHALE. PARTIAL DISENTANGLEMENT RESCUE AND RESIGHT OF ANIMAL NEXT DAY INDICATED BUOYS HAD MOVED FURTHER BACK TOWARD TAIL. ANIMAL WAS USING ITS PECTORAL FLIPPERS FOR SWIMMING PRIMARILY. ASSIGNED SERIOUS INJURY UNDER L2 DUE TO CONSTRICTING NATURE OF GEAR REMAINING ON ANIMAL AND APPARENT INABILITY TO FULLY-UTILIZE ITS FLUKES. EVIDENCE OF HEALTH DECLINE INDICATED BY LIMITED FLUKE MOBILITY.	SI	L2	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2017	1	29	VESSEL STRIKE	ORANGE	CA	SI	A 65FT COASTAL CRUISER STRUCK A WHALE WHILE TRANSITING BETWEEN NEWPORT HARBOR AND DANA POINT HARBOR, 2 NM NW OF DANA POINT HARBOR. INJURED GRAY WHALE IS REPORTED ALIVE AND APPEARS TO HAVE THE FOLLOWING INJURIES: 3 DEEP LACERATIONS NEAR ITS PECTORAL FIN. LOTS OF BLOOD IN WATER.	SI	L6A	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2017	2	12	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	SI (PRORATE)	ENTANGLED WHALE HAD WOOD-LIKE FLOAT TRAILING 30 YARDS BEHIND. WHALE BREACHING FOR 10-15 MIN BEFORE MOVING ON WITH OTHER WHALES. GEAR TYPE AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2017	3	12	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	SI (PRORATE)	FREE-SWIMMING WHALE TRAILING A SINGLE BUOY APPROXIMATELY 10 FEET BEHIND ANIMAL. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. ANIMAL RESIGHTED NEXT DAY, 15 NMI NW OF PREVIOUS DAY'S POSITION. STILL TRAILING BUOY, NOT RAISING FLUKES ABOVE WATER DURING SEVERAL SURFACING CYCLES.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2017	3	19	GILLNET FISHERY	ORANGE	CA	SI	WHALE SWIMMING WITH MASS OF BLUE ROPE, PINK GILLNET, AND BLACK FLOATS AROUND FLUKES. CLOSE-UP PHOTO SHOWS OPEN WOUND WHERE BLUE ROPE AND FLOATS ARE ATTACHED. CONSTRICTING ENTANGLEMENT. SERIOUS INJURY BECAUSE OPEN WOUND HAS POTENTIAL TO BECOME NECROTIC.	SI	L2	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2017	3	28	GILLNET FISHERY	ORANGE	CA	SI (PRORATE)	PINK MONOFILAMENT NETTING ON HEAD, EXTENDING BACK PAST BLOWHOLES AND DOWN LEFT SIDE OF ANIMAL TO WATERLINE. MONOFILAMENT NETTING WOUND ON ITSELF. WHALE IS RAISING ITS FLUKES DURING DIVE CYCLES. TOTAL AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2017	4	1	MARINE DEBRIS	ORANGE	CA	SI	GRAY WHALE SWIMMING WITH LARGE METAL FRAME AROUND HEAD, JUST POSTERIOR TO BLOWHOLES. FRAME IS FIRMLY ATTACHED TO WHALE AND IS CONSIDERED TO BE A SERIOUS INJURY DUE TO THE CONSTRICTING NATURE OF THE ENTANGLEMENT AND PROBABILITY OF PREVENTING THE WHALE FROM FEEDING PROPERLY. WHALE RESIGHTED 9 DAYS LATER AS IT MOVED NORTH ALONG THE COAST.	SI	L2	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2017	4	15	GILLNET FISHERY	ORANGE	CA	SI	BLUE LINE ON TAIL WITH KELP, 6 INCH MESH GILLNET WRAPPED AROUND TAILSTOCK AND LEADING EDGE OF FLUKE; RIGHT TIP OF FLUKE BROKEN OFF AND POSSIBLE NECROTIC TAIL. SWIMMING SLOWLY, MOSTLY WITH PECTORAL FLIPPERS, SURFACING HEADFIRST AND NO FLUKE UP DIVING. WHALE DISENTANGLEMENT TEAM REMOVED OVER 100 FEET OF GILLNET (=RESCUE). THERE IS STILL SOME WEBBING AND LINE REMAINING ON FLUKES. CONSIDERED SERIOUS INJURY DUE TO ORIGINAL AND POSSIBLY CONTINUING CONSTRICTING NATURE OF ENTANGLEMENT.	SI	L10	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2017	4	16	UNIDENTIFIED FISHERY INTERACTION	LOS ANGELES	CA	SI (PRORATE)	ORANGE LINE WRAPPED AROUND CAUDAL PEDUNCLE. UNKNOWN GEAR CONFIGURATION AND AMOUNT.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2017	4	19	UNIDENTIFIED FISHERY INTERACTION	SAN LUIS OBISPO	CA	SI	CALF OF PAIR ENTANGLED WITH YELLOW / ORANGE ROPE OVER BACK. WHITE LINE DRAPED OVER UPPER TAILSTOCK. GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI	L8	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2017	4	21	UNIDENTIFIED FISHERY INTERACTION	ORANGE	CA	SI (PRORATE)	BLUE ROPE GEAR TRAILING 5 FEET. SMALL BLUE BUOYS. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2017	4	28	DUNGENESS CRAB POT FISHERY (WASHINGTON)	PACIFIC	WA	DEAD	GEAR FROM MULTIPLE POTS WRAPPED AROUND CAUDAL PEDUNCLE OF DEAD, FLOATING MALE CALF OF THAT YEAR (20 FEET IN LENGTH). FISHERY SOURCE BASED ON GEAR TAGS RETRIEVED FROM WHALE. NECROPSY DETERMINED ENTANGLEMENT AS CAUSE OF DEATH.	DEAD	NA	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC - PCFG	2017	6	12	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	WA	DEAD	SEVERE ENTANGLEMENT INJURIES ON TAILSTOCK AND FLUKE. DEEP CUTS FROM LINES ON EACH SIDE OF FLUKE INSERTION, WRAP INJURY WITH ABAIDED TISSUE CUTTING DEEP INTO RIGHT FLUKE (2/3 TOWARD TIP). POSSIBLE IMPRESSIONS ACROSS HEAD. EVIDENCE OF CONSTRICTING ENTANGLEMENT.	DEAD	NA	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2017	6	15	GILLNET FISHERY	LAKE AND PENINSULA BOROUGH	AK	SI (PRORATE)	GRAY WHALE WITH FISHING LINE ENTANGLED AROUND TAIL. IT WAS SWIMMING BUT SLOWLY NEAR FISHING BOATS BY THE MOUTH OF THE LAGOON. SMALL GRAY WHALE, POSSIBLY SUBADULT. GEAR DESCRIBED AS FISHING NET WITH BLACK FLOATS. NET WRAPPED AROUND FLUKE. ASSIGNED PRORATED SERIOUS INJURY DUE TO UNKNOWN AMOUNT AND CONFIGURATION OF GEAR.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2017	7	29	ILLEGAL HUNT	BETHEL	AK	DEAD	KILLED AND HARVESTED BY LOCALS ON THE KUSKOWIM RIVER.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2017	11	8	UNIDENTIFIED FISHERY INTERACTION	VENTURA	CA	DEAD	DEAD ANIMAL WITH ROPE, NETTING AND WIRE IN MOUTH.	DEAD	NA	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2017	12	11	GILLNET FISHERY	ORANGE	CA	SI (PRORATE)	YELLOW ROPE ON TAIL AND TRAILING 100 FEET BEHIND WHALE; RESPONSE EFFORTS CONFIRMED 8 INCH PINK MONOFILAMENT GILLNET WRAPPED AROUND TAIL, INCLUDING MULTIPLE BLACK FLOATS, YELLOW AND BLACK ROPE. ANIMAL SWIMMING SLOWLY NORTH AND DIVING. INTERVENTION RESPONSE RESULTED IN THE CUTTING AND REMOVAL OF SOME GEAR. WHALE WAS LOST AFTER THIS INTERVENTION AND REMAINING GEAR AMOUNT AND CONFIGURATION IS UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2018	1	29	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM. DEAD WHALE ENTANGLED IN LARGE-MESH DRIFT GILLNET.	DEAD	NA	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2018	2	21	UNIDENTIFIED FISHERY INTERACTION	ORANGE	CA	SI	LINE ENTANGLED AROUND THE BASE OF THE PEDUNCLE AND OVER THE FLUKE. LINE APPEARS TO BE CUTTING INTO PEDUNCLE TISSUE (=CONSTRICTING). REPORTING PARTY NOTED THAT LINE HAD SOME TENSION AND MAY HAVE BEEN CARRYING SOME WEIGHT. EVIDENCE OF TRAILING GEAR. ANIMAL BODY CONDITION LOOKED GOOD FROM PHOTOGRAPHS. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI	L2	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2018	2	21	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	SINGLE RED - ORANGE BUOY TRAILED RELATIVELY CLOSE BEHIND WHALE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2018	3	3	GILLNET FISHERY	VENTURA	CA	SI (PRORATE)	BLUE MESH GILLNET WRAPPED AROUND CAUDAL PEDUNCLE OF SWIMMING WHALE, WITH 4 TO 5 SMALL, RED BULLET BUOYS ASSOCIATED. MESH SIZE DIFFICULT TO DETERMINE AS PHOTOS WERE TAKEN FROM OBSERVER ON SHORE. GEAR AMOUNT AND CONFIGURATION UNKNOWN. .	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2018	3	18	VESSEL STRIKE	LOS ANGELES	CA	SI	FERRY STRUCK WHAT THEY BELIEVED TO BE A GRAY WHALE MID CHANNEL ON THE WAY TO CATALINA. THE CAPTAIN SAID THAT THE WHALE SURFACED ABOUT 20 FT IN FRONT OF THE BOAT WHEN IT WAS TRAVELING AT APPROXIMATELY 25 KTS SO THERE WAS NO WAY TO STOP OR AVOID THE COLLISION. VESSEL SIZE = 134 FT. HE DID INDICATE THAT THERE WAS SOME DAMAGE TO THE BULBOUS BOW AND THAT HE BELIEVED THE WHALE WAS INJURED BUT ALIVE AFTER THE CONTACT. CATEGORIZED AS SERIOUS INJURY BASED ON SIZE AND SPEED OF VESSEL.	SI	L6A	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2018	3	26	VESSEL STRIKE	SAN DIEGO	CA	DEAD	ORGANS PROTRUDING THROUGH LACERATION AT RIGHT DORSAL SIDE AT MID-LENGTH. FRACTURED VERTEBRAE AND BONE FRAGMENTS IN THIS REGION. UNKNOWN IF THIS VESSEL STRIKE REPRESENTS SAME ANIMAL STRUCK OFF CATALINA ISLAND ON 3/18/2018. TREATED AS UNIQUE RECORD.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2018	3	28	MARINE DEBRIS	MARIN	CA	DEAD	OBSERVED FLOATING IN RICHARDSON BAY MARCH 28 2018. FLUKES AND DISTAL PENDUNCLE MISSING. WITHIN A PORTION OF GRAY NECROTIC TISSUE IS A 6-INCH LENGTH OF WIRE WITH A COPPER CORE, DEEPLY ENTWINED WITH THE NECROTIC TISSUE. THIS REFLECTS EVIDENCE OF A CONSTRICTING ENTANGLEMENT.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2018	4	13	DUNGENESS CRAB POT FISHERY (WASHINGTON)	PACIFIC	WA	SI	WHALE HAD BEEN SIGHTED ALIVE NINE DAYS PRIOR TO STRANDING RESPONSE. WHALE ENTANGLED IN WASHINGTON DUNGENESS CRAB POT GEAR IDENTIFIED BY TAG NUMBERS RECOVERED AT SCENE. BUOY AT LEFT MOUTH, LINE THROUGH MOUTH CIRCLING RIGHT FLIPPER ACROSS BACK TO LEFT PEDUNCLE (THIS IS THE CONFIGURATION FOUND WHEN THE ANIMAL STRANDED DEAD ONSHORE, LIKELY DIFFERENT WHEN THE ANIMAL WAS ALIVE). BRUISING AROUND PEDUNCLE WHICH MAY SUGGEST IT WAS ENTANGLED AT SOME POINT IN TIME. CAUSE OF DEATH LISTED AS INANATION (=STARVATION).	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2018	4	13	DUNGENESS CRAB POT FISHERY (WASHINGTON)	SNOHOMISH	WA	SI (PRORATE)	BUOY AND LINE ENTERING MOUTH LEFT SIDE AND EXITING MOUTH RIGHT SIDE. THIS TRAILS TO A SECOND BUOY JUST IN FRONT OF THE FLUKES. THEY ARE BOTH TRAILER BUOYS PART OF THE SURFACE SYSTEM OF A CRAB SET. LINE 3/8" POSSIBLY BLUE STEEL. GEAR IDENTIFIED AS PART OF WASHINGTON COMMERCIAL DUNGENESS CRAB FISHERY. TEAM SUCCESSFULLY ATTACHED A TELEMETRY BUOY AND COLLECTED UNDERWATER FOOTAGE. RESPONDER RETRIEVED OUR GRAPPLE, OUR LINE AND TELEMETRY BUOY AND ONE OF THE ENTANGLING FLOATS FROM ANOTHER VESSEL. THIS MEANS THE WHALE IS PARTIALLY DISENTANGLED. UNKNOWN AMOUNT AND CONFIGURATION OF GEAR REMAINING ON WHALE. PHOTOS OF WHALE SHOW A VERY EMACIATED ANIMAL THAT EXHIBITS A HEALTH DECLINE. SERIOUS INJURY PRORATED TO A VALUE OF 1 DUE TO DETERIORATING HEALTH.	SI (PRORATE)	L10	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2018	4	15	GILLNET FISHERY	SAN DIEGO	CA	SI (PRORATE)	GILLNET ON THE HEAD AND DOWN ALONG THE BODY, WITH A MASS OF GILLNET ON OR NEAR THE TAIL. SINGLE PHOTO SHOWS MASS OF PINK MONOFILAMENT GILLNET EXTENDING FROM HEAD REGION TO DORSAL HUMP. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. WHALE REPORTED SWIMMING TO THE NORTHWEST.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2018	4	24	GILLNET FISHERY	ORANGE	CA	SI	GILLNET (PINK MESH, 1/2 GREEN ROPE, 20 SMALL RED/ORANGE FLOATS) WRAPPED AROUND PEDUNCLE AND TRAILING OVER LEFT FLUKE LOBE. MOST OF THE GEAR IS BUNCHED UP IN A TIGHT BALL AROUND THE PEDUNCLE, CLOSE TO THE ANIMAL AND FAIRLY TIGHT AROUND PEDUNCLE (=CONSTRICTING GEAR). THERE IS ALSO SOME TRAILING GEAR (TANGLED UP MESH AND PROBABLY A LEAD LINE) TRAILING ABOUT 20FT BEHIND WHALE. THE TRAILING GEAR IS ALWAYS BELOW THE SURFACE. SO LIKELY THE TRAILING GEAR IS WEIGHTED SOMEHOW OR BEEN FOULED UP ALONG THE WAY. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI	L2	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2018	5	4	VESSEL STRIKE	ALAMEDA	CA	DEAD	NECROPSY RESULTS INDICATED A FRACTURED CRANIUM AND MUSCULAR AND SKELETAL HEMORRHAGING. CONSISTENT WITH BLUNT FORCE TRAUMA CHARACTERISTIC OF A VESSEL STRIKE.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2018	5	6	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	SAN LUIS OBISPO	CA	DEAD	PHOTOS FROM 5/6/2018 SHOWS A SINGLE ORANGE BUOY NEXT TO A HEAVILY-SCAVENGED GRAY WHALE CARCASS. BUOY NUMBER OBTAINED AND FISHERMAN INTERVIEWED. FISHERMAN INDICATED HIS GEAR WAS NOT TOUCHING WHALE AND FISHERMAN REMOVED GEAR FROM AREA AFTER SEEING PHOTOS OF WHALE. NO EXPLICIT PHOTO EVIDENCE THAT BUOY OR LINE IS ATTACHED TO CARCASS, HOWEVER, HARBOR PATROL WENT TO SAME EXACT LOCATION THE NEXT DAY AND FOUND THE CARCASS UNMOVED, INDICATING IT WAS ANCHORED BY SOMETHING. BUOY WAS NO LONGER VISIBLE ON 5/7/2018.	DEAD	NA	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2018	5	8	DUNGENESS CRAB POT FISHERY (WASHINGTON)	CLALLAM	WA	SI	ANCHORED WHALE WITH LINE WRAPPED AROUND THE PEDUNCLE AND BOTH FLUKE BLADES WITH THREE FLOATS AND LINE TRAILING TO APPROXIMATELY 60' BEHIND THE WHALE. TEAM WAS ABLE TO CUT MOST LINE AWAY BUT SEVERAL WRAPS REMAINED AROUND NECROTIC TISSUE AT CAUDAL PEDUNCLE. THIS WHALE WAS FOUND DEAD STRANDED ON MAY 27TH.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2018	5	11	SALMON GILLNET FISHERY	CORDOVA	AK	SI (PRORATE)	WHALE ENTANGLED IN SALMON GILLNET. VISIBLE BLOOD FLOW. GEAR AMOUNT AND CONFIGURATION UNKNOWN. OUTCOME UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2018	5	17	VESSEL STRIKE	SANTA CRUZ	CA	DEAD	PROPELLER WOUNDS NEAR TAIL.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2018	5	18	VESSEL STRIKE	MARIN	CA	DEAD	PALE DISCOLORED BAND OF SKIN AROUND THE NECK APPROX. 20 CMS WIDE, BLUBBER BENEATH THIS DISCOLORED AREA HAS SMALL PATCHES OF HEMORRHAGE. THE LEFT AXILLA HAS A LACERATION AROUND THE FLIPPER BASE, WITH DISCOLORED MUSCLE AND EDEMA BENEATH IT. SKIN OF THE LEFT FLIPPER IS DRY AND MISSING IN MULTIPLE PLACES. LEFT COMMISSURE OF THE MOUTH HAS A PALE LINEAR MARK IN IT, AND IS COVERED IN LICE. RIGHT SIDE OF THE WHALE HAS TWO LONG PARALLEL LACERATIONS, ONE PENETRATES SCAPULA WHICH SHATTERED (MULTIPLE FRACTURES, COMMUNUTED FRACTURES), OTHER IS THROUGH BLUBBER AND MUSCLE. THERE IS NO HEMORRHAGE OR DISCOLORATION OF BLUBBER OR MUSCLE ADJACENT TO THESE LACERATIONS. THERE ARE MULTIPLE LINEAR MARKS ON THE SKIN TYPICAL OF ABRASION BY A BRAIDED LINE. NECROPSY REPORT INDICATED THAT VESSEL STRIKE WAS PRIMARY CAUSE OF DEATH (COMPARED WITH ENTANGLEMENT EVIDENCE), AS CONDITION OF ANIMAL IS GOOD (ADEQUATE BODY FAT STORES) AND STOMACH WAS FULL.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2018	5	27	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	PACIFIC	WA	DEAD	LINE WRAPPED TIGHTLY AROUND LEFT PECTORAL FLIPPER AND PASSES THROUGH LEFT GAPE. EVIDENCE OF A WRAP AROUND THROAT (BLOATING LIKELY CAUSED ROPE TO SNAP-FRAYED ENDS VISIBLE). GREEN, ORANGE, AND WHITE LINES WRAPPED AROUND TAILSTOCK. FAINT IMPRESSIONS ACROSS VENTRAL LEFT FLUKE. TRAILING 2 CRAB POTS. ORIGINALLY SEEN WITH 2 ORANGE BUOYS (WHILE FLOATING), ONE VISIBLE IN INITIAL PHOTOS OF THE BEACH LANDING, BUT HAD BEEN REMOVED BY UNKNOWN PERSONS PRIOR TO OUR ARRIVAL ON SCENE.	DEAD	NA	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC - PCFG	2018	6	6	DUNGENESS CRAB POT FISHERY (WASHINGTON)	LINCOLN	OR	SI (PRORATE)	ENTANGLEMENT LOCATED ON THE CENTER OF THE BODY AND ON THE TAIL WHILE TRAILING TWO BUOYS AND CRAB POT GEAR. COMMERCIAL DUNGENESS CRAB GEAR WAS IDENTIFIED BY THE ROUND YELLOW TAG ON ONE BUOY BUT THE PHOTO QUALITY WAS POOR SO A NUMBER COULD NOT BE READ TO GET A FISHERMAN ID. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC - PCFG	2018	6	28	VESSEL STRIKE	GRAYS HARBOR	WA	SI	EMACIATED WHALE LIVE-STRANDED AND SUBSEQUENTLY DIED. LARGE AREA OF ABRASION (116X30CM) ON LEFT DORSAL AND ACROSS BACK, JUST ANTERIOR TO HUMP, WITH MISSING SKIN AND NECROSIS AT MARGINS, VISIBLE BRUISING UNDER WIDEST POINT OF MISSING SKIN. ABRASION ON UPPER RIGHT SIDE AT SAME LEVEL AS LARGER ABRASION. WHALE LICE ALL OVER BODY, INCLUDING DORSAL SURFACE OF FLUKE (UNUSUAL, SUSPECT UNABLE TO LIFT FLUKES PROPERLY). AT LEAST 4 SHATTERED VERTEBRAE AT SITE, APPROXIMATELY 1 MONTH'S WORTH OF HEALING IN TISSUES. AREAS OF INTERNAL INFECTION AT TRAUMA SITE. SUSPECT ANIMAL HIT BY SHIP, WITH SUBSEQUENT INFECTION, EMACIATION AND LIVE STRANDING.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC - PCFG	2018	7	9	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	CURRY	OR	SI (PRORATE)	VIDEO OF A GRAY WHALE TRAILING A SINGLE BUOY, WHICH ONLY APPEARS AS WHALE IS DIVING. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC - PCFG	2018	8	26	VESSEL STRIKE	SITKA	AK	NSI	A GRAY WHALE WAS STRUCK BY A 24 FT PRIVATE RECREATIONAL CABIN CRUISER AT 2.4 KNOTS. THE BOAT WAS JOLTED BY THE IMPACT, AFTER WHICH THE WHALE SUBMERGED IMMEDIATELY. THE WHALE WAS SEEN RESURFACING WITHIN A MINUTE OF THE STRIKE, BUT THERE WAS NO INDICATION OF INJURY TO THE ANIMAL. THE VESSEL DID NOT INCUR ANY DAMAGE.	NSI	L6C	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2019	3	19	VESSEL STRIKE	LOS ANGELES	CA	DEAD	SELF REPORTED VESSEL COLLISION WITH JET CATALINA EXPRESS WHICH HAS A 35 KTS CRUISE SPEED AND LENGTH OF 144 FEET. WHALE MOVING SOUTH TO NORTH AND WAS SEEN JUST AHEAD OF THE PORT BOW AS VESSEL TRAVELED WEST. WHALE HIT ON RIGHT SIDE BASED ON VESSEL DIRECTION AND NARRATIVE. VESSEL IMMEDIATELY SLOWED AND CAPT. FELT A BUMP TOWARDS THE BACK OF THE VESSEL. CAPT. DID SEE WHALE DIVING AND TURNING DOWN JUST BEFORE COLLISION. COLLISION OCCURRED AT 33.687 AND -118.18. FRESH DEAD CARCASS FOUND ON 3/21/2019 (WCRLB-20190321ER) AT 33.73 AND -118.20 (3 MILES FROM REPORTED VESSEL STRIKE) DETERMINED TO BE SAME WHALE AS IT HAS EVIDENCE OF BEING HIT ON THE RIGHT DORSAL SURFACE, WITH THE FORCE CAUSING SIGNIFICANT HEMORRHAGING AROUND PECTORAL FLIPPERS. LARGE WOUND ACROSS THE ANIMALS BACK CONSISTENT WITH VESSEL COLLISION.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2019	3	24	UNIDENTIFIED FISHERY INTERACTION	LINCOLN	OR	SI (PRORATE)	ENTANGLED WHALE SEEN WITH GREEN LINE THROUGH MOUTH. GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2019	3	24	VESSEL STRIKE	VENTURA	CA	DEAD	WHALE HAD A SERIES OF DEEP LACERATIONS FROM A PROPELLER DOWN ENTIRE LENGTH OF PEDUNCLE. DEEP INTRAMUSCULAR ABCESS AT BASE OF PEDUNCLE WITH NECROTIC TISSUE AND NOTED POTENTIAL FOR SPINAL INVOLVEMENT IN INJURY. .	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2019	4	3	UNIDENTIFIED FISHERY INTERACTION	LOS ANGELES	CA	DEAD	LARGE SOFTBALL SIZED ABSCESS ON VENTRAL SIDE OF RIGHT FLUKE BLADE POSTERIOR TO PEDUNCLE ON MODERATELY DECOMPOSED WHALE. ABSCESS WAS VERY HARD AND DIFFICULT TO CUT THROUGH. ABSCESS WAS COVERED IN WHALE LICE, STARTED TO BLEED WHEN CUT. UPON REVIEW OF UNDERWATER VIDEO, TWISTED ROPE IS SEEN EMBEDDED IN FLUKES RIGHT NEXT TO ABSCESS. SKIN AND BLUBBER COLLECTED. ENTIRE ABSCESS COLLECTED AND SUB SAMPLED FOR HISTOLOGY.	DEAD	NA	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2019	4	10	VESSEL STRIKE	SAN MATEO	CA	DEAD	9.6 METER FEMALE WITH GOOD BODY CONDITION. LARGE AREA OF HEMORRHAGE ON THE RIGHT LATERAL NECK AND MUSCLES ABOVE AND BELOW THE SCAPULA. THE MUSCLE IN THIS AREA APPEARED DEEP RED AND WAS MORE DECOMPOSED THAN THE REST OF THE MUSCLE ON THE BODY. THE MUSCLE FROM THE MID THORAX DOWN WAS LIGHT REDDISH PINK AND HAD NORMAL TONE WITH LITTLE TO NO DECOMPOSITION. FINDINGS CONSISTENT WITH VESSEL STRIKE INJURY. .	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2019	4	13	VESSEL STRIKE	CONTRA COSTA	CA	DEAD	FRESH DEAD CARCASS WAS AMPUTATED POSTERIOR TO THE GENITAL SLIT AND WAS MISSING ENTIRE PEDUNCLE AND FLUKES. BASED ON MEASUREMENT OF THE REMAINING CARCASS (910 CM.) AND SIMILAR SIZE FEMALE GRAY WHALES, WE ESTIMATED THAT THE INTACT CARCASS WOULD HAVE BEEN APPROXIMATELY 12 M. IN LENGTH.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2019	4	14	GILLNET FISHERY	ORANGE	CA	SI	WHALE ENTANGLED IN PINK GILLNET WITH GREEN LINES AROUND FLUKES, TRAILING 20 FEET BEHIND WHALE. MASS OF NETTING IS TIGHT AROUND FLUKES AND IS CONSTRICTING AND CUTTING INTO TRAILING EDGE OF FLUKES.	SI	L2	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2019	4	16	VESSEL STRIKE	SAN MATEO	CA	DEAD	10.9 METER FEMALE, SLIGHTLY UNDERWEIGHT. THE EPAXIAL MUSCLE ALONG THE POSTERIOR THORACIC VERTEBRAE (M. LONGISSIMUS DORSII) WAS FRIABLE AND MACERATED RELATIVE TO THE SAME MUSCLE LOCATED MORE CRANIAL ON THE THORACIC SPINE. CHANGE IS CONSISTENT WITH BLUNT FORCE TRAUMA AND HEMORRHAGE. AT LEAST EIGHT VERTEBRAE HAD FRACTURED DORSAL PROCESSES. ALL RIBS WERE INTACT.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2019	4	20	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	ORANGE	CA	SI	PINK MONOFILAMENT GILLNET 8 INCH MESH SIZE CONSISTENT WITH LOCAL SET GILLNET FISHERY. BLACK FLOAT LINE (BLACK FLOATS), AND BLACK LEAD LINE WRAPPED AROUND FLUKE AND PEDUNCLE. MULTIPLE WRAPS, FOUR TO FIVE. ENTANGLEMENT DESCRIBED AS DIGGING INTO TAIL, SO A CONSTRICTING ENTANGLEMENT. LINE TRAILED DEEP. ARTICLE STATES THAT END OF TRAILING GEAR WAS 40 FT BEHIND WHALE. WHALE PARTIALLY DISENTANGLED AND FOUND DEAD ON 5/3/2020.	DEAD	NA	1.00	Y	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2019	4	28	VESSEL STRIKE	MARIN	CA	DEAD	PRELIMINARY CAUSE OF DEATH: SHIPSTRIKE- PROPELLER WOUND TO PEDUNCLE. THERE WAS ONE PARTIAL AND ONE FULL-THICKNESS LACERATION ALONG THE CAUDAL PEDUNCLE AND A PARTIAL THICKNESS LACERATION ALONG THE DORSAL ASPECT OF THE FLUKE. APPROXIMATELY 128 CM CRANIAL TO THE FLUKE ALONG THE RIGHT CAUDAL PEDUNCLE EXTENDING FROM THE DORSAL MIDLINE TO THE MID-LATERAL ASPECT IS A 45.3 CM LENGTH AND 5-14 CM WIDTH, V-SHAPED PARTIAL THICKNESS LACERATION WITH RAGGED, IRREGULAR MARGINS AND EXPOSURE OF THE UNDERLYING BRIGHT RED DERMIS. ON CUT SURFACE, THE SUPERFICIAL BLUBBER UNDERLYING THE EXPOSED DERMIS HAS A WELL DEMARCATED, THIN, BRIGHT RED BAND (HEMORRHAGE). THE CAUDAL PEDUNCLE APPROXIMATELY 15 CM CRANIAL TO THE FLUKE IS ALMOST COMPLETELY TRANSECTED THROUGH THE SKIN, BLUBBER, VASCULATURE, TENDONS, AND THE CAUDAL VERTEBRAL BODY AND CONNECTED TO THE BODY BY A THICK BAND OF SKIN, BLUBBER, AND TENDONS ALONG THE RIGHT DORSAL AND LATERAL ASPECT. WOUND MARGINS ARE SHARP AND WELL-DEMARCATED. THE VERTEBRAL BONE ALONG THE CRANIAL ASPECT OF THE WOUND IS FRACTURED INTO NUMEROUS SMALL FRAGMENTS AND BONE ALONG THE CAUDAL ASPECT IS LARGELY INTACT WITH SEVERAL SMALL FRAGMENTS ALONG THE DORSAL AND LATERAL MARGINS OF THE BONE. THE CENTER OF THE VERTEBRAL BODY IS MOTTLED DARK RED TO PURPLE. ALONG THE DORSAL ASPECT OF THE FLUKE EXTENDING FROM THE LEFT LATERAL CRANIAL MARGIN DIAGONALLY TOWARDS THE RIGHT LATERAL CAUDAL MARGIN IS A 1.35 M, PARTIAL THICKNESS UP TO 3 CM DEEP LACERATION WITH EXPOSURE OF THE UNDERLYING BLUBBER AND CONNECTIVE TISSUE. THE RIGHT-SIDED, POST OCCIPITAL SUBCUTIS IS MARKEDLY EXPANDED WITH DARK RED, GELATINOUS MATERIAL (HEMORRHAGE). SKELETAL MUSCLE IS SIMILARLY HEMORRHAGIC. THE SUPERFICIAL BLUBBER IMMEDIATELY CAUDAL TO THIS IS BRIGHT RED (HEMORRHAGE).	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2019	5	4	MARINE DEBRIS	SAN LUIS OBISPO	CA	SI (PRORATE)	WHALE DRAGGING A 2 FT X 2 FT STYROFOAM CUBE OR BUOY BEHIND BLOWHOLE. UNKNOWN AMOUNT OF LINE AND GEAR CONFIGURATION.	SI (PRORATE)	L10	0.75	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2019	5	6	VESSEL STRIKE	SAN FRANCISCO	CA	DEAD	THE PRELIMINARY CAUSE OF DEATH IS SEVERE ACUTE BLUNT TRAUMA AFFECTING THE HEAD AND NECK. POST-OCCIPITAL AND THORACIC EPAXIAL AND HYPAXIAL SKELETAL MUSCLES, PREDOMINANTLY ALONG THE RIGHT SIDE AND TO A LESSER DEGREE ON THE LEFT, ARE MARKEDLY EXPANDED WITH DARK RED GELATINOUS MATERIAL (HEMORRHAGE). THE OVERLYING DEEP BLUBBER AND SUBCUTIS ARE SIMILARLY HEMORRHAGIC AND THE SUPERFICIAL BLUBBER HAS A THICK LINEAR BAND OF HEMORRHAGE. ON CUT SURFACE, SKELETAL MUSCLE AND SUBCUTIS OOZES A MODERATE VOLUME OF RED-TINGED OPAQUE FLUID. THE TIPS OF THE DORSAL SPINOUS PROCESSES ON THE ATLAS (C2) ARE ABSENT AND THE EXPOSED ENDOSTEUM IS ROUGHENED AND IRREGULAR (AVULSION FRACTURE, PRESUMPTIVE). A LARGE RECTANGULAR PORTION OF THE PERIOSTEUM ALONG THE RIGHT NUCHAL CREST IS ELEVATED FROM THE UNDERLYING BONE AND THE EXPOSED SURFACE IS SIMILARLY ROUGH AND IRREGULAR (AVULSION FRACTURE, PRESUMPTIVE). A SMALL PORTION OF THE PERIOSTEUM ALONG THE DORSAL AND LATERAL ASPECTS OF THE RIGHT OCCIPITAL CONDYLE ARE SIMILARLY AVULSED. THE RIGHT SCAPULA HUMERAL AND RIGHT SQUAMOMANDIBULAR JOINTS WERE UNREMARKABLE.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC	2019	6	3	MARINE DEBRIS	SNOHOMISH	WA	NSI	GRAY WHALE BRIEFLY ENTANGLED IN MOORING BUOY BEFORE SELF-RELEASING. WHALE SEEN GEAR-FREE AFTER EVENT.	NSI	L3	0.00	N	N
GRAY WHALE	EASTERN N PACIFIC - PCFG	2019	6	12	DUNGENESS CRAB POT FISHERY (COMMERCIAL)	CURRY	OR	DEAD	DURING A SEABIRD SURVEY, HELICOPTER TEAM DETECTED DEAD ENTANGLED WHALE WITH MULTIPLE SETS OF DUNGENESS GEAR. STATE FISHERY NOT CONFIRMED.	DEAD	NA	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC - PCFG	2019	9	6	VESSEL STRIKE	LINCOLN	OR	SI	WHALE TOWING LINE FROM DAMAGED LEFT FLUKE BLADE THAT HAD DEEP PROPELLER INJURY, AS EVIDENCED BY REGULAR SPACING AND CHARACTER OF WOUNDS. LINE WAS CAUGHT IN THE SCAR OF THE PROPELLER WOUND. CYAMIDS NOTED IN WOUND. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. OBSERVER WAS AN OSU WHALE RESEARCHER.	SI	L5A	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC - PCFG	2019	9	13	UNIDENTIFIED FISHERY INTERACTION	LINCOLN	OR	SI (PRORATE)	MULTIPLE WRAPS ON FLUKES, TRAILING LINE 40 FEET BEHIND ANIMAL, WHERE IT SANK BELOW SURFACE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2020	1	12	UNIDENTIFIED FISHERY INTERACTION	VENTURA	CA	SI (PRORATE)	APPROXIMATELY 75 FEET OF LINE TRAILING FROM TAIL AREA ON WHALE. AT THE END OF THE LINE IS A SINGLE LIGHT GREEN OR YELLOWISH GREEN BUOY. FULL GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2020	1	20	GILLNET FISHERY	SAN DIEGO	CA	SI (PRORATE)	ROPE IN FRONT OF BLOWHOLE AND WRAPPED AROUND THE ROSTRUM AND TRAILING DOWNWARD; BLUEISH/PURPLE MONOFILAMENT NETTING DRAPPED OVER THE BLOWHOLE. WRAPPED ON ITSELF INTO A "CORD" TRAILING OVER BACK. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2020	4	24	DUNGENESS CRAB POT FISHERY (WASHINGTON)	CLALLAM	WA	SI (PRORATE)	FREE-SWIMMING GRAY WHALE WITH CLOSED BRIDLE THROUGH MOUTH. OTHER END OF GEAR TRAILING WITH BUOYS AND DESCENDING TO DEPTH. LINE RUNS THROUGH MOUTH; OUT OF LEFT MOUTH ACROSS THE HEAD TO MEET UP WITH THE LINE COMING FROM THE RIGHT MOUTH IN A MULTIPLE TWISTS. THE LINE FROM THE LEFT MOUTH CONTINUES AFTER THE TWISTS TOWARDS THE SEAFLOOR / TRAP. THE LINE FROM THE RIGHT MOUTH CONTINUES PAST THE TWISTS TO THE BUOYS NEAR THE PEDUNCLE. POT LINE - 10 FATHOMS OF 3/8THS SINKING LINE FROM BUOY, RUNNING TO 2 FMS OF 7/16TH FLOATING LINE TO POT HAD BLUE SQUARE WDFW TAG FROM 2019-20 SEASON (300 POT LIMIT FROM COASTAL WA); 10 FATHOMS OF 3/8THS SINKING LINE FROM BUOY. RESCUE TEAM WAS ABLE TO CUT GEAR FREE / FULL RELEASE.	NSI	L3	0.00	Y	N
GRAY WHALE	EASTERN N PACIFIC	2020	5	10	UNIDENTIFIED FISHERY INTERACTION	PACIFIC	WA	DEAD	MODERATELY DECOMPOSED AND IN POOR NUTRITIONAL CONDITION WITH HEALING ENTANGLEMENT INJURY AT TIP OF LOWER JAW. ONE SET OF PHOTOS POSTED ON FACEBOOK ON MAY 10 SHOWED A LOOSE ENTANGLEMENT ON LEFT PECTORAL FLIPPER, BUT THE GEAR WAS GONE BY MORNING OF MAY 11. WHALE ALSO SHOWED EVIDENCE OF PRIOR ENTANGLEMENT.	DEAD	NA	1.00	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2020	5	31	VESSEL STRIKE	PACIFIC	WA	DEAD	BLUNT FORCE TRAUMA TO LEFT SIDE ROSTRUM. HEMORRHAGE, EDEMA, HEMATOMA, FORCE STRONG ENOUGH TO CAUSE LATITUDINAL CRACKS IN BALEEN AND BEND THE FRINGE OUTWARD OVER THE LOWER LIP. NO BROKEN BONES SEEN. AT LEAST CONTRIBUTED TO THE MORTALITY. HEALED ENTANGLEMENT WOUNDS ON LEADING EDGE OF FLUKES AND ON TAILSTOCK--NOT RELATED TO MORTALITY. INDENT ACROSS TONGUE (HEALED), APPROX 1/3 POSTERIOR TO THE TIP, APPEARS TO HAVE BEEN WRAPPED/CONSTRICTED AT SOME POINT--NOT RELATED TO MORTALITY. VESSEL SIZE AND SPEED UNKNOWN.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC - PCFG	2020	7	5	VESSEL STRIKE	GRAYS HARBOR	WA	DEAD	BLUNT FORCE TRAUMA TO TOP OF HEAD, PREMORTEM. HEMORRHAGE AND EDEMA AT TOP OF HEAD. BONE NEAR EAR CANAL CHIPPED, EVIDENCE OF DRAINING HEMORRHAGE IN AREA. TINY BONE FRAGMENTS COULD BE FELT IN EDEMATOUS BONE TISSUE. VESSEL SIZE AND SPEED UNKNOWN.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC - PCFG	2020	8	6	GILLNET FISHERY, TRIBAL	CLALLAM	WA	DEAD	TRIBAL SALMON GILLNET; NET AND ROPE THIS WHALE WAS REPORTED BY FISHERMAN (TRIBAL SALMON GILLNET FISHERY) THAT HAD CAUGHT THE WHALE IN HIS NET. IT WAS DEAD ON ARRIVAL AT 9:40 AM AFTER HAVING DROWNED IN THE NET. IT IS NOT KNOWN WHEN THE WHALE WAS ENTANGLED, OR WHEN IT DIED, BUT IT WAS CLEAR THAT THE WHALE HAD VERY LITTLE DECOMPOSITION SUGGESTING THAT IT HAD NOT BEEN DEAD IN THE NET FOR TOO LONG. CARCASS WAS BROUGHT ASHORE FOR A FULL EXAMINATION DUE TO THE ONGOING GRAY WHALE UME INVESTIGATION AND THE FRESH CONDITION OF THE ANIMAL. PRETTY CLEAR WHERE THE LARGE ROPES OF NET HAD INTERACTED WITH THE WHALE - BUT IF ROPE HAD NOT BEEN SEEN AT THAT LOCATION IT WOULD HAVE BEEN HARD TO PICK OUT AS COMPARED TO NORMAL SUITE OF SCARS AND SCRATCHES ON A GRAY WHALES. WE DID NOT SEE ANY OF THE CHARACTERISTIC HASH MARKING CAUSED BY A NET. ALSO INCLUDED IN NORTHWEST INDIAN FISHERIES COMMISSION ANNUAL REPORT.	DEAD	NA	1.00	N	Y
GRAY WHALE	EASTERN N PACIFIC - PCFG	2020	8	7	GILLNET FISHERY	MENDOCINO	CA	SI (PRORATE)	BLUE STEEL LINE WITH 2 BUOYS (1/2 WHITE/ 1/2 ORANGE) WRAPPED AROUND HEAD AND FLIPPER. WE BELIEVE IT COULD BE WRAPPED AROUND THE LEFT PECTORAL AND THERE IS SOME SMALL REMNANTS OF GILLNET. UNAUTHORIZED RP SAID THEY GRABBED THE LINE VERY CLOSE TO THE WHALE AND WHEN THE WHALE FELT THEM ON THE LINE IT SPOOKED AND DOVE AND THEY DIDN'T SEE IT AGAIN. FINAL OUTCOME AND GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
GRAY WHALE	EASTERN N PACIFIC	2020	8	19	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	ORANGE BUOY WITH MARINE GROWTH ATTACHED TO LEFT SIDE OF WHALE. ATTACHMENT POINT ASSUMED TO BE PECTORAL FLIPPER BASED ON PHOTO. REPORTING PARTY STATES THERE WAS A SMALL AMOUNT OF BLUE GILLNET ATTACHED TO THE BUOY, BUT IT IS NOT VISIBLE IN PHOTOS. GEAR AMOUNT AND CONFIGURATION UNKNOWN. WHALE APPEARS HEALTHY AND IS FREE-SWIMMING. ASSUMED TO BE SAME UNIDENTIFIED WHALE INITIALLY SEEN OFF GUALALA IN MENDOCINO ON 8/7 AND IDENTIFIED AS A GRAY WHALE IN SAME AREA ON 8/13 WITH SIMILAR GEAR AND PLACEMENT.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GRAY WHALE	EASTERN N PACIFIC	2020	11	18	UNIDENTIFIED FISHERY INTERACTION	ORANGE	CA	SI (PRORATE)	CONFIRMED ENTANGLED FROM UNMANNED AERIAL VEHICLE PHOTOS: BUNDLE OF LINE AT BASE OF PEDUNCLE AND MID FLUKE. CONSTRICTING LINE AT FLUKE INSERTION. LONG SINGLE LINE TRAILING THE WHALE THAT MAY EXCEED LENGTH OF WHALE. FULL GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L2	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2016	4	22	MARINE DEBRIS	MONTEREY	CA	SI	EMACIATED, LETHARGIC, THICK SINGLE BRAIDED PLASTIC LINE/NETTING AROUND NECK. DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2016	4	25	MARINE DEBRIS	MONTEREY	CA	SI	EMACIATED, ORANGE NYLON NETTING CUTTING INTO NECK AND WRAPPED LOOSELY AROUND UPPER BODY.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2016	4	27	MARINE DEBRIS	MARIN	CA	SI	EMACIATED, THICK BLACK ROPE WAS AROUND NECK BUT REMOVED BY MEMBER OF PUBLIC (FIRE DEPARTMENT?) PRIOR TO RESCUE TEAM ARRIVING. PUBLIC NETTED OUT OF THE WATER. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	N	N
GUADALUPE FUR SEAL	MEXICO	2016	5	22	MARINE DEBRIS	SAN LUIS OBISPO	CA	DEAD	EMACIATED, DECOMPOSING CARCASS WITH ENTANGLEMENT.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2016	5	27	UNIDENTIFIED FISHERY INTERACTION		WA	DEAD	REPORTED FRESH DEAD FROM 'SHILOH BEACH'. EXAM BOTH INTERNAL AND EXTERNAL. SUSPECTED ENTANGLEMENT OR ENTRAPMENT. BASED ON CIRCULAR LINEAR HEMORRHAGE AT HIND FLIPPER/ LOWER PELVIS AREA AS WELL AS BOTH FRONT FLIPPERS.	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2016	5	28	UNIDENTIFIED FISHERY INTERACTION	SAN MATEO	CA	DEAD	TWO LOOPS OF ROPE NET FOUND AROUND THE NECK JUST ABOVE THE SHOULDERS. INTRUSION INTO MUSCLE ALMOST COMPLETE CIRCUMFERENTIALLY, EXCEPT FOR A 1 INCH SECTION MIDLINE VENTRALLY	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2016	5	29	MARINE DEBRIS	SONOMA	CA	SI	PUBLIC REPORTEDLY REMOVED AN ENTANGLEMENT FROM AN EMACIATED ANIMAL. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P7B	0.00	N	N
GUADALUPE FUR SEAL	MEXICO	2016	5	29	MARINE DEBRIS	MONTEREY	CA	SI	MEMBER OF PUBLIC DISENTANGLED EMACIATED ANIMAL. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P7B	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GUADALUPE FUR SEAL	MEXICO	2016	6	8	MARINE DEBRIS	SAN LUIS OBISPO	CA	SI	EMACIATED, LARGE YELLOW ENTANGLEMENT AROUND LOWER NECK, SHOULDERS AND FLIPPERS. ANIMAL STRANDED WITH BLUE FLIPPER TAGS. UNCLEAR IF BLUE FLIPPER TAGS WERE FROM RESEARCH-RELATED ACTIVITY OR REPRESENT A PREVIOUSLY-STRANDED HUMAN-RELATED CASE. TREATED AT REHAB FACILITY AND RELEASED WITH NEW ORANGE FLIPPER TAGS. TREATED AS SERIOUS INJURY BECAUSE PROBABLE RE-STRAND.	SI	P7B	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2016	6	15	MARINE DEBRIS	MENDOCINO	CA	DEAD	CARCASS COLLECTED, WITH ENTANGLEMENT, BUT ONLY SKULL AND BACULUM RETAINED. NO DETAILS ON TYPE OF ENTANGLEMENT.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2017	6	9	MARINE DEBRIS	CLATSOP	OR	DEAD	HARD PLASTIC RING AROUND NECK.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2017	6	10	UNIDENTIFIED FISHERY INTERACTION	SAN MATEO	CA	SI	ANIMAL HAD ORANGE NETTING ENTANGLED AROUND MOST OF BODY, BUT NOT CUTTING INTO TISSUE. TREATED AND RELEASED FROM REHAB FACILITY.	NSI	P7B	0.00	Y	N
GUADALUPE FUR SEAL	MEXICO	2017	6	10	MARINE DEBRIS	SONOMA	CA	DEAD	ENTANGLED ANIMAL FOUND, DETAILS ON NATURE OF ENTANGLEMENT LACKING.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2017	6	12	MARINE DEBRIS	SAN MATEO	CA	DEAD	ANIMAL ENTANGLED IN BALLOON RIBBON MATERIAL.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2017	6	19	MARINE DEBRIS	MONTEREY	CA	SI	EMACIATED ANIMAL FOUND WITH ENTANGLEMENT SCAR, DIED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2017	6	28	MARINE DEBRIS	SAN LUIS OBISPO	CA	DEAD	CARCASS FOUND WITH THICK DARK GREEN NETTING ENTANGLED AROUND HEAD, CAUSING TWO DEEP LACERATIONS.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2017	11	1	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	SI	ANIMAL HOOKED IN HEAD AND ACTIVELY STRUGGLING. CREW PULLED ANIMAL TO WITHIN 10 FEET OF VESSEL, WHERE THE LINE WAS CUT. THE HOOK AND AT LEAST 5-10 FEET OF LEADER LEFT ON THE ANIMAL. OBSERVER PROGRAM.	SI	P6	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2017	11	17	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	NSI	ANIMAL HOOKED IN MOUTH. GEAR PULLED FREE OF ANIMAL AS IT WAS BEING PULLED TOWARD THE VESSEL. NO TISSUE LOCATED ON RETRIEVED HOOK. OBSERVER PROGRAM.	NSI	P5C	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GUADALUPE FUR SEAL	MEXICO	2017	12	3	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	SI	ANIMAL HOOKED IN RIGHT FRONT FLIPPER. STRUGGLED AS IT WAS BEING PULLED TOWARDS VESSEL. LINE WAS CUT, HOOK AND 20 FEET OF MONOFILAMENT REMAINED ON ANIMAL. OBSERVER PROGRAM.	SI	P6	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2018	5	23	HOOK AND LINE FISHERY	ORANGE	CA	SI	UNDERWEIGHT ANIMAL ENTANGLED IN FISHING LINE. ANIMAL WAS RESCUED BY PMMC ON 5/23/18 IN NEWPORT BEACH AND TRANSFERRED TO SEA WORLD ON THE SAME DAY. REHABILITATED IN COORDINATION WITH NOAA FISHERIES. ANIMAL RELEASED WITH SPOT 6311A SATELLITE TRANSMITTER.	NSI	P6	0.00	N	N
GUADALUPE FUR SEAL	MEXICO	2018	6	15	GILLNET FISHERY	MARIN	CA	SI	LARGE GREEN NET ENTANGLEMENT AROUND HEAD AND NECK RESULTING IN LACERATION BY EARS. ANIMAL WAS EMACIATED. NO DETAILS GIVEN ON RESCUE / REHAB EFFORTS.	SI	P8A	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2018	6	16	GILLNET FISHERY	SAN MATEO	CA	SI	EMACIATED ANIMAL FOUND WITH LARGE AMOUNT OF GREEN NYLON NETTING AROUND NECK. NO DETAILS GIVEN ON RESCUE / REHAB EFFORTS.	SI	P8A	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2018	7	23	GILLNET FISHERY	MENDOCINO	CA	SI	GILLNET FISHERY DISENTANGLEMENT BY THE PUBLIC. THIS ANIMAL WAS DISENTANGLED BY THE PUBLIC AND IT FLED THE BEACH SHORTLY AFTER. THE INCIDENT WAS FILMED AND UPLOADED TO THE FB PAGE OF THE WESTPORT CAMPGROUND AND RV. VIDEO LINK NOT AVAILABLE AT TIME OF SERIOUS INJURY ASSESSMENT. NO DETAILS ON SEVERITY OF ENTANGLEMENT, CONDITION OF ANIMAL, OR IF GEAR REMAINED ON ANIMAL.	SI	P6	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2018	8	31	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	DEAD	LINE ENTANGLEMENT AROUND NECK. CARCASS TRANSFERRED TO CALIFORNIA ACADEMY OF SCIENCES.	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	1	7	TRAWL FISHERY UNIDENTIFIED	GRAYS HARBOR	WA	SI	SEAL LIVE ON BEACH AND ENTANGLED IN GREEN POLYFILAMENT TRAWL NET. 3 FEET HEAVILY WRAPPED AROUND WHOLE BODY. HEALTHY ANIMAL DESCRIBED AS HAVING 'AN ATTITUDE AND BIG TEETH' WAS DISENTANGLED AND RELEASED ON BEACH. ANIMAL RESTRANDED ON JAN. 19 AND HAD LACERATIONS DOWN TO MUSCLE LAYER RESULTING FROM NEW NET ENTANGLEMENT AND NET MARKS ON FUR. TAKEN TO REHAB FACILITY. OUTCOME UNKNOWN. CATEGORIZED AS SERIOUS INJURY DUE TO DEEP LACERATIONS AND MULTIPLE STRANDINGS.	SI	P8A	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GUADALUPE FUR SEAL	MEXICO	2019	1	26	TRAWL FISHERY UNIDENTIFIED	SANTA CRUZ	CA	SI	MALNOURISHED ANIMAL WITH GREEN ROPE TYPE NETTING ENCIRCLING THE HEAD CAUSING WOUNDS ON TOP OF HEAD.	SI	P8A	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	5	8	MARINE DEBRIS	SAN LUIS OBISPO	CA	SI	EMACIATED, PLASTIC RING AROUND LOWER NECK/SHOULDERS REGION - SEE HUMAN INTERACTION FORM FOR DETAILS.	SI	P8A	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2019	5	18	UNIDENTIFIED HUMAN INTERACTION	SAN MATEO	CA	DEAD	ENTIRE SKELETON ARCHIVED LATE NOTE** 11/19/2019 SKULL, LEFT MANDIBLE AND CANINE FRACTURES WITH PROJECTILE FOUND IN MESH BAG WITH SKULL.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2019	5	22	UNIDENTIFIED FISHERY INTERACTION	DOUGLAS	OR	SI	LIVE FUR SEAL YEARLING ENTANGLED, FISHING NET AROUND NECK. NORTH OF TENMILE CREEK. OBSERVER (A SNOWY PLOVER MONITOR) CAME BACK TO SITE THE FOLLOWING MORNING AND DID NOT OBSERVE THE ANIMAL AGAIN.	SI	P6	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	6	1	UNIDENTIFIED HUMAN INTERACTION	SANTA CRUZ	CA	SI	MALNOURISHED ANIMAL WITH CIRCUMFERENTIAL LACERATION AROUND NECK ~1CM IN WIDTH CLEAN MARGINS. NO FISHING LINE/ENTANGLEMENT FOUND.	SI	P7B	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2019	6	4	UNIDENTIFIED NET FISHERY	MONTEREY	CA	SI	EMACIATED ANIMAL WITH RED NETTING AROUND NECK CUTTING INTO ANIMAL.	SI	P8A	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	6	7	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	WA	DEAD	FOUND DURING BEACH SURVEY DEAD ON BEACH. BASED ON THE FINDING ON GROSS NECROPSY - HEMORRHAGE AROUND BOTH ANKLES OF HIND FLIPPERS AND ALSO DORSAL ASPECT OF RADIUS AND ULNA AND ACUTE RHABDOMYOLYSIS SUSPECT FISHERY ENTANGLEMENT.	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	6	7	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	WA	DEAD	FOUND DEAD BY WDFW VOLUNTEER; PARTIAL SCAVENGED MISSING FLIPPER. LINEAR IMPRESSION ON EYE; FORE FLIPPER MISSING. ALTHOUGH THE ANIMAL WAS PARTIALLY SCAVENGED THE OBSERVATION OF THE LINEAR IMPRESSION ON THE EYE NOTED HEMORRHAGE AT NECK ON GROSS AND ACUTE RHABDOMYOLYSIS ON HISTO SEEM TO SUPPORT A ACUTE EVENT PRIOR TO DEATH AND PROBABLY ENTANGLEMENT. MISSING FLIPPER COULD POSSIBLY DUE TO SCAVENGING OR PRIOR DIFFICULT TO DETERMINE.	DEAD	NA	1.00	Y	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GUADALUPE FUR SEAL	MEXICO	2019	6	8	UNIDENTIFIED FISHERY INTERACTION	SONOMA	CA	SI	ANIMAL WAS ON AN OFFSHORE ROCK, WITH AN ENTANGLEMENT AROUND THE NECK THAT WAS SNAGGED ON THE ROCK. AN ATTEMPT TO RESCUE WAS MADE BY TMMC, BUT THE CONDITIONS WERE NOT FAVORABLE OR SAFE. ANIMAL WAS NOT FOUND THE NEXT DAY AND DID NOT STRAND IN THE WEEKS FOLLOWING THIS OBSERVATION.	SI	P7A	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	6	9	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	WA	DEAD	CARCASS WITH GOOSENECK BARNACLES ON BOTH HIND FLIPPERS AND ON BASE OF TAIL ON LEFT SIDE. HEAD IS SMASHED; MULTIPLE BREAKS ON SKULL AND AROUND ROSTRUM. LOWER JAW FRACTURED IN MIDDLE. LEFT FORE FLIPPER FINGER DIGITS DISLOCATED; POSSIBLE BREAK ON RIGHT DIGITS. EVIDENCE OF THE MULTIPLE FRACTURES OF THE SKULL NOSE AND JAW NOTED ON GROSS EXAM AND THE FINDING OF ACUTE HEMORRHAGE, SKELETAL MUSCLE AND WELL AS ACUTE EDEMA, LUNG ARE CONSISTENT WITH ACUTE TRAUMA ANTEMORTEM. SUGGESTIVE OF FOCAL BLUNT FORCE TRAUMA AND DROWNING. POSSIBLY DUE TO CLUBBING OR ENTANGLEMENT.	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	6	12	GILLNET FISHERY	SANTA BARBARA	CA	DEAD	ENTIRE BODY ENTANGLED IN "GILL FISHING LINE."	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	6	13	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	WA	DEAD	BASED ON THE GROSS FINDINGS OF THE CIRCULINEAR HEMORRHAGE ON BOTH THE ANKLES AND RADIUS AND ULNAS AND EDEMA AND HEMORRHAGE ON THE CHEST THAT APPEAR TO SQUEEZED OBLONG WITH HEMORRHAGE AREA OF THE LUNGS AND TORN LIVER. THE HISTO CONFIRMS TRAUMA AND POSSIBLY DROWNING LEFT SIDE CHEST REDDENED EDEMA. THIS AREA CORRESPONDS WITH DARK RED AREA IN LUNG APPEARS TO BE POSSIBLY FROM BEING CONSTRICTED CIRCALUNAR REDDISH TISSUE ABOVE ANKLE JOINT.	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	6	15	UNIDENTIFIED FISHERY INTERACTION	MARIN	CA	SI	EMACIATED ANIMAL ENTANGLED WITH SEVERE CHRONIC LACERATION. ENTANGLEMENT NETTING CAUGHT THROUGH MOUTH AND ACROSS MUZZLE, AS WELL AS NECK. BONE EXPOSURE, ULCERATION, AND INFECTION APPARENT. NOT CLEAR FROM NARRATIVE WHETHER MATERIAL WAS TRAWL OR GILLNET GEAR.	SI	P8A	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GUADALUPE FUR SEAL	MEXICO	2019	6	16	UNIDENTIFIED FISHERY INTERACTION	SAN FRANCISCO	CA	SI	EMACIATED ANIMAL ENTANGLED WITH A NET AROUND ITS NECK. THE CALLER AND HER FRIENDS REMOVED THE NET WITH A KNIFE EXPOSING A DEEP WOUND ON THE ANIMAL'S NECK. THERE WERE A NUMBER OF PEOPLE AROUND THE ANIMAL IN CLOSE CONTACT AND PETTING ANIMAL. POSSIBLE TREMORS ON BEACH. LITTLE REACTION TO HUMAN ENCROACHMENT. UNRESPONSIVE BUT BREATHING DURING RESPONSE.	SI	P7B	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	6	18	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	WA	DEAD	BASED ON THE FINDING ON GROSS NECROPSY AND THE SUPPORTING DIAGNOSTIC ON HISTOPATH OF ACUTE TRAUMA AND STRUGGLE AND THE CIRCULINEAR HEMORRHAGE AROUND FORE FLIPPER AND ANKLES SUPPORTS SUSPECTED ENTANGLEMENT.	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	6	22	UNIDENTIFIED FISHERY INTERACTION	SANTA CRUZ	CA	SI	EMACIATED ANIMAL WITH DEEP LACERATION WITH POCKETS OF PUS FROM A PREVIOUS ENTANGLEMENT AROUND NECK AND FACE.	SI	P8A	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	7	4	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	WA	DEAD	LINEAR ABRASION ON BOTH EYES; REDDENING EDEMA BEHIND BOTH EYES, SMALL FOCAL HEMORRHAGE LEFT FORE FLIPPER. TONGUE TIP AND BACK OF TONGUE REDDENED. REDDENING LIP AT BACK GAPE. FRONT UPPER LIPS "SWOLLEN/ EDEMATOUS. ONE INCISOR ON LOWER JAW NOT ALIGNED WITH OTHER. HISTOPATHOLOGY SUPPORTS DROWNING DUE TO ENTANGLEMENT ALTHOUGH BASED ON HISTO ANIMAL ALSO WAS SEPTIC AS WELL.	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	7	7	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	WA	DEAD	PETECHIAE AROUND STERNUM, CIRCULINEAR HEMORRHAGE AROUND ANKLE. LINEAR AND CIRCULINEAR HEMORRHAGE AROUND FOREFLIPPERS, HEMORRHAGE AROUND RIGHT EYE THAT CONTINUES DOWN TO LOWER JAW. BRAIN-PALE. RIGHT FRONTAL LOBE LARGE ~4X4 CM HEMATOMA ASSOCIATED WITH HEMORRHAGE OUTSIDE BRAIN, LUNG- AERATED, MOTTLED LIGHT PINK/DARK, DARKENED PORTION DOESN'T FLOAT AS WELL IN FORMALIN. HISTOLOGIC FINDINGS CORROBORATE THE CLINICAL OBSERVATIONS. THE ACUTE HEMORRHAGE IN MULTIPLE TISSUES IS CONSISTENT WITH ACUTE ANTEMORTEM TRAUMA.PULMONARY LESIONS SUGGEST THE ANIMAL DROWNED AND PROBABLY ENTANGLEMENT	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2019	7	8	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	WA	DEAD	NO LACERATIONS OR INJURIES, JUST LIGHT IMPRESSIONS AROUND NECK. RECOVERED DEAD ON BEACH WITH MULTIFILAMENT NET AROUND NECK. HISTOPATH CONFIRMED ACUTE TRAUMA AND THAT THE ANIMAL DROWNED. COMMENTS: NET APPEARED TO BE CUT AROUND NECK. 5 LOOPS AROUND NECK.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GUADALUPE FUR SEAL	MEXICO	2019	7	8	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	WA	DEAD	EMACIATED ANIMAL FOUND DEAD. FAINT CIRCULINEAR HEMORRHAGE AROUND HINDFLIPPERS. FOREFLIPPERS HEAVILY SCAVENGED WITH SIGNS OF HEMORRHAGE. NASAL BONE APPEARS SOMEWHAT BROKEN. LARGE BLOOD CLOTS IN THE SKULL CAVITY (3 CC). PENETRATING HOLE IN ROOF OF MOUTH. HISTOLOGIC FINDINGS CORROBORATE THE CLINICAL OBSERVATIONS. THIS ANIMAL WAS EMACIATED AND EXPERIENCED AN EPISODE OF ACUTE TRAUMA AND PROBABLY DROWNING PROBABLE ENTANGLEMENT POSSIBLE GAFFED/ CLUBBED.	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2020	1	27	UNIDENTIFIED FISHERY INTERACTION	PACIFIC	WA	SI	CITIZENS REMOVED NET AND NECK BAND FROM AN ALERT ANIMAL THAT LEFT THE AREA.	NSI	P7B	0.00	Y	N
GUADALUPE FUR SEAL	MEXICO	2020	4	18	UNIDENTIFIED FISHERY INTERACTION	SANTA CRUZ	CA	DEAD	CARCASS FOUND WITH NET AROUND BODY. SKELETON AT CAL ACADEMY OF SCIENCES.	DEAD	NA	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2020	6	1	MARINE DEBRIS	HUMBOLDT	CA	SI	TWINE ENTANGLEMENT AROUND NECK. CUT THROUGH SKIN FROM APPROX. 10 0'CLOCK AROUND TO 5 0'CLOCK BUT NOT INTO FLESH. SERIOUS INJURY DUE TO POTENTIAL OF MATERIAL TO BECOME CONSTRICTING OR CREATE DRAG.	SI	P8A	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2020	6	2	SHOOTING	SAN FRANCISCO	CA	DEAD	SKULL DAMAGED FROM BUCKSHOT. ONE PIECE OF BUCKSHOT RECOVERED AND ARCHIVED WITH THE SPECIMEN. UPDATE: TWO OTHER PIECES OF BUCKSHOT WERE RECOVERED DURING BRAIN REMOVAL WHILE PROCESSING. MODERATE DECOMPOSITION.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2020	6	6	SHOOTING	SAN MATEO	CA	DEAD	A MINIMUM OF THREE PIECES OF BUCKSHOT WERE RECOVERED FROM THE CARCASS DURING PREPARATION. ONE NEAR THE HEART, THE OTHER MIXED IN THE ORGANS AS THEY WERE BEING REMOVED, ONE IN THE RIGHT ULNAR BONE.	DEAD	NA	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2020	6	9	MARINE DEBRIS	DEL NORTE	CA	SI	MALNOURISHED ANIMAL WITH ENTANGLEMENT OF UNKNOWN MATERIAL. NO FURTHER DETAILS.	SI	P1	1.00	N	Y
GUADALUPE FUR SEAL	MEXICO	2020	6	20	UNIDENTIFIED FISHERY INTERACTION	SAN LUIS OBISPO	CA	SI	LARGE AMOUNT OF GREEN NYLON NETTING AROUND LOWER NECK/SHOULDERS CUTTING INTO SKIN DORSALLY, MODERATELY UNDERWEIGHT.	SI	P8A	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GUADALUPE FUR SEAL	MEXICO	2020	6	22	UNIDENTIFIED FISHERY INTERACTION	OFFSHORE	CA	SI	CAPTAIN DETECTED ANIMAL BADLY ENTANGLED IN NET. CREW ABLE TO SECURE ANIMAL IN DIPNET AND BRING ONBOARD VESSEL. MANUALLY RESTRAIN ANIMAL, AND CUT THE ANIMAL FREE OF NETTING. ANIMAL LOWERED BACK INTO THE WATER USING DIPNET AND OBSERVED SWIMMING AWAY. PHOTOS PROVIDED BY CAPTAIN SHOW ANIMAL IN REASONABLE BODY CONDITION WITH GREEN NYLON NETTING AROUND NECK. NO LACERATIONS SEEN AFTER NET WAS REMOVED. NET MATERIAL RETAINED BY TMMC.	NSI	P7B	0.00	Y	N
GUADALUPE FUR SEAL	MEXICO	2020	10	12	UNIDENTIFIED FISHERY INTERACTION	TILLAMOOK	OR	SI	WAS FOUND BY PASSERS-BY ON REMOTE BEACH; WAS DISENTANGLED BY A STATE PARKS RANGER (CAPE LOOKOUT UNIT MANAGER KIRK BARHAM) AND IMMEDIATELY RELEASED ON SITE. THE ANIMAL DID NOT APPEAR TO HAVE ANY OBVIOUS INJURIES AND APPEARED VERY ALERT AND RESPONSIVE; SWAM ALIVE	NSI	P7B	0.00	Y	N
GUADALUPE FUR SEAL	MEXICO	2020	10	31	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	SI	HOOKED IN MOUTH (LOWER JAW) BY 18/0 OFFSET ROUND OR FLAT CIRCLE HOOK (5MM DIAMETER). ANIMAL WAS STRUGGLING DURING ATTEMPTED DEHOOKING (UNSUCCESSFUL) AND PRESUMED CUTTING OF LINE: HOOK AND 10CM MONOFILAMENT LEADER LEFT ON ANIMAL. OBSERVER PROGRAM.	SI	P5A	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2020	11	1	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	SI	HOOKED IN MOUTH (SEEMINGLY UPPER RIGHT JAW) BY 18/0 OFFSET ROUND OR FLAT CIRCLE HOOK (5.0MM DIAMETER). ANIMAL WAS STRUGGLING AS IT WAS PULLED TOWARD THE VESSEL UNTIL THE LINE WAS CUT: HOOK, 8M MONOFILAMENT LEADER, AND LIGHTSTICK LEFT ON ANIMAL. OBSERVER PROGRAM.	SI	P5A, P6	1.00	Y	Y
GUADALUPE FUR SEAL	MEXICO	2020	11	2	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	NSI	HOOKED IN LEFT PECTORAL FLIPPER BY 18/0 OFFSET FLAT CIRCLE HOOK (5.0MM DIAMETER). ANIMAL WAS STRUGGLING AS IT WAS BROUGHT ALONG VESSEL, WHERE AFTER SEVERAL ATTEMPTS, IT WAS SUCCESSFULLY DEHOOKED: NO GEAR LEFT ON ANIMAL. SOME BLEEDING OBSERVED, ESPECIALLY AFTER DEHOOKING. OBSERVER PROGRAM.	NSI	P5C	0.00	N	N
GUADALUPE FUR SEAL	MEXICO	2020	11	3	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	NSI	HOOKED IN MOUTH (SEEMINGLY LOWER LEFT JAW) BY 18/0 OFFSET FLAT CIRCLE HOOK (5.0MM DIAMETER). ANIMAL WAS STRUGGLING AS IT WAS BROUGHT ALONG VESSEL, WHERE IT WAS SUCCESSFULLY DEHOOKED: NO GEAR LEFT ON ANIMAL. OBSERVER PROGRAM.	NSI	P5C	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
GUADALUPE FUR SEAL	MEXICO	2020	11	3	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	NSI	HOOKEE IN RIGHT PECTORAL FLIPPER BY 18/0 OFFSET ROUND CIRCLE HOOK (5.0MM DIAMETER). AS CREW WAS PULLING THE ANIMAL TOWARD THE VESSEL, IT CAME FREE OF THE GEAR: NO GEAR LEFT ON ANIMAL. OBSERVER PROGRAM.	NSI	P5C	0.00	N	N
GUADALUPE FUR SEAL	MEXICO	2020	12	5	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	NSI	HOOKEE IN MOUTH (CENTER LOWER JAW) BY 18/0 OFFSET FLAT CIRCLE HOOK (5.0MM DIAMETER). ANIMAL WAS STRUGGLING AS IT WAS BROUGHT ALONG VESSEL, WHERE IT WAS SUCCESSFULLY DEHOOKED: NO GEAR LEFT ON ANIMAL. OBSERVER PROGRAM.	NSI	P5C	0.00	N	N
GUADALUPE FUR SEAL	MEXICO	2020	12	5	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	NSI	HOOKEE IN MOUTH (PART NOT SPECIFIED) BY 18/0 OFFSET ROUND CIRCLE HOOK (5.0MM DIAMETER). SOON AFTER THE ANIMAL WAS OBSERVED, IT CAME FREE OF THE GEAR: NO GEAR LEFT ON ANIMAL. OBSERVER PROGRAM.	NSI	P5C	0.00	N	N
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2016	2	16	UNIDENTIFIED NET FISHERY		OR	DEAD	A HARBOR PORPOISE WAS FOUND STRANDED IN A STATE OF MODERATE DECOMPOSITION. THE PORPOISE DISPLAYED EVENLY SPACED INDENTATIONS ON ITS FLUKE AND A SUBDERMAL HEMATOMA AT THE BASE OF THE HEAD.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2016	5	22	UNIDENTIFIED NET FISHERY		OR	DEAD	A HARBOR PORPOISE WAS FOUND STRANDED AND IN A STATE OF MODERATE DECOMPOSITION. THE CARCASS DISPLAYED LONG KNIFE CUTS ON THE BODY AND THE DORSAL FIN WAS CUT OFF. THERE WAS HEMORRHAGE THROUGHOUT THE HEAD AND BODY, AND SUBSTANTIAL SUBSCAPULAR HEMATOMA. THE ANIMAL HAD A FISH LODGED IN ITS THROAT AND WAS IN GOOD BODY CONDITION.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2016	7	3	UNIDENTIFIED NET FISHERY		OR	DEAD	A HARBOR PORPOISE WAS DISCOVERED FRESH DEAD WITH TWO LINEAR MARKS ALONG THE DORSAL PEDUNCLE IN ADDITION TO OTHER POTENTIAL NET MARKS. A NECROPSY WAS CONDUCTED, AND THE PORPOISE WAS DETERMINED TO HAVE ASPHYXIATED ON FISH, LIKELY WHILE ENTANGLED IN FISHING GEAR.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2016	7	16	UNIDENTIFIED NET FISHERY		OR	DEAD	A HARBOR PORPOISE WAS DISCOVERED STRANDED, IN ADVANCED DECOMPOSITION. A FISH WAS LODGED IN THE ANIMAL'S THROAT, AND THE CARCASS DISPLAYED DISTINCTLY PATTERNED MARKS ON BODY, GASHES, AND EXTENSIVE HEMORRHAGE THROUGHOUT BODY. CARCASS WAS OTHERWISE IN GOOD BODY CONDITION.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2016	10	31	GILLNET FISHERY		WA	DEAD	A HARBOR PORPOISE CALF WAS FOUND STRANDED AND FRESHLY DEAD. THE ANIMAL DISPLAYED EVIDENCE OF NET ENTANGLEMENT, AND THERE WERE CLEAR LINE IMPRESSIONS AROUND THE ANIMAL'S HEAD, RIGHT FLIPPER, AND LEADING AND TRAILING EDGES OF FLUKES. GILLNET FISHING WAS NOTED TO BE OCCURRING IN THE AREA.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2016	11	7	GILLNET FISHERY		WA	DEAD	A HARBOR PORPOISE WAS ENTANGLED AND KILLED IN A GILLNET	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2016	12	11	UNIDENTIFIED FISHERY INTERACTION		OR	DEAD	A HARBOR PORPOISE WAS FOUND IN A STATE OF MODERATE DECOMPOSITION AND NECROPSIED. THE ANIMAL'S LEFT PECTORAL FIN WAS AMPUTATED. THERE WAS ALSO TOOTH DAMAGE, FOAM IN THE TRACHEA, AND HEMORRHAGE THROUGHOUT THE BODY. OTHERWISE, THE ANIMAL WAS IN EXCELLENT BODY CONDITION.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2017	3	1	UNIDENTIFIED FISHERY INTERACTION	CLATSOP	OR	DEAD	PARTS MISSING AND APPEARED CUT OFF (DORSAL FIN, FLIPPERS); MASSIVE HEMORRHAGE; DEEP PUNCTURES ON BODY; BROKEN RIBS; BLOODY FLUID IN THORACIC AND ABDOMINAL CAVITIES.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2017	4	28	UNIDENTIFIED FISHERY INTERACTION	PACIFIC	WA	DEAD	FOAM IN LUNGS; HEAVY HEMORRHAGE; BLOODY FLUID IN THORACIC CAVITY; TEETH MISSING; LARGE FISH IN THROAT AS WELL AS ONE IN STOMACH; POSSIBLE ASPHYXIATION AS WELL AS FISHERIES INTERACTION.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2017	4	29	UNIDENTIFIED FISHERY INTERACTION	PACIFIC	WA	DEAD	HEAVY HEMORRHAGE; BROKEN JAW; LINE MARKS ON STOCK/TAIL; THE ANIMAL HAD GOOD BODY CONDITION.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2017	5	3	UNIDENTIFIED FISHERY INTERACTION	PACIFIC	WA	DEAD	HEAVY TRAUMA/HEMORRHAGE AROUND HEAD AND THORAX; CUTS ON BODY; THE PORPOISE HAD EXCELLENT BODY CONDITION.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2017	5	4	UNIDENTIFIED FISHERY INTERACTION	PACIFIC	WA	DEAD	FLUKE CUT OFF; TEETH MISSING; LINEAR MARKS FROM THORAX TO HEAD; HEMORRHAGE; FOAM IN TRACHEA; FETUS HAD SUBSTANTIAL HEMORRHAGE AND BLOODY FLUID IN THORAX AND ABDOMINAL CAVITIES; GOOD BODY CONDITION.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2017	5	18	UNIDENTIFIED FISHERY INTERACTION	PACIFIC	WA	DEAD	SUSPICIOUS, DEEP 3.5 CM DIA. HOLE IN PEDUNCLE (FROM GAFF?); FLUKES COMPLETELY GONE; DAMAGE/INDENTATIONS IN BONE ALONG JAW EDGES; HEMORRHAGE IN JAW BONES; PORPOISE VERY DECOMPOSED AND SCAVENGED.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2017	5	22	UNIDENTIFIED FISHERY INTERACTION	PACIFIC	WA	DEAD	LEFT FLUKE AND FLIPPER CUT OFF; HEMORRHAGE IN BODY; TOOTH INDENTATIONS FROM UPPER JAW ALONG GUMS IN LOWER JAW; THE PORPOISE HAD EXCELLENT BODY CONDITION.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2017	6	9	UNIDENTIFIED FISHERY INTERACTION	PACIFIC	WA	DEAD	HEMORRHAGE, HEMATOMAS, LINE MARKS, SLASHES, AND TOOTH DAMAGE	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2017	8	30	UNIDENTIFIED FISHERY INTERACTION	PIERCE	WA	DEAD	LINEAR LACERATION AROUND TOP OF JAW AND MATCHING LACERATION RIGHT SIDE LOWER JAW. LINEAR LACERATION ON BOTH PECTORAL FINS AS WELL AS LACERATION FLUKE AND ONE AT BASE OF DORSAL FIN.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2017	10	28	GILLNET FISHERY	KITSAP	WA	DEAD	LINEAR LACERATIONS AND IMPRESSION AROUND HEAD THROUGH UPPER JAW AT GAPE AND AROUND RIGHT PECTORAL FIN.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2017	10	30	GILLNET FISHERY	KING	WA	DEAD	MONOFILAMENT LINE MARKINGS ON ROSTRUM, LINE WRAPS AROUND RIGHT PECTORAL FLIPPER AND DORSAL FIN (CUT INTO MID-TRAILING EDGE OF DORSAL FIN APPROX 1.5 INCHES LONG, PARALLEL TO BODY, WITH CORRESPONDING WRAP MARK ON LEADING EDGE OF FIN). LINE WRAP IMPRESSIONS ON BOTH SIDES OF FLUKE WITH ABRASIONS ALONG TRAILING EDGES.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	SAN FRANCISCO-RUSSIAN RIVER	2018	4	11	GILLNET FISHERY	ALAMEDA	CA	DEAD	MANDIBLE HAD BEEN ENTANGLED BY AN UNKNOWN OBJECT. THE OBJECT WAS ABSENT AT THE TIME OF EXAMINATION, BUT THE ENTANGLEMENT CAUSED SEVERE DAMAGE, INCLUDING THE LOSS OF SEVERAL TEETH AND A FRACTURE OF THE RIGHT HEMI MANDIBLE.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2018	5	14	GILLNET FISHERY	CLATSOP	OR	DEAD	THE PORPOISE HAD GOOD EXTERNAL BODY CONDITION AND HAD NUMEROUS MARKS ON BODY SUGGESTING FISHERY INTERACTION AND HEMORRHAGING ON BODY. FOAM IN LUNGS.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2018	7	24	GILLNET FISHERY	CLATSOP	OR	DEAD	DEEP GASHES AND PUNCTURE WOUNDS. ANIMAL HAD ROPE MARKS AND CUTS ON TAIL STOCK AND HEMORRHAGE FROM HEAD TO ABDOMEN ON RIGHT SIDE.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2018	8	6	GILLNET FISHERY	PACIFIC	WA	DEAD	TAIL STOCK CUT OFF; HEMORRHAGE THROUGHOUT ANIMAL OTHERWISE THE PORPOISE HAD GOOD BODY CONDITION.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2018	10	21	GILLNET FISHERY	KITSAP	WA	DEAD	EVIDENCE OF FISHERY ENTANGLEMENT. 15CM LACERATION PENETRATES FULL BLUBBER AND GOES INTO MUSCLE AND CAN FEEL RIBS BROKEN. MULTIPLE IMPRESSIONS AND LACERATION ACROSS ROSTRUM AND LOWER JAW; CRISS-CROSSES TO OTHER SIDE; ABRASIONS ON SNOUT; ~2CM SMALL CHUNK OUT OF THE LEFT FORE FLIPPER, LACERATION; IMPRESSIONS AROUND RIGHT FORE FLIPPER; IMPRESSION ON LEADING EDGE OF DORSAL FIN. EVIDENCE OF FISHERY ENTANGLEMENT: SEVERAL IMPRESSIONS AND LACERATIONS ON FIN, FLIPPERS, ROSTRUM, FLUKE. 15CM LACERATION ON RIGHT BODY CONSISTENT WITH SLICING. ALL COMMERCIAL FISHING CLOSED IN THE AREA AROUND THE TIME OF STRANDING. HOWEVER, THERE WAS TRIBAL FISHING IN THE AREA DURING THAT TIME (7 DAYS/WEEK).	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2018	10	24	GILLNET FISHERY	KITSAP	WA	DEAD	LINEAR IMPRESSIONS ON DORSAL FIN, ROSTRUM, AND LOWER JAW. ACTIVE FISHING IN AREA. CARCASS CONDITION WAS ROBUST, IMPLYING ACUTE DEATH EVENT.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	NORTHERN OREGON- WASHINGTON COAST	2019	3	22	GILLNET FISHERY	PACIFIC	WA	DEAD	LOWER TEETH LOOSE AND MISSING; BLOODY FOAM IN TRACHEA; HEMORRHAGE BELOW TONGUE ON LOWER JAW; LINE MARKS ALONG DORSAL PEDUNCLE; SOME SKIN SCAVENGING ON HEAD AND BODY. EXCELLENT BODY CONDITION OTHERWISE. INJURIES CONSISTENT WITH DROWNING IN GILLNET.	DEAD	NA	1.00	Y	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2019	6	26	VESSEL STRIKE	SAN JUAN	WA	DEAD	NA DEAD FRESH HARBOR PORPOISE WITH EVIDENCE OF EXTENSIVE INJURY FROM PROP WOUND. MOST SKIN AND BLUBBER MISSING FROM BACK OF SKULL TO DORSAL FIN. LINEAR CUTS PRESENT UNDER LEFT PECTORAL FIN ~13.5CM, DORSO-CAUDAL TO MID THORAX 33CM, THEN CRANIAL ?19.5CM, THEN CAUDAL OF RIGHT DORSAL 19CM, THEN CRANIAL TO RIGHT PECTORAL FIN ~21CM. SCAVENGING ALONG FLUKES AND FACE, LIKELY POST MORTEM. EYES SIGNIFICANT CLEAN-CUT WOUND WRAPPING AROUND UPPER BODY WITH MOST OF SKIN AND BLUBBER MISSING FROM BEHIND THE HEAD TO THE DORSAL FIN. MULTIPLE LESIONS ON LOWER HALF OF BODY, THOUGH MINOR IN COMPARISON. SUSPECTED PROPELLER STRIKE. DEAD FRESH HARBOR PORPOISE WITH EVIDENCE OF EXTENSIVE INJURY FROM PROP WOUND. MOST SKIN AND BLUBBER MISSING FROM BACK OF SKULL TO DORSAL FIN. LINEAR CUTS PRESENT UNDER LEFT PECTORAL FIN ~13.5CM, DORSO-CAUDAL TO MID THORAX 33CM, THEN CRANIAL ?19.5CM, THEN CAUDAL OF RIGHT DORSAL 19CM, THEN CRANIAL TO RIGHT PECTORAL FIN ~21CM.	DEAD	NA	1.00	N	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2019	7		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2019	8	5	GILLNET FISHERY, TRIBAL	PACIFIC	WA	DEAD	GOOD BODY CONDITION; TREMENDOUS AMOUNT OF WHITE FOAM COMING FROM BLOWHOLE WHEN FIRST STRANDED; TREMENDOUS AMOUNT OF FOAM IN BRONCHI AND LUNGS AT TIME OF NECROPSY; THERE WAS A DEEP GAFF CUT ON HEAD; EYES WERE BLOODY AND AREAS OF TRAUMA ON BODY, INCLUDING RIB MARKS ON LUNGS; MILD AMOUNT OF BLOOD IN THORACIC CAVITY; BROKEN RIBS; SEVERE NEUTROPHILIC PNEUMONIA ON HISTOPATHOLOGY; GASTRIC NEMATODIASIS AND ULCERATION WERE ALSO NOTED, WITH ASSOCIATED PROLIFERATIVE CUTANEOUS LESIONS.	DEAD	NA	1.00	N	Y
HARBOR PORPOISE	NORTHERN OREGON - WASHINGTON COAST	2019	8	15	GILLNET FISHERY, TRIBAL	PACIFIC	WA	DEAD	ANIMAL HAD GOOD BODY CONDITION; THERE WERE SIGNS OF TRAUMA WHICH INCLUDED NET MARKS, BLOOD IN THE THORACIC CAVITY, AND RIB MARKS ON THE LUNGS.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2019	10	20	GILLNET FISHERY, TRIBAL	PIERCE	WA	DEAD	LINEAR IMPRESSIONS/ LACERATIONS APPEAR TO HAVE STARTED TO HEALED AREA OF ABRASIONS/ LINEAR IMPRESSION AROUND ROSTRUM AND LOWER LIP, DORSAL FIN AND FLUKES. SEE DRAWINGS FOR SPECIFIC LOCATIONS. JUSTIFICATION: BASED ON THE LINEAR IMPRESSION AROUND ROSTRUM, LOWER JAW DORSAL AND FLUKE. IT CONFIRMS PORPOISE WAS RECENTLY ENTANGLED BUT SUSPECT THE LIKELY RELEASE ALIVE. SUSPECT DIED TO INJURIES AND SUSPECT CAPTURE MYOPATHY 1-3 DAYS LATER.	DEAD	NA	1.00	N	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2020	8	12	GILLNET FISHERY, TRIBAL	CLALLAM	WA	DEAD	A TOTAL OF SIX HARBOR PORPOISE WERE FOUND DEAD WITH EVIDENCE OF GILLNET MORTALITY IN MAKAH BAY OVER 2 DAYS. THREE PORPOISE CAME ASHORE ON 8/12 IN A NET. THE NEXT DAY, THREE MORE PORPOISE STRANDED DEAD WITH CUTS CONSISTENT WITH A GILLNET INTERACTION, CONSIDERED TO BE PART OF SAME EVENT OR FISHERY.	DEAD	NA	1.00	N	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2020	8	12	GILLNET FISHERY, TRIBAL	CLALLAM	WA	DEAD	A TOTAL OF SIX HARBOR PORPOISE WERE FOUND DEAD WITH EVIDENCE OF GILLNET MORTALITY IN MAKAH BAY OVER 2 DAYS. THREE PORPOISE CAME ASHORE ON 8/12 IN A NET. THE NEXT DAY, THREE MORE PORPOISE STRANDED DEAD WITH EVIDENCE OF NET MARKS, CONSIDERED TO BE PART OF SAME EVENT OR FISHERY.	DEAD	NA	1.00	N	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2020	8	12	GILLNET FISHERY, TRIBAL	CLALLAM	WA	DEAD	A TOTAL OF SIX HARBOR PORPOISE WERE FOUND DEAD WITH EVIDENCE OF GILLNET MORTALITY IN MAKAH BAY OVER 2 DAYS. THREE PORPOISE CAME ASHORE ON 8/12 IN A NET. THE NEXT DAY, THREE MORE PORPOISE STRANDED DEAD WITH EVIDENCE OF NET MARKS, CONSIDERED TO BE PART OF SAME EVENT OR FISHERY.	DEAD	NA	1.00	N	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2020	8	13	GILLNET FISHERY, TRIBAL	CLALLAM	WA	DEAD	A TOTAL OF SIX HARBOR PORPOISE WERE FOUND DEAD WITH EVIDENCE OF GILLNET MORTALITY IN MAKAH BAY OVER 2 DAYS. THREE PORPOISE CAME ASHORE ON 8/12 IN A NET. THE NEXT DAY, THREE MORE PORPOISE STRANDED DEAD WITH EVIDENCE OF NET MARKS, CONSIDERED TO BE PART OF SAME EVENT OR FISHERY.	DEAD	NA	1.00	N	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2020	8	13	GILLNET FISHERY, TRIBAL	CLALLAM	WA	DEAD	A TOTAL OF SIX HARBOR PORPOISE WERE FOUND DEAD WITH EVIDENCE OF GILLNET MORTALITY IN MAKAH BAY OVER 2 DAYS. THREE PORPOISE CAME ASHORE ON 8/12 IN A NET. THE NEXT DAY, THREE MORE PORPOISE STRANDED DEAD WITH EVIDENCE OF NET MARKS, CONSIDERED TO BE PART OF SAME EVENT OR FISHERY.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2020	8	13	GILLNET FISHERY, TRIBAL	CLALLAM	WA	DEAD	A TOTAL OF SIX HARBOR PORPOISE WERE FOUND DEAD WITH EVIDENCE OF GILLNET MORTALITY IN MAKAH BAY OVER 2 DAYS. THREE PORPOISE CAME ASHORE ON 8/12 IN A NET. THE NEXT DAY, THREE MORE PORPOISE STRANDED DEAD WITH EVIDENCE OF NET MARKS, CONSIDERED TO BE PART OF SAME EVENT OR FISHERY.	DEAD	NA	1.00	N	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2020	9	26	VESSEL STRIKE	WHATCOM	WA	SI	ANIMAL WITH PROPELLER STRIKE INJURIES DESCRIBED AS SEVERE HEAD TRAUMA. EUTHANIZED.	DEAD	NA	1.00	N	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2020	9	30	GILLNET FISHERY	KITSAP	WA	DEAD	MULTIPLE DEEP IMPRESSIONS ON BOTH SIDES OF TAIL FLUKE CONSISTENT WITH GILLNET ENTANGLEMENT.	DEAD	NA	1.00	Y	Y
HARBOR PORPOISE	WASHINGTON INLAND WATERS	2020	10	3	GILLNET FISHERY	WHATCOM	WA	DEAD	FRESH DEAD ANIMAL ENTANGLED IN NETTING.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2016	1	17	HARASSMENT	SAN DIEGO	CA	NSI	APPARENTLY HEALTHY NEONATE WITH UMBILICUS WAS REMOVED FROM BEACH BY PUBLIC. TREATED AT REHAB FACILITY AND RELEASED. ANIMAL WAS ALSO DOCUMENTED ON 3/23 AND 3/24 BEING HANDLED BY THE PUBLIC.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	1	24	HARASSMENT	SAN DIEGO	CA	NSI	APPARENTLY HEALTHY NEONATE WAS REMOVED FROM BEACH BY PUBLIC. DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	2	23	HOOK AND LINE FISHERY	KITSAP	WA	DEAD	A HARBOR SEAL WAS FOUND DEAD ON A PUBLIC BEACH. A LIMITED NECROPSY WAS CONDUCTED, AND A FISHING HOOK AND LINE WAS FOUND LODGED IN THE SEAL'S INTESTINES.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	2	24	HARASSMENT	SAN LUIS OBISPO	CA	NSI	UNDERWEIGHT ANIMAL WITH FRESHLY ABSENT UMBILICUS HANDLED BY PUBLIC. TREATED AT REHAB FACILITY AND RELEASED.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	2	25	HARASSMENT	SAN DIEGO	CA	NSI	NEONATE WITH ATTACHED UMBILICUS WAS REMOVED FROM BEACH BY PUBLIC. ANIMAL WAS LETHARGIC WITH LABORED BREATHING. TREATED AT REHAB FACILITY AND RELEASED.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	2	28	HARASSMENT	MARIN	CA	NSI	MILDLY UNDERWEIGHT NEONATE REMOVED FROM BEACH BY PUBLIC. DIED IN REHAB.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	CALIFORNIA	2016	2	29	HARASSMENT	MARIN	CA	NSI	HARASSED - NETTED OUT OF WATER BY PUBLIC, MODERATELY UNDERWEIGHT, VOCAL, FULL LANUGO COAT, 3-4 CM UMBILICUS DRY AT TIP PRESENT. TREATED AT REHAB FACILITY AND RELEASED.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	3	1	HARASSMENT	MARIN	CA	NSI	REMOVED FROM WILD BY KAYAKER AND BROUGHT TO CAMPGROUND, FULL LANUGO COAT, FRESH PINK UMBILICUS PRESENT, EMACIATED. TREATED AT REHAB FACILITY AND RELEASED.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	3	2	HARASSMENT	MARIN	CA	NSI	REMOVED FROM WILD BY PUBLIC. MODERATELY UNDERWEIGHT, FULL LANUGO COAT WITH 3 CM DRIED UMBILICUS PRESENT. TREATED AT REHAB FACILITY AND RELEASED.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	3	15	HARASSMENT	SAN LUIS OBISPO	CA	NSI	HARASSED - ON TARP BEING PULLED AWAY FROM THE WATER BY MEMBER OF THE PUBLIC, FULL LANUGO COAT, EMACIATED. TREATED AT REHAB AND RELEASED.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	3	16	HARASSMENT	MARIN	CA	NSI	HARASSED - PUBLIC PULLED OUT OF WATER, MODERATELY UNDERWEIGHT, FULL LANUGO COAT, 3 CM LONG UMBILICUS DRY AT TIP PRESENT. TREATED AT REHAB FACILITY AND RELEASED.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	3	20	HARASSMENT	HUMBOLDT	CA	NSI	BEING FED BY MEMBERS OF THE PUBLIC. FOUND ON A PICNIC TABLE. DIED IN REHAB.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2016	3	25	SHOOTING		OR	DEAD	A HARBOR SEAL WAS FOUND IN A STATE OF MODERATE DECOMPOSITION AND A NECROPSY WAS CONDUCTED. PELLET HOLES THROUGHOUT THE SKULL AND BODY AS WELL AS BLOODY FLUID IN THE THORACIC CAVITY INDICATED THE ANIMAL HAD BEEN SHOT.	DEAD	NA	1.00	N	Y
HARBOR SEAL	HOOD CANAL	2016	4	4	MARINE DEBRIS		WA	DEAD	A HARBOR SEAL WAS FOUND ENTANGLED IN BUOY LINES THAT SUPPORTED CAGES CONTAINING MUSSELS BEING GROWN TO MONITOR FOR ENVIRONMENTAL CONTAMINATION DURING A REMEDIATION PROJECT.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	4	12	HARASSMENT	MARIN	CA	NSI	REMOVED FROM WILD BY PUBLIC, EMACIATED, UMBILICUS FRESHLY ABSENT. TREATED AT REHAB FACILITY AND RELEASED.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	4	26	DOG ATTACK	HUMBOLDT	CA	SI	UNDERWEIGHT ANIMAL WITH DOG BITES. DIED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y

## Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	OREGON - WASHINGTON COAST	2016	4	26	SHOOTING		WA	DEAD	A HARBOR SEAL WAS FOUND IN A STATE OF ADVANCED DECOMPOSITION AND A NECROPSY WAS CONDUCTED. PELLET SIZED PENETRATING WOUNDS IN THE HEAD AND BODY, WITH ASSOCIATED HEMORRHAGING INDICATED THE ANIMAL HAD BEEN SHOT.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2016	5	11	HARASSMENT	MARIN	CA	NSI	MODERATELY UNDERWEIGHT, UMBILICUS ABSENT SITE CLOSED AND HEALED, HARASSED - PUBLIC TRYING TO DRAG TO WATER, SMALL TAR PATCHES ON MULTIPLE PARTS OF BODY.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2016	5	21	HARASSMENT	GRAYS HARBOR	WA	SI	AN EMACIATED HARBOR SEAL PUP WAS REMOVED FROM A BEACH, BROUGHT TO A CONDO, AND FED MILK BY A MEMBER OF THE PUBLIC. IT ASPIRATED MILK INTO ITS AIRWAY, AND LATER DIED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2016	5	26	HARASSMENT		OR	SI	A HARBOR SEAL WAS REPORTEDLY PICKED UP BY A MEMBER OF THE PUBLIC, MOVED FROM ITS ORIGINAL LOCATION, AND LATER RETURNED TO ITS ORIGINAL LOCATION. IT WAS LATER FOUND DEAD.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2016	6	10	SHOOTING		OR	DEAD	A HARBOR SEAL WAS FOUND IN A STATE OF ADVANCED DECOMPOSITION AND A NECROPSY WAS CONDUCTED. THERE WERE BULLET ENTRANCE AND EXIT WOUNDS IN THE SKULL, AND HEMORRHAGE THROUGHOUT THE BODY INDICATED THE ANIMAL HAD BEEN SHOT.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2016	6	16	SHOOTING		OR	DEAD	A HARBOR SEAL WAS FOUND IN A STATE OF MODERATE DECOMPOSITION AND A NECROPSY WAS CONDUCTED. A HOLE IN THE HEAD WITH ASSOCIATED HEMORRHAGE INDICATED THE ANIMAL HAD BEEN SHOT. OTHERWISE THE ANIMAL WAS IN EXCELLENT BODY CONDITION.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	6	23	HARASSMENT		WA	NSI	A HARBOR SEAL PUP THAT HAULED OUT IN A DOG PARK WAS OBSERVED BEING HELD BY MEMBERS OF THE PUBLIC. OVER REPEATED OBSERVATIONS THE SEAL PUP DID NOT MOVE LOCATION AND THE MOTHER WAS NOT ATTENDENT, SO THE PUP WAS TRANSPORTED TO A REHABILITATION CENTER AND LATER RELEASED.	NSI	P14	0.00	N	N
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	7	3	HARASSMENT	PIERCE	WA	NSI	A HARBOR SEAL PUP BOARDED A SAILBOAT, BUT WAS UNABLE TO EXIT AFTER CLIMBING ABOARD. WDFW RESPONDED AND REMOVED THE SEAL. THE SEAL WAS REPORTED TO APPEAR HEALTHY.	NSI	P9	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	8	1	HARASSMENT		WA	NSI	A LIVE HARBOR SEAL PUP HAD REPORTEDLY BEEN OBSERVED BEING HIT BY PEOPLE. THE SEAL WAS DEAD WHEN THE STRANDING RESPONDER ARRIVED. A NECROPSY WAS CONDUCTED, AND THE SEAL HAD A BROKEN JAW.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	8	2	HARASSMENT	KITSAP	WA	NSI	A HARBOR SEAL PUP WAS SEEN FOR DAYS HAULED OUT ON A HIGH-USE CITY DOCK. THE MOTHER WAS NOT IN ATTENDANCE, WHICH MAY HAVE BEEN DUE TO THE HIGH PUBLIC USE OF THE AREA. THE PUP WAS CAPTURED AND SENT TO A REHABILITATION CENTER WHERE IT LATER DIED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2016	8	10	HOOK AND LINE FISHERY		OR	DEAD	A HARBOR SEAL WAS FOUND IN A STATE OF MODERATE DECOMPOSITION AND A NECROPSY WAS CONDUCTED. A FISH HOOK AND LINE WAS FOUND IN THE INTESTINES AND THERE WAS A SUBSTANTIAL AMOUNT OF BLOODY FLUID IN THE THORACIC AND ABDOMINAL CAVITIES.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	8	11	GILLNET FISHERY	KITSAP	WA	DEAD	A FRESH DEAD HARBOR SEAL WAS FOUND FLOATING IN AN AREA ACTIVELY BEING FISHED WITH GILLNETS. THE SEAL HAD NET-LIKE LINEAR IMPRESSIONS ON ITS EYES, CHEST, SHOULDERS, AND PELVIS.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	8	15	GILLNET FISHERY	KITSAP	WA	DEAD	A HARBOR SEAL WAS FOUND FLOATING IN A STATE OF MODERATE DECOMPOSITION AND A NECROPSY WAS CONDUCTED. THE CARCASS DISPLAYED CIRCULINEAR HEMORRHAGING AROUND THE LOWER JAW, HEAD, NECK, AND PELVIS. THERE WAS GILLNET FISHING OCCURING IN THE AREA.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	8	15	GILLNET FISHERY	KITSAP	WA	DEAD	A HARBOR SEAL WAS FOUND FLOATING IN A STATE OF MODERATE DECOMPOSITION AND A NECROPSY WAS CONDUCTED. THERE WAS CIRCULINEAR HEMORRHAGING AROUND THE LOWER JAW AND BASE OF THE NECK.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	8	15	GILLNET FISHERY	KITSAP	WA	DEAD	A HARBOR SEAL WAS FOUND FLOATING FRESHLY DEAD. A NECROPSY WAS CONDUCTED. THERE WAS HEMORRHAGE AROUND THE HEAD, NECK, AND MID-BELLY.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	NORTHERN OREGON - WASHINGTON COAST	2016	8	24	UNIDENTIFIED FISHERY INTERACTION		WA	DEAD	A HARBOR SEAL WAS FOUND IN A STATE OF MODERATE DECOMPOSITION AND A NECROPSY WAS CONDUCTED. THERE WAS LINEAR HEMORRHAGE JUST BEHIND THE JAW EXTENDING VENTRALLY, HEMORRHAGE IN THE NECK AND BODY, RIB MARKS ON THE LUNG, AND THE SEAL WAS IN EXCELLENT BODY CONDITION.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	8	25	GILLNET FISHERY		WA	DEAD	A HARBOR SEAL WAS FOUND FLOATING FRESHLY DEAD. A NECROPSY WAS CONDUCTED. THE EXAMINER NOTED LINEAR LINES/IMPRESSIONS ACROSS THE EYE. THE HEAD WAS ALSO BLOODY AND SWOLLEN, AND THE SKULL WAS LIKELY FRACTURED. IT APPEARED THE SEAL HAD BECOME ENTANGLED AND WAS THEN BLUDGEONED. GILLNET FISHING WAS OCCURRING NEARBY.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2016	8	26	SHOOTING	MARIN	CA	SI	FOUND ALIVE IN SURF WITH BLEEDING FROM THE HEAD. APPROACHABLE, GOOD BODY CONDITION. RADIOLOGY AT TMMC FOUND A CRANIAL FRACTURE WITH A BULLET AND FRAGMENT SCATTER IN THE SOFT TISSUES OF THE LEFT SIDE OF THE HEAD. EUTHANIZED IN REHAB.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	8	27	GILLNET FISHERY		WA	DEAD	A HARBOR SEAL WAS FOUND FLOATING FRESHLY DEAD. A NECROPSY WAS CONDUCTED. THE EXAMINER NOTED LINEAR LINES/IMPRESSIONS ACROSS THE EYE. THE HEAD WAS ALSO BLOODY AND SWOLLEN, AND THE SKULL WAS LIKELY FRACTURED. IT APPEARED THE SEAL HAD BECOME ENTANGLED AND WAS THEN BLUDGEONED. GILLNET FISHING WAS OCCURRING NEARBY.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	8	31	VESSEL STRIKE	SAN JUAN	WA	DEAD	A FRESHLY DEAD HARBOR SEAL WAS FOUND STRANDED WITH TWO PARALLEL SLICES ON ITS DORSAL SIDE THAT APPEARED TO BE A PROPELLER INJURY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	9	2	GILLNET FISHERY		WA	DEAD	A HARBOR SEAL WAS FOUND FLOATING DEAD IN A STATE OF MODERATE DECOMPOSITION. A NECROPSY WAS CONDUCTED. IN ADDITION TO LINEAR IMPRESSIONS, THE SEAL HAD THREE DEEP LINEAR CUTS ON THE HEAD AND SHOULDER.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2016	9	11	SHOOTING	DEL NORTE	CA	DEAD	CARCASS NECROPSIED. APPARENT GUN SHOT WOUND TO THE HEAD, BULLET NOT FOUND.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	9	22	HOOK AND LINE FISHERY		WA	NSI	A HARBOR SEAL PUP WITH A 4 OZ FISHING LURE HOOKED TO ITS HIND FLIPPER WAS CAPTURED, THE HOOK WAS REMOVED, AND THE ANIMAL WAS RELEASED.	NSI	P5C	0.00	N	N
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2016	9	25	GILLNET FISHERY		WA	DEAD	A HARBOR SEAL WAS FOUND DEAD, FLOATING IN A HARBOR. THE SEAL HAD NET IMPRESSIONS / INDICATIONS ON ITS BODY AND GILLNET FISHING WAS OCCURRING IN THE AREA.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	SOUTHERN PUGET SOUND	2016	9	29	GILLNET FISHERY		WA	DEAD	A HARBOR SEAL PUP WAS FOUND DEAD IN A STATE OF MODERATE DECOMPOSITION. THE PUP APPEARED AS IF IT HAD BEEN WRAPPED/ENTANGLED IN ROPE OR NET, AND THERE WAS SUBSTANTIAL HEMORRHAGE AROUND THE CHEST, LEADING EDGE OF FORE FLIPPERS, AND NOSE. THE ANIMAL ALSO HAD A PUNCTURED LEFT EYE. THERE WAS SALMON GILLNET FISHING OCCURING IN THE AREA.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2016	10	14	SHOOTING	HUMBOLDT	CA	DEAD	CARCASS FOUND AT THE BASE OF INDIAN BEACH TRAIL STAIRS APPROXIMATELY 100 YARDS SOUTH. HOOK WAS EMBEDDED ON THE RIGHT SIDE OF THE ANIMALS NECK AND LINE WAS WRAPPED IN KELP MASS NEARBY. APPARENT GUN SHOT WOUND TO THE HEAD. PENETRATING WOUND WITH CLEAN MARGINS ON FRESH CARCASS WITH MINIMAL TO NO SCAVENGING PRESENT.	DEAD	NA	1.00	N	Y
HARBOR SEAL	HOOD CANAL	2016	10	18	UNIDENTIFIED FISHERY INTERACTION		WA	DEAD	A HARBOR SEAL PUP WAS FOUND STRANDED WITH ALL TISSUE REMOVED FROM ITS SHOULDERS TO ITS EYES, AND WHAT APPEARED TO BE A PENETRATING GAFF WOUND ON ITS HEAD.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2017	2	10	VESSEL STRIKE	MONTEREY	CA	DEAD	THREE LACERATIONS THAT RUN DIAGONALLY ACROSS THE BACK OF THE ANIMAL, EQUIDISTANT (22-24CM) FROM EACH OTHER. THE ANTERIOR AND POSTERIOR PROPELLER STRIKES BROKE THROUGH THE SKIN AND PROBABLY THE BLUBBER. THE MIDDLE PROPELLER STRIKE DID NOT BREAK SKIN BUT IS EVIDENT AS A SCAR WITH REMOVED FUR. BEYOND THIS APPARENT SCAVENGING HAS OBSCURED OBSERVATION OF HUMAN INTERACTION. BONES AT LEFT SIDE OF BACK OF SKULL ARE BROKEN. SLIGHTLY BLOATED AND EYES SCAVENGED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2017	3	2	SHOOTING	LINCOLN	CA	DEAD	DORSAL ENTRY WOUND APPROXIMATELY 1/2 INCH IN DIAMETER. EXIT WOUND ON VENTRUM.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2017	4	9	HARASSMENT	SANTA BARBARA	CA	NSI	PUP (UMBILICUS FRESHLY ABSENT) ILLEGALLY PICKED UP BY MEMBER OF THE PUBLIC AND BROUGHT HOME OVERNIGHT WHERE IT WAS FED MILK AND FISH OIL. PERSON TRIED TO RELEASE THE ANIMAL THE NEXT DAY, BUT IT WOULD NOT LEAVE BEACH. TAKEN INTO REHAB FACILITY, TREATED AND RELEASED.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2017	4	10	HARASSMENT	SONOMA	CA	NSI	MALNOURISHED PUP WRAPPED IN A TOWEL BY MEMBERS OF THE PUBLIC AND MOVED AWAY FROM COLONY.	SI	P14	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	CALIFORNIA	2017	4	17	DOG ATTACK	DEL NORTE	CA	SI	DOG ATTACKED ANIMAL. EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2017	4	21	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2017	4	22	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2017	4	29	HARASSMENT	MARIN	CA	SI	PEOPLE TOUCHING AN EMACIATED SEAL PUP ON THE BEACH.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2017	5	19	VEHICLE COLLISION	CLATSOP	OR	DEAD	PUP WITH UMBILICUS PRESENT, TRAUMA AND HEMORRHAGING DETERMINED TO BE RELATED TO BEING STRUCK BY VEHICLE.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	5	26	HARASSMENT	SKAGIT	WA	NSI	PUP BEING PET BY PEOPLE ON BEACH. REMOVED FROM BEACH AND EUTHANIZED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	NORTHERN OREGON - WASHINGTON COAST	2017	5	27	HARASSMENT	LINCOLN	OR	NSI	NEWBORN PUP WAS IN A HEAVILY USED SURFING AREA, WAS CONSTANTLY APPROACHED BY PEOPLE ON BEACH AND IN WATER DESPITE POSTED SIGNS; 5/28 WAS RELOCATED TO HAUL OUT AREA COVE NORTH OF INN AT OTTER CREST; GREEN PAINT APPLIED TO TOP OF HEAD.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2017	5	31	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2017	6	7	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2017	6	9	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	VENTURA	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	HOOD CANAL	2017	6	17	HARASSMENT	MASON	WA	NSI	NEWBORN PUP WAS BEING PET BY MEMBERS OF THE PUBLIC. MOTHER DID NOT RETURN TO PUP AFTER A FEW DAYS AND PUP WAS REMOVED AND EUTHANIZED IN REHAB FACILITY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	6	19	HARASSMENT	WHATCOM	WA	DEAD	NEWBORN PUP DUMPED IN SOMEONE'S YARD.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	6	25	HARASSMENT	ISLAND	WA	NSI	NEWBORN PUP THAT HAD BEEN IN GOOD CONDITION WAS BEING CONTINUALLY HARASSED ON A BUSY BEACH. ITS CONDITION DETERIORATED AND IT WAS EUTHANIZED AT A REHAB FACILITY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	6	27	HARASSMENT	WHATCOM	WA	NSI	CHILDREN WERE PUTTING A NEWBORN SEAL INTO THE WATER AND SWIMMING WITH IT AT A BUSY BEACH. ANIMAL EVENTUALLY WAS RELOCATED TO A NEW BEACH. DESIGNATED SERIOUS INJURY DUE TO MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	6	28	HARASSMENT	WHATCOM	WA	NSI	CHILDREN WERE PUTTING A NEWBORN SEAL INTO THE WATER AND SWIMMING WITH IT AT A BUSY BEACH. SOME WERE THROWING ROCKS AT ANIMAL. ANIMAL CONDITION DETERIORATED. DESIGNATED SERIOUS INJURY DUE TO MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	HOOD CANAL	2017	6	30	HARASSMENT	MASON	WA	NSI	PUP ILLEGALLY REMOVED FROM BEACH.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	7	1	HARASSMENT	SAN JUAN	WA	NSI	NEWBORN PUP BEING HARASSED BY PEOPLE. SERIOUS INJURY DUE TO MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	7	1	HARASSMENT	KITSAP	WA	NSI	NEWBORN PUP ILLEGALLY REMOVED FROM BEACH, BROUGHT TO PRIVATE RESIDENCE. PUP RETURNED TO BEACH AFTER REPORTING PARTY WAS TOLD OF ILLEGALITY OF REMOVING ANIMAL FROM BEACH. CONSIDERED SERIOUS INJURY BECAUSE OF MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	N OREGON - WASHINGTON COAST	2017	7	3	HARASSMENT	LANE	OR	NSI	WITNESS SAID BOYS WERE HITTING A SEAL WITH STICKS, DRAWING BLOOD.	SI	P9	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2017	7	8	SHOOTING	SONOMA	CA	DEAD	SHOTGUN PELLETS IN CRANIUM.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	7	16	HARASSMENT	WHATCOM	WA	NSI	PUP BEING SURROUNDED AND INTERACTED WITH PEOPLE ON A REGULAR BASIS. PUP UNDERWEIGHT AND DEHYDRATED. ASSIGNED AS A SERIOUS INJURY DUE TO LIKELY PUP / MOTHER SEPARATION BECAUSE OF PRESENCE OF PEOPLE.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	7	17	HARASSMENT	ISLAND	WA	NSI	PUP BEING FED, MOVED INTO WATER, AND TOUCHED BY PEOPLE ON THE BEACH. SERIOUS INJURY DUE TO PUP / MOTHER SEPARATION AGGRAVATED BY HUMAN ACTIVITY.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	7	20	HARASSMENT	WHATCOM	WA	NSI	PUP BEING APPROACHED BY PEOPLE ON BEACH. SERIOUS INJURY DUE TO LIKELIHOOD OF AGGRAVATED MATERNAL / PUP SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	7	22	HARASSMENT	WHATCOM	WA	NSI	PUP ON BEACH BEING MOVED INTO WATER BY PEOPLE.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	7	29	HARASSMENT	SKAGIT	WA	NSI	PUP REMOVED FROM BEACH AND FED AT PRIVATE RESIDENCE WHERE IT DIED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	7	30	HARASSMENT	PIERCE	WA	NSI	PUP BEING HARASSED BY DOGS AND PEOPLE ON THE BEACH. SERIOUS INJURY DUE TO MATERNAL / PUP SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	7	30	HARASSMENT	WHATCOM	WA	NSI	PUP REMOVED FROM BEACH BY BOATERS. SERIOUS INJURY DUE TO MATERNAL / PUP SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	7	31	HARASSMENT	ISLAND	WA	NSI	HEALTHY PUP WAS HARASSED ON BEACH OVER A PERIOD OF DAYS AND EVENTUALLY DIED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	8	5	HOOK AND LINE FISHERY	SAN JUAN	WA	SI	STRANDING RESPONSE TO A CALL OF A PUP WITH A FISH HOOK IN THE ROSTRUM. RESPONDERS ARRIVED AND CONFIRMED THAT PUP NO LONGER HAD HOOK ATTACHED.	NSI	P5C	0.00	N	N
HARBOR SEAL	CALIFORNIA	2017	8	6	HARASSMENT	SAN MATEO	CA	SI	UNDERWEIGHT ANIMAL BEING TOUCHED BY MEMBERS OF THE PUBLIC. DIED AT REHAB FACILITY.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	8	10	VESSEL STRIKE	SAN JUAN	WA	DEAD	FRESHLY-WEANED PUP CARCASS WITH THREE PROPELLER LACERATIONS.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	8	12	VESSEL STRIKE	PIERCE	WA	DEAD	CARCASS WITH THREE PROPELLER LACERATIONS BEING FED ON BY EAGLES.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	8	15	VESSEL STRIKE	PIERCE	WA	DEAD	PUP CARCASS FOUND WITH MULTIPLE LACERATIONS CONSISTENT WITH VESSEL STRIKE.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2017	8	20	VESSEL STRIKE	MARIN	CA	DEAD	ANIMAL HAD A LARGE LACERATION IN ITS RIGHT SHOULDER AND A LARGE HEMATOMA IN THE RIGHT SIDE OF THE NECK AND HEAD CONSISTENT WITH VESSEL STRIKE INJURIES.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	8	23	MARINE DEBRIS	KITSAP	WA	DEAD	ONE OF SEVEN ANIMALS ENTANGLED IN A NET BUOY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	8	23	MARINE DEBRIS	KITSAP	WA	DEAD	ONE OF SEVEN ANIMALS ENTANGLED IN A NET BUOY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	8	23	MARINE DEBRIS	KITSAP	WA	DEAD	ONE OF SEVEN ANIMALS ENTANGLED IN A NET BUOY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	8	23	MARINE DEBRIS	KITSAP	WA	DEAD	ONE OF SEVEN ANIMALS ENTANGLED IN A NET BUOY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	8	23	MARINE DEBRIS	KITSAP	WA	DEAD	ONE OF SEVEN ANIMALS ENTANGLED IN A NET BUOY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	8	23	MARINE DEBRIS	KITSAP	WA	DEAD	ONE OF SEVEN ANIMALS ENTANGLED IN A NET BUOY.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	8	23	MARINE DEBRIS	KITSAP	WA	DEAD	ONE OF SEVEN ANIMALS ENTANGLED IN A NET BUOY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	8	24	GILLNET FISHERY	KITSAP	WA	DEAD	CARCASS FOUND WITH REMNANTS OF GILLNET AROUND NECK.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	9	15	HOOK AND LINE FISHERY	KING	WA	SI	FISHING LINE PROTRUDING FROM MOUTH WITH BLOOD AROUND MOUTH. LIKELY INGESTED HOOK.	SI	P2	1.00	N	Y
HARBOR SEAL	NORTHERN OREGON - WASHINGTON COAST	2017	10	5	SHOOTING	CLATSOP	OR	DEAD	ANIMAL WITH VERY GOOD BODY CONDITION WITH TREMENDOUS HEMORRHAGING AND HOLES ALL OVER BODY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	NORTHERN OREGON - WASHINGTON COAST	2017	10	11	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	OR	DEAD	ONE OF TWO CARCASSES FOUND ON THE BEACH WITH PENETRATING WOUNDS CONSISTENT WITH THE USE OF A FISHING GAFF.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	NORTHERN OREGON - WASHINGTON COAST	2017	10	11	UNIDENTIFIED FISHERY INTERACTION	GRAYS HARBOR	OR	DEAD	ONE OF TWO CARCASSES FOUND ON THE BEACH WITH PENETRATING WOUNDS CONSISTENT WITH THE USE OF A FISHING GAFF.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2017	10	13	DOG ATTACK	WHATCOM	WA	SI	ANIMAL DESCRIBED AS BEING ATTACKED BY DOG, POSSIBLY RESULTING IN A BROKEN TOE ON SEAL. TREATED AT REHAB FACILITY AND RELEASED.	NSI	P9	0.00	N	N
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	10	30	GILLNET FISHERY	THURSTON	WA	DEAD	ONE OF TEN HARBOR SEALS FOUND DEAD IN A GILLNET.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	10	30	GILLNET FISHERY	THURSTON	WA	DEAD	ONE OF TEN HARBOR SEALS FOUND DEAD IN A GILLNET.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	10	30	GILLNET FISHERY	THURSTON	WA	DEAD	ONE OF TEN HARBOR SEALS FOUND DEAD IN A GILLNET.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	10	30	GILLNET FISHERY	THURSTON	WA	DEAD	ONE OF TEN HARBOR SEALS FOUND DEAD IN A GILLNET.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	10	30	GILLNET FISHERY	THURSTON	WA	DEAD	ONE OF TEN HARBOR SEALS FOUND DEAD IN A GILLNET.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	10	30	GILLNET FISHERY	THURSTON	WA	DEAD	ONE OF TEN HARBOR SEALS FOUND DEAD IN A GILLNET.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	10	30	GILLNET FISHERY	THURSTON	WA	DEAD	ONE OF TEN HARBOR SEALS FOUND DEAD IN A GILLNET.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	10	30	GILLNET FISHERY	THURSTON	WA	DEAD	ONE OF TEN HARBOR SEALS FOUND DEAD IN A GILLNET.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	10	30	GILLNET FISHERY	THURSTON	WA	DEAD	ONE OF TEN HARBOR SEALS FOUND DEAD IN A GILLNET.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	10	30	GILLNET FISHERY	THURSTON	WA	DEAD	ONE OF TEN HARBOR SEALS FOUND DEAD IN A GILLNET.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	NORTHERN OREGON - WASHINGTON COAST	2017	11	1	GILLNET FISHERY	JEFFERSON	WA	DEAD	CARCASS FOUND WITH CIRCULAR DEEP IMPRESSION AROUND SNOUT AND POSSIBLE GAFF MARKS.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2017	12	1	GILLNET FISHERY	PIERCE	WA	SI	RESEARCHERS ENCOUNTERED A HARBOR SEAL IN A GILLNET AND BROUGHT IT ABOARD A VESSEL WHERE THEY DISENTANGLED IT. THE ANIMAL WAS ABLE TO EXIT THE BOAT AND SWIM AWAY UNDER ITS OWN POWER.	NSI	P7B	0.00	Y	N
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	2	5	SHOOTING	PIERCE	WA	DEAD	REPORTED DEAD FLOATING. IN A BAY THAT HAS A HATCHERY UP CREEK FROM WHERE RECOVERED. NO ACTIVE COMMERCIAL FISHING IN AREA. PENETRATING WOUND BEHIND RIGHT ORBITAL, FRACTURING FROM RIGHT ORBITAL TO EAR. FOUND BULLET FRAGMENTS AMONG BONE FRAGMENTS IN MUSCLE AT NECK. SEAL WAS PREGNANT WITH 2ND TRIMESTER FETUS. TRACKING INJURY THOUGH LEFT SIDE OF SKULL. ENTRANCE INTO EYE AND THEN TRACKED BACK L SIDE SKULL FRACTURING SKULL ALL THE WAY BACK AND BULLET RECOVERED IN NECK MUSCLE WITH ASSOCIATED HEMORRHAGE. HEMORRHAGE INTO BRAIN AND SKULL CAVITY.FOUND BULLET FRAGMENTS AMONG BONE FRAGMENTS.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	2	7	SHOOTING	PACIFIC	WA	SI	PENETRATING PUNCTURE ON R SIDE OF BEHIND SKULL TRACKS ALL THE WAY TO EAR WHERE TISSUE IS SWOLLEN. CAN FEEL IT HIT BONE AND ACTUALLY PENETRATES IN SKULL. LARGE 10X6X3 CM WOUND LACERATION ON SIDE FACE RIGHT AT LOWER JAW, DEEP. MUSCLE JUST BELOW JAW CUT. ABLE TO FEEL CREPITUS UPON PALPATION OF THE SKULL AREA AT TOP OF HEAD ALONG SIDE, POSSIBLY FRACTURED. PUNCTURES TO R PELVIS AREA. NECK AND HEAD SWOLLEN. ANIMAL EUTHANIZED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2018	2	18	HARASSMENT	SANTA BARBARA	CA	SI	HUMAN-INDUCED ABANDONMENT. NEONATE (POSSIBLY ABANDONED) WITH PLACENTA AND UMBILICUS ATTACHED. ANIMAL WAS REMOVED FROM BEACH BY PUBLIC AND LATER EUTHANIZED AT FACILITY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	2	20	SHOOTING	GRAYS HARBOR	WA	DEAD	PENETRATING WOUND WITH ASSOCIATED TRACKING HEMORRHAGE FROM BACK OF SKULL INTO SKULL WITH BONE FRACTURES OUT NEAR EYE AND THRU TO NASAL CAVITY WHERE THE BULLET WAS RECOVERED. OBVIOUSLY SIGNIFICANT ENOUGH TO CAUSE THE DEATH OF THE SEAL.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2018	2	25	HARASSMENT	SAN DIEGO	CA	SI	HUMAN-INDUCED ABANDONMENT. LIFEGUARD PICKED NEONATE OFF OF SOUTH CASA BEACH AND BROUGHT IT TO THE LIFEGUARD TOWER. POSSIBLE ABANDONMENT PRIOR TO RESCUE. SLIGHTLY THIN, BUT BRIGHT, ALERT, AND RESPONSIVE. NO DETAILS ON OUTCOME.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2018	3	20	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2018	4	4	HARASSMENT	SANTA BARBARA	CA	SI	ILLEGALLY REMOVED A PUP FROM BEACH AND BROUGHT TO A REHAB FACILITY. PUP VERY THIN, NO UMBILICAL CORD. OUTCOME UNKNOWN.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2018	4	12	HARASSMENT	SANTA CRUZ	CA	SI	MALNOURISHED ANIMAL DRAGGED OUT OF SURFLINE BY PEOPLE. NO FURTHER DETAILS.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	4	14	HARASSMENT	CLATSOP	OR	SI	CITIZEN PICKED UP LANUGO PUP FROM BEACH AND RETURNED IT. PUP WAS VERY ACTIVE FOR 2-3 DAYS, THEN LOST ACTIVITY/WEIGHT. PUP SUBSEQUENTLY DIED.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	4	14	HARASSMENT	GRAYS HARBOR	WA	SI	MULTIPLE PEOPLE REPORTED PETTING AND HARASSING A 100% LANUGO PUP WITH A FRESH UMBILICUS. SEAL REPORTED TO HAVE GONE BACK IN THE WATER WITH MOTHER DURING THE NIGHT BUT REPORTED BACK ON THE BEACH NEXT DAY. SEAL WAS MARKED WITH GREEN PAINT. SEAL WAS REPORTED GONE THE FOLLOWING DAY NOT SEEN AGAIN.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	4	16	SHOOTING	TILLAMOOK	OR	DEAD	ANIMAL WITH EXCELLENT BODY CONDITION AND SHATTERED SKULL WAS CLEARLY SHOT IN THE HEAD.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	4	21	HARASSMENT	LINCOLN	OR	SI	HARASSMENT. LANUGO COVERING MUCH OF POST-CRANIAL BODY.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	4	21	SHOOTING	PACIFIC	WA	DEAD	ANIMAL WAS SHOT IN THE HEAD; THE SEAL HAD EXCELLENT BODY CONDITION.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2018	4	22	HARASSMENT	MARIN	CA	NSI	MALNOURISHED PUP BEING HARASSSED BY PEOPLE AND DOGS.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	4	22	SHOOTING	CLATSOP	OR	SI	THE SEAL WAS REPORTED ALIVE ON HIGHWAY 202, THEN DEAD SHORTLY THEREAFTER FROM BEING SHOT IN THE HEAD. FULL-TERM FETUS PRESENT WITH HEAD WELL DOWN INTO BIRTH CANAL. FETUS SHOWED SIGNS OF SIGNIFICANT TRAUMA AND HEMORRHAGE - CAUSE IS UNKNOWN. IT IS UNCLEAR WHETHER THE SEAL WAS RUN OVER, AS THERE WERE NO OBVIOUS SIGNS OUTSIDE OF CONDITION OF FETUS. THE SEAL HAD EXCELLENT BODY CONDITION. HISTOPATHOLOGY INDICATED MILD MULTIFOCAL ENCEPHALITIS, BUT INDICATED THAT IT WAS NOT THE PROXIMATE CAUSE OF DEATH.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2018	4	24	HARASSMENT	SAN MATEO	CA	SI	CITIZEN PICKED UP EMACIATED PUP AWAY FROM THE WATER UP THE BEACH.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2018	5	1	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
HARBOR SEAL	CALIFORNIA	2018	5	2	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	CALIFORNIA	2018	5	3	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	5	15	HARASSMENT	GRAYS HARBOR	WA	SI	NEWBORN PUP WITH FRESH UMBILICUS REMOVED FROM THE WATER BY PUBLIC BECAUSE THEY THOUGHT ANIMAL WAS DROWNING. MATERNAL SEPARATION. SERIOUS INJURY UNDER CRITERIA P14.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	5	18	HARASSMENT	GRAYS HARBOR	WA	SI	PUBLIC PICKING UP NEWBORN PUP FROM BEACH AND ATTEMPTING TO RETURN IT TO THE WATER. MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	5	23	HARASSMENT	LINCOLN	OR	SI	PUP ILLEGALLY REMOVED FROM BEACH BY CONCERNED CITIZENS. MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	6	11	SHOOTING	PACIFIC	WA	DEAD	SEAL WITH EXCELLENT BODY CONDITION THAT WAS OBVIOUSLY SHOT, AS THE SKULL WAS BLOWN OUT. ASSOCIATED HEMORRHAGING.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	6	11	SHOOTING	COOS	OR	DEAD	MAJOR TRAUMA TO HEAD, THREE LARGE PENETRATING WOUNDS WITH LEFT EYE BLOWN OUT. THESE APPEAR TO BE GUNSHOT WOUNDS. LACERATION AT BASE OF LEFT HIND FLIPPER.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	6	13	VESSEL STRIKE	SAN JUAN	WA	DEAD	FRESHLY DEAD ADULT SEAL FOUND FLOATING. COLLECTED FOR FULL NECROPSY. BUCKSHOT EMBEDDED BEHIND AUDITORY CANAL. LEFT EYE PHITIC, FIBROUS, AND SHRUNKEN. FOUR PARALLEL LACERATIONS RUNNING ROUGHLY FROM LEFT TO RIGHT ON THE LEFT LATERAL SURFACE STARTING AT THE PELVIS AND CONTINUING TOWARDS THE LEFT HIND FLIPPERS WITH APPROXIMATELY 4.5 CM BETWEEN EACH LACERATION; CLEAN EDGES; INDICATIVE propeller STRIKE INJURIES. LACERATIONS EXTENDED THROUGH SEVERAL BONES IN LEFT HIND FLIPPER AND THERE WAS HEMORRAGING NEAR THE INJURIES AS WELL AS IN THE ABDOMINAL CAVITY. HISTORY OF GUNSHOT - SMALL BUCKSHOT FOUND AND RECOVERED FROM SKULL.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	6	15	HARASSMENT	GRAYS HARBOR	WA	SI	PUP WITH UMBILICUS MOVING UP AND DOWN THE BEACH, INTO AND OUT OF WATER. ILLEGALLY PICKED UP BY CITIZEN WHO BROUGHT ANIMAL TO HOTEL. MATERNAL SEPARATION.	SI	P14	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	6	15	HARASSMENT	GRAYS HARBOR	WA	SI	EMACIATED ANIMAL BEING KICKED AND HIT WITH STICKS BY PUBLIC. ANIMAL DIED ENROUTE TO REHAB FACILITY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	6	20	HARASSMENT	PIERCE	WA	SI	PUBLIC HAD MOVED PUP WITH UMBILICUS OUT OF THE WAY OF BOAT LAUNCH AREA. ANIMAL DIED AFTER 2 WEEKS AT REHAB FACILITY. MATERNAL SEPARATION.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	6	21	HARASSMENT	WHATCOM	WA	SI	JACKET PLACED OVER LANUGO PUP ON BEACH. MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	6	26	VESSEL STRIKE	PACIFIC	WA	SI	A SERIES OF THREE PROPELLER CUTS ON RIGHT LATERAL SIDE OF BODY; THERE WERE ALSO CANINE PUNCTURE WOUNDS THAT APPEARED TO BE POST-MORTEM AND, THEREFORE, NOT THE CAUSE OF DEATH. THE LIVE PUP WAS PICKED UP BY A WDFW OFFICER AND THE SEAL DIED IN TRANSIT. THE ANIMAL HAD FAIR BODY CONDITION.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	6	26	VESSEL STRIKE	PIERCE	WA	SI	PUBLIC MOVING PUP ON THE BEACH. MATERNAL SEPARATION.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	6	28	HARASSMENT	SAN JUAN	WA	SI	NEWBORN PUP WITH FRESH UMBILICUS REMOVED FROM THE BEACH BY PUBLIC. TRANSFERRED TO REHAB FACILITY, OUTCOME UNKNOWN. MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2018	6	29	GILLNET FISHERY	SAN DIEGO	CA	SI	ANIMAL WITH GOOD BODY WEIGHT AND GILLNET CUTTING DEEP INTO NECK. RESCUE ATTEMPTS FAILED.	SI	P8A	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	6	30	HARASSMENT	PIERCE	WA	SI	PUP BEING HARASSED BY PEOPLE AND DOGS AT THE BEACH. ANIMAL DIED IN REHAB FACILITY. MATERNAL SEPARATION.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	6	30	HARASSMENT	KITSAP	WA	SI	THIN, BUT ALERT AND CALLING PUP BEING HARASSED BY PUBLIC AND DOGS. MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	7	3	HARASSMENT	WHATCOM	WA	SI	PUBLIC ATTEMPTING TO SWIM WITH PUP FOR TWO DAYS WHILE MOTHER WAS NOT DETECTED. MATERNAL SEPARATION.	SI	P14	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	CALIFORNIA	2018	7	6	HOOK AND LINE FISHERY	MONTEREY	CA	SI	HOOK AND LINE FISHERY AND HARASSMENT. LETHARGIC ANIMAL WITH SEPTICEMIA AND UNDESCRIBED HOOK AND LINE FISHERY ISSUES SURROUNDED BY MEMBERS OF THE PUBLIC ON BEACH. OUTCOME UNKNOWN.	SI	P1	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	7	6	SHOOTING	LINCOLN	OR	DEAD	ENTRY WOUND AND TRACT LEADING FROM LEFT SHOULDER TO RIGHT SIDE OF HEAD - TRACHEA SEVERED; RIGHT SIDE OF FACE AND LOWER JAW SEVERELY DAMAGED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	7	6	HARASSMENT	WHATCOM	WA	SI	PUP WAS FIRST OBSERVED ON JULY 4TH ON A HEAVILY POPULATED BEACH. PUP ENTERED THE WATER YET KEPT RETURNING TO THE SAME SPOT. PEOPLE WERE SURROUNDING IT AND IT HAD BEEN REPORTED THAT THEY HAD PUT IT IN THE WATER MORE THAN ONCE. MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	7	7	HARASSMENT	WHATCOM	WA	SI	ANIMAL ON BEACH BEING HARASSED BY DOGS. NO FURTHER DETAILS ON AGE OR CONDITION OF ANIMAL. ASSUMING THIS CASE INVOLVED A PUP AND MATERNAL SEPARATION, AS AN ADULT ANIMAL WOULD LIKELY FLEE INTO THE WATER.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2018	7	8	VESSEL STRIKE	SONOMA	CA	DEAD	OTOSTRONGYLIASIS, TRAUMA. SEAL WAS FOUND ON THE BEACH WITH LEFT EYE BLEEDING, DIED IN TRANSPORT TO FACILITY. 3 PARALLEL LACERATIONS ON RIGHT SIDE OF FACE (BOATSTRIKE).	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	7	17	HARASSMENT	WHATCOM	WA	SI	PUBLIC MOVING PUP FROM ROCKS TO WATER REPEATEDLY. MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	7	20	HARASSMENT	SAN JUAN	WA	SI	PUP WITH UMBILICUS HAULED OUT OR PLACED ON PADDLEBOARD. SENT TO REHAB FACILITY, OUTCOME UNKNOWN.	SI	P14	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	7	22	HARASSMENT	PIERCE	WA	SI	UMBILICUS WAS A DRIED NUB. ALERT, CALLING TRY TO SUCKLE. PEOPLE WERE REPORTED AS MOVING SEAL INTO WATER. HARASSMENT / MATERNAL SEPARATION.	SI	P14	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	7	27	VESSEL STRIKE	ISLAND	WA	DEAD	INVESTIGATORS FOUND SUB ADULT FEMALE WITH SEVERAL OPEN WOUNDS ON HER DORSAL AND LEFT SIDE. THE CURVED SHAPE OF THE WOUNDS INDICATED POSSIBLE COLLISION WITH BOAT PROPELLER. THE CARCASS HAD BEEN LYING ON ITS VENTRAL SIDE WHEN FIRST SEEN, INTERPRETED TO MEAN THAT THE DORSAL SURFACE, WHERE MOST OF THE WOUNDS WERE LOCATED MAY NOT HAVE BEEN AVAILABLE TO SCAVENGING AFTER BEACHING.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	7	28	HARASSMENT	PIERCE	WA	SI	HARASSMENT AND POSSIBLE DOG ATTACK AS EVIDENCED BY PUNCTURE WOUNDS. ON AND AROUND A PUBLIC BEACH WITH FERRY DOCK.	SI	P9	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	8	4	HARASSMENT	PIERCE	WA	SI	SEAL PUP ILLEGALLY REMOVED FROM BEACH BY PUBLIC. MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	8	11	SHOOTING	CLATSOP	OR	DEAD	PELLET/BULLET HOLES IN SKULL.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	8	11	HARASSMENT	KITSAP	WA	SI	PUBLIC REMOVED PUP FROM BEACH / WATER AND PLACED IT ON TOP OF PADDLEBOAT. IT DIED 2 DAYS LATER.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	8	12	SHOOTING	WHATCOM	WA	DEAD	BULLET HOLE, BULLET NOT RECOVERED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2018	8	21	SHOOTING	PACIFIC	WA	DEAD	HEAD SHATTERED, STRONGLY SUGGESTIVE OF A GUNSHOT WOUND. THE SEAL HAD EXCELLENT BODY CONDITION OTHERWISE.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	8	23	GILLNET FISHERY	PIERCE	WA	DEAD	LINEAR LACERATION ON BOTH EYES. INJURIES ARE CONSISTENT WITH FISHERY ENTANGLEMENT, EXCELLENT BODY CONDITION.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	8	24	GILLNET FISHERY	KING	WA	DEAD	FRESH DEAD CARCASS RECOVERED AND TRANSFERRED TO WDFW ON 8/26. EXAMINATION INDICATES FISHERIES INTERACTION WITH LACERATIONS TO EYES AND FACE.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	8	25	GILLNET FISHERY	THURSTON	WA	DEAD	BAND OF HEMORRHAGING IN BLUBBER AND DEEP MUSCLE AROUND NECK AND ON BACK NEAR RIGHT SHOULDER BLADE. EXCELLENT BODY CONDITION. ACTIVE GILLNET FISHING IN AREA. LIKELY ENTANGLEMENT.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	8	25	GILLNET FISHERY	KING	WA	DEAD	DEAD ANIMAL COLLECTED AND TRANSFERRED TO WDFW ON 8/26. EXAMINATION INDICATED FISHERIES INTERACTION, I.E. LACERATIONS AND IMPRESSIONS OF NET.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2018	9	1	VESSEL STRIKE	PIERCE	WA	DEAD	REPORTED FRESH DEAD ON BEACH. APPEARED TO HAVE A INJURY ON R PELVIS/ BACK AREA. SEVERELY FRACTURED PELVIS AND LEFT HIND FLIPPER SEVERE ENOUGH TO KILL THIS ANIMAL. THE DEFINED LINEAR HEMORRHAGE IS CONSISTENT WITH BOAT PROPELLER INJURY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON- WASHINGTON COAST	2018	9	14	HOOK AND LINE FISHERY	PACIFIC	WA	DEAD	THE SEAL HAD INGESTED A SMALL FISHING LURE WITH HOOK AND LINE THAT PERFORATED THE INTESTINES WHILE ANIMAL WAS ALIVE (HEMORRHAGE PRESENT).	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	9	18	GILLNET FISHERY	KING	WA	DEAD	DEAD HARBOR SEAL PUP FOUND ON BEACH ENTANGLED IN GILL NET. NET SET FROM DRIFTWOOD ON BEACH TO BUOY OFFSHORE IN COVE OFF PUBLIC ACCESS BEACH.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	9	29	SHOOTING	ISLAND	WA	DEAD	GUNSHOT EVIDENCE FOUND DURING NECROPSY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2018	9	30	GILLNET FISHERY	WHATCOM	WA	DEAD	HEAD CUT OFF.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	OREGON- WASHINGTON COAST	2018	12	31	SHOOTING	PACIFIC	WA	DEAD	OCCIPITAL AND PART OF PARIETAL SMASHED, CONSISTENT WITH GUNSHOT WOUNDS.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019	1	26	SHOOTING	SAN JUAN	WA	SI	SINGLE GUNSHOT WOUND TO THE HEAD. ENTRANCE WOUND LOCATED DORSALLY ON THE CAUDAL RIGHT SIDE OF THE HEAD. EXIT WOUND MEASURING 1/4-1/2 INCH IN DIAMETER LOCATED JUST MEDIAL TO THE LEFT AUDITORY CANAL. THIS ADULT FEMALE HARBOR SEAL WAS SHOT DURING A SPORT FISHING DERBY IN SAN JUAN COUNTY. SUBSTANTIAL EVIDENCE OF THE INCIDENT WAS SUBMITTED TO ENFORCEMENT OFFICERS INCLUDING PHOTOS AND VIDEO OF THE SHOOTING. THE SEAL SURVIVED A SINGLE SHOT TO THE HEAD, AND WAS BROUGHT TO SJCMMSN BY SJC DEPUTIES. NO SKULL FRACTURES WERE NOTED, BUT THE LEFT EYE WAS SIGNIFICANTLY DAMAGED. THE SEAL WAS TRANSFERRED TO WOLF HOLLOW ON 1/26/19 WHERE IT RECEIVED INITIAL TREATMENT INCLUDING PAIN MEDS (BANAMINE) AND FLUIDS. A COMPLETE MEDICAL EXAM INCLUDING RADIOGRAPHS TOOK PLACE ON MONDAY, JANUARY 28TH AND THE SEAL WAS GIVEN A DOSE OF ANTIBIOTICS (CEFOVECIN). THE SEAL WAS TRANSFERRED TO PAWS WILDLIFE CENTER ON 2/1/19 FOR ENUCLEATION PROCEDURE AND POST-OP CARE. THE SEAL WAS RELEASED AT TURN POINT PUBLIC BEACH ACCESS ON 2/17/19. THIS WAS A FEMALE SEAL THAT ABORTED A FETUS WHILE IN REHAB. DESIGNATED AS SERIOUS INJURY EVEN THOUGH IT WAS TREATED AND RELEASED, DUE TO EYE DAMAGE.	SI	P9	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2019	1		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON- WASHINGTON COAST	2019	2	18	GILLNET FISHERY	PACIFIC	WA	DEAD	THREE FRESH-LOOKING NET-LIKE MARKS ON ANTERIOR NECK PRIOR TO SCAVENGING. THE SEAL HAD GOOD BODY CONDITION.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	OREGON- WASHINGTON COAST	2019	2	19	SHOOTING	CLATSOP	OR	DEAD	BULLET HOLES ON SKULL (ENTRY) AND IN RIGHT NECK REGION (EXIT HOLE); GASH ON HIND FLIPPERS; AREAS OF HEMORRHAGE AROUND HEAD AND NECK TO SCAPULA; THE SEAL HAD OKAY BODY CONDITION.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	2	22	VESSEL STRIKE	SANTA CRUZ	CA	DEAD	FOAMING AT THE NOSE WOUND AT RIGHT UPPER SHOULDER, LOOKS LIKE POSSIBLE SHARK BITE, BUT AFTER NECROPSY IT WAS DETERMINED A PROPELLER MARK. APPEARS TO HAVE HEMORRHAGE AROUND WOUND.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON- WASHINGTON COAST	2019	3	23	SHOOTING	PACIFIC	WA	DEAD	ANIMAL WITH EXCELLENT BODY CONDITION HAD OBVIOUS PELLET HOLES IN SKULL AND POSSIBLY IN ABDOMEN.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	OREGON-WASHINGTON COAST	2019	4	3	SHOOTING	PACIFIC	WA	DEAD	NOTICED OBVIOUS BULLET ENTRANCE AND EXIT HOLES THROUGH PARIETALS DURING RECOVERY OF THE CARCASS; THE SEAL HAD EXCELLENT BODY CONDITION; LARGE AMOUNT OF BLOOD IN THORACIC AND ABDOMINAL CAVITIES AND IN THE PERICARDIUM; PLACENTA AND INTESTINES WERE TIGHTLY TWISTED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	4	7	HARASSMENT	SANTA BARBARA	CA	SI	GUADALUPE DUNES RESERVE OFFICER RECEIVED SECONDHAND REPORT OF HARBOR SEAL ON BEACH, POSSIBLE ISSUE WITH BACK RIGHT FLIPPER, ROLLING IN THE SURF. DUNES OFFICERS BELIEVED IT HAD BEEN SEPARATED FROM ITS MOTHER, AND MEMBERS OF THE PUBLIC HAD BEEN INTERACTING WITH THE ANIMAL. DUNES OFFICERS REMOVED ANIMAL FROM BEACH AND BROUGHT IT TO RESTROOMS/PARKING LOT AREA. TMMC TEAM COLLECTED ANIMAL FROM OFFICERS. MILDLY UNDERWEIGHT. HARASSMENT MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	4	8	HARASSMENT	SANTA CRUZ	CA	SI	MATERNAL SEPARATION. MEMBER OF PUBLIC TRIED TO PULL ANIMAL OUT OF THE WATER. HARASSMENT MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	4	12	HARASSMENT	SAN MATEO	CA	SI	MATERNAL SEPARATION AND A RUNNER ON THE BEACH TOLD RESPONDERS THAT HE PET IT, AND THEN CHASED IT INTO THE WATER TWICE. HARASSMENT MATERNAL SEPARATION, MALNUTRITION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	4	14	HARASSMENT	MARIN	CA	SI	MATERNAL SEPARATION, PEOPLE PETTING AN UNDERWEIGHT PUP.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2019	4	16	SHOOTING	CLATSOP	OR	DEAD	SEAL APPEARED HAD EXCELLENT EXTERNAL BODY CONDITION BUT WAS VERY DECOMPOSED; SKULL WAS EXPOSED AND THERE WAS AN OBVIOUS BULLET HOLE THROUGH IT.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	4	17	DOG ATTACK	HUMBOLDT	CA	SI	NARRATIVE REPORTED DOG BITES BUT NO DETAILS ON CONDITION OF ANIMAL. CLASSIFYING AS SERIOUS INJURY AS CONSERVATIVE DEFAULT.	SI	P9	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	4	17	HARASSMENT	SONOMA	CA	SI	MATERNAL SEPARATION. PEOPLE PICKED UP AN UNDERWEIGHT PUP AND MOVED IT TO ANOTHER PART OF THE BEACH.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	4	18	HARASSMENT	MONTEREY	CA	SI	UNDERWEIGHT PUP WITH UMBILICUS SURROUNDED BY PEOPLE AND DOGS. PUP TRANSFERRED TO REHAB FACILITY. OUTCOME UNKNOWN.	SI	P14	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	CALIFORNIA	2019	4	27	HARASSMENT	SAN MATEO	CA	SI	MATERNAL SEPARATION AND MODERATELY UNDERWEIGHT. FISHERMAN PUSHING IT INTO WATER -- ASKED REPORTING PARTY TO TELL HIM TO STOP AND HE STOPPED TOUCHING THE ANIMAL. MANY PEOPLE AND OFF-LEASH DOGS ON BEACH.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	4	27	HARASSMENT	MARIN	CA	SI	PEOPLE POKING ANIMAL WITH STICK, MATERNAL SEPARATION, PUNCTURE WOUNDS ON RIGHT HIND FLIPPER (CAUSE UNKNOWN BUT DOG PRINTS CLEARLY SURROUNDING ANIMAL, AND CAUSE MATCHES SOMETHING LIKE A CONSPECIFIC OR DOG), AND MODERATELY UNDERWEIGHT.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	4	27	HARASSMENT	SONOMA	CA	SI	ILLEGAL PICK-UP AND MATERNAL SEPARATION. MEMBER OF THE PUBLIC PICKED UP SEAL AND HELD IT IN HER LAP EVEN AFTER LAW-ENFORCEMENT AGENCY INFORMED HER NOT TO. THE ANIMAL WAS CHECKED BY TMMC RESPONDERS EARLIER IN THE DAY, AND NO MOM SEAL WAS FOUND AT THE TIME OF CHECKING OR WHEN TMMC RESPONDERS ARRIVED TO GET THE ANIMAL AFTER THE ILLEGAL PICK-UP. MODERATELY UNDERWEIGHT.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019	5	11	UNIDENTIFIED HUMAN INTERACTION	SAN JUAN	WA	DEAD	FRACTURING IN THE LEFT ORBIT. METALLIC FOREIGN BODY (WIRE) WAS FOUND IN THE GASTROINTESTINAL TRACT. EXTENSIVE PHOTOGRAPHIC EVIDENCE WAS COLLECTED AS WAS THE WIRE ITSELF.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2019	5	20	SHOOTING	PACIFIC	WA	DEAD	ANIMAL HAD EXCELLENT BODY CONDITION; SHE WAS PREGNANT WITH A FULL-TERM FETUS; PELLET HOLES IN SKULL; HEMORRHAGE ALONG BODY; INTESTINES WERE TIGHTLY TWISTED; TEAR IN UTERUS; FETUS WAS HEAD-DOWN AT BIRTH CANAL.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	5	21	VESSEL STRIKE	MARIN	CA	DEAD	MILDLY UNDERWEIGHT, SEVERE WOUNDS TO CAUDAL LEFT SIDE OF THE BODY, BONE EXPOSURE. GROSS APPEARANCE AND REGULARITY OF THE WOUNDS SUGGESTIVE OF BOAT STRIKE.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	6	11	HARASSMENT	MONTEREY	CA	SI	PEOPLE TAKING PHOTOS TOO CLOSELY CAUSING ANIMAL TO CRAWL AWAY FROM THEM. NO ADULT HARBOR SEALS PRESENT DURING ENTIRE OBSERVATION TIME. ABSCESS AND MILDLY UNDERWEIGHT. MATERNAL SEPARATION.	SI	P14	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	6	29	VEHICLE COLLISION	MASON	WA	DEAD	ORIGINALLY LIVE ON 29-JUN AND BEING ATTENDED BY MOM IN THE EVENINGS (MARINA STAFF SAW INTERACTIONS FROM OFFICE WINDOWS). FOUND DEAD ON THE BOAT RAMP ON THE MONRING OF 03-JUL-19. . . . RUN OVER BY VEHICLE OVERNIGHT ON THE BOAT RAMP.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019	7	13	HARASSMENT	SAN JUAN	WA	SI	PUP WAS SEEN FOR SEVERAL DAYS BY MULTIPLE REPORTING PARTIES SWIMMING AROUND, CALLING FOR MOM AND APPROACHING BOATS/KAYAKS. HUMAN INTERACTION AT HAUL-OUT SITE DUE TO COMMUNITY RESIDENTS. SPENT 24+ HOURS HAULED OUT ON PADDLE BOARD THAT WAS OFFERED BY RESIDENTS. EMACIATED AND DEEMED ABANDONED. PUP WAS COLLECTED FOR REHABILITATION DUE TO PHYSICAL CONDITION AND PREVIOUS HUMAN INTERACTION. MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	HOOD CANAL	2019	7	21	UNIDENTIFIED HUMAN INTERACTION	MASON	WA	SI	WAS ALIVE AND THRASHING IN DRY OYSTER BEDS, BLEEDING ON THE HEAD AT 1115. WAS DEAD BY 1134. BLOODY TRAIL LEFT ON BEACH.. L EYE POPPED OUT W/BLOOD CONGEALED AROUND IT. UPPER LEFT CANINE AND LOWER INCISORS MISSING (FOR A LONG TIME). UPPER L JAW AROUND EYE FEELS FRACTURED. NOSE FEELS FRACTURED TOO, POSSIBLY LOWER JAW FRACTURED AS WELL.. . BLUNT FORCE TRAUMA TO L SIDE OF HEAD/EYE. POSSIBLE CLUBBING (MOST LIKELY) OR BOAT STRIKE (LESS LIKELY BUT STILL POSSIBLE).	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	7	29	VESSEL STRIKE	PIERCE	WA	DEAD	FOUND DEAD ON THE BEACH AT KNOWN HARBOR SEAL HAUL OUT BUT ALSO HIGH USE BOATING RECREATIONAL AREA- DAY AFTER BUSY WEEKEND, MID TIDE LEVEL, FRESH DEAD STILL IN RIGOR, BLOODY DISCHARGE AT NOSE. COLLECTED PUT ON ICE AND NECROPSIED. INFLAMMED CONJUCTIVAS WITH SAND; CURVED LINEAR IMPRESSION CUT AT STERNUM 10 CM LONG THAT MOSTLY CUTS FUR (DOES NOT BREAK SKIN); BLOOD WAS DISCHARGING OUT OF NOSE AT TIME OF COLLECTION; 9 CM ANTERIOR TO PREVIOUSLY DESCRIBED CUT MOSTLY PARALLEL TO CUT ON STERNUM THAT IS 7 CM LONG - SUPERFICIAL; UNDER STERNAL. . HI FORM COMPLETED. HI JUSTIFACATION- INJURIES NOTED ON EXTERNAL EXAM AND GROSS NECROPSY ARE CONSISTENT WITH A PROPELLER INJURY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	7		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	OREGON-WASHINGTON COAST	2019	8	16	UNIDENTIFIED HUMAN INTERACTION	CLATSOP	OR	SI	DESPITE OBVIOUS PROPELLER CUTS OR GASHES ON BELLY, ANIMAL WAS VERY ACTIVE AND LEFT THE BEACH; NOT RESIGHTED. EXTENT OF INJURIES UNKNOWN. CONSERVATIVELY ASSIGNED A SERIOUS INJURY BECAUSE EXTENT OF INJURIES UNKNOWN.	SI	P9	1.00	N	Y
HARBOR SEAL	HOOD CANAL	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	9	3	VESSEL STRIKE	PIERCE	WA	DEAD	APPEARS TO HAVE BEEN HIT BY A PROPELLER. TWO PARALLEL CUTS THAT ARE RUNNING (FIRST CUT STARTS ON LEFT LATERAL SIDE 20 CM BELOW ARMPIT; NEXT CUT IS 34 CM BELOW THE ARMPIT; DISTANCE BETWEEN THE TWO IS 12 CM. THE LENGTH OF THE FIRST CUT IS 24 CM; THE LENGTH OF THE SECOND CUT IS 24 CM. THE CUTS FORM A BACKWARDS "S". THE FIRST CUT HAS CUT THROUGH BLUBBER AND MUSCLE; THE INTESTINES ARE CUT IN TWO LOCATIONS. THE SPLEEN HAS BEEN LACERATED. THE SECOND CUT WENT THROUGH MUSCLE, BLUBBER, PELVIC BONE AND PAST THE VERTEBRAE. IT HAS CUT THE COLON AS WELL. ANOTHER 11 CM FORWARD OF THE FIRST CUT IS ANOTHER CUT WITH HEMORRHAGE IN THE BLUBBER... JUSTIFICATION: INJURIES CONSISTENT WITH PROPELLER INJURY; TWO LARGE BACKWARDS "S" SHAPED LACERATION CUT THROUGH BLUBBER, MUSCLE, AND INTO ABDOMINAL CAVITY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019	9	17	VESSEL STRIKE	JEFFERSON	WA	DEAD	LACERATION IS CONSISTENT WITH PROPELLER WOUND.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	9	22	GILLNET FISHERY	PIERCE	WA	DEAD	RIGHT EYE IS BULGING OUT. BLEEDING FROM LEFT EYE. INDENTIONS ABOVE AND BELOW EYES, ONE AT TOP OF MUZZLE AND ONE AROUND THE SKULL. EYES ALSO HAVE AN INDENTION ACROSS. ALL INDENTIONS LINEAR ACROSS. BLOOD COMING OUT OF MOUTH. FUR/SKIN HANGING FROM MOUTH. SWOLLEN ON RIGHT SIDE OF CHEEK AND ON TOP OF HEAD. SKIN NOT QUITE SLOUGHING; NO LONGER IN RIGOR. BODY IS BLOATED. HINDFLIPPERS ARE SWOLLEN WITH ANOTHER APPARENT LINEAR INDENTION AROUND... JUSTIFICATION: BASED ON INTERNAL AND EXTERNAL EXAM AND LINEAR IMPRESSION WITH EXTENSIVE HEMORRHAGE IS CONSISTENT WITH NET ENTANGLEMENT. ACTIVE TRIBAL FISHING IN AREA.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2019	9	26	SHOOTING	PACIFIC	WA	DEAD	ANIMAL HAD EXCELLENT BODY CONDITION; SKULL WAS FRACTURED; BULLET FRAGMENTS WERE RECOVERED FROM HEAD.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2019	9	26	SHOOTING	PACIFIC	WA	DEAD	ANIMAL HAD EXCELLENT BODY CONDITION; POSTERIOR PART OF SKULL BLOWN OUT; HEMORRHAGE IN BACK OF MOUTH AND ON SKULL; PELLET HOLE IN LEFT EYE SOCKET WITH ASSOCIATED DAMAGE ON RIGHT; VERY SUBSTANTIAL CLOTTING IN DORSAL AORTA AND ALONG BOTH TRACHEA AND ESOPHAGUS.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	9	26	MARINE DEBRIS	PIERCE	WA	DEAD	ENTANGLEMENT/ ENTRAPMENT IN WINDSOCK/ MARINE DERBIS. SEAL STUCK IN DISTAL END OF WIND SOCK. HEAD REMAINS COMING OUT SOCK. THIS OCCURRED IN ~20 YEARS AGO WHEN WIND SOCK WAS LOST OF NEARBY DOC MCNIEL ISLAND DOCK. APPEAR THAT THE SEAL SWAM INOT AND GOT STUCK AND DROWNED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	HOOD CANAL	2019	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019	10	18	GILLNET FISHERY	ISLAND	WA	DEAD	ONE OF TWO SEALS FOUND DEAD IN GILLNET WASHED ASHORE. THE FEMALE SEAL WAS FOUND ALONG WITH A MALE SEAL FULLY ENTANGLED IN A FISHING NET (GILL NET). THE NET HAD 3 SMALL BUOYS ATTACHED, 2 UNMARKED AND ONE STAMPED WITH "MADE IN KOREA". NO ADDITIONAL MARKS OR ID SEEN ON THE NET ITSELF. BOTH SEALS WERE FULLY WRAPPED IN THE NET WITH NET TO SPARE. THE NET ALSO SEVERELY LACERATED THE FEMALE'S FACE. IT WAS APPARENT THAT THE NET HAD WORKED ITS WAY AROUND THE SEAL'S NECK IN A MANNER WHICH COULD (AND DID) CAUSE AIRWAY MALFUNCTIONS. THE NET WAS ENTANGLED IN A MASS OF BULL KELP WHICH HAD WASHED UP WITH THE CARCASS.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019	10	18	GILLNET FISHERY	ISLAND	WA	DEAD	ONE OF TWO SEALS FOUND DEAD IN GILLNET WASHED ASHORE. THE FEMALE SEAL WAS FOUND ALONG WITH A MALE SEAL FULLY ENTANGLED IN A FISHING NET (GILL NET). THE NET HAD 3 SMALL BUOYS ATTACHED, 2 UNMARKED AND ONE STAMPED WITH "MADE IN KOREA". NO ADDITIONAL MARKS OR ID SEEN ON THE NET ITSELF. BOTH SEALS WERE FULLY WRAPPED IN THE NET WITH NET TO SPARE. THE NET ALSO SEVERELY LACERATED THE FEMALE'S FACE. IT WAS APPARENT THAT THE NET HAD WORKED ITS WAY AROUND THE SEAL'S NECK IN A MANNER WHICH COULD (AND DID) CAUSE AIRWAY MALFUNCTIONS. THE NET WAS ENTANGLED IN A MASS OF BULL KELP WHICH HAD WASHED UP WITH THE CARCASS.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2019	10	19	SHOOTING	PACIFIC	WA	DEAD	ANIMAL HAD EXCELLENT BODY CONDITION; OBVIOUS TRAUMA TO HEAD AND BULLET HOLES ON BODY; ANIMAL WAS NOT AVAILABLE FOR NECROPSY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	10	22	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
HARBOR SEAL	HOOD CANAL	2019	10		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019	10		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019	11	5	UNIDENTIFIED FISHERY INTERACTION	KING	WA	DEAD	FRESH DEAD PUP. CARCASS INTACT EXCEPT FOR DAMAGED LEFT EYE, TEETH MISSING FROM UPPER LEFT SIDE BLOODY JAW, SWOLLEN LEFT CHEEK AREA, PROTRUDING LEFT EAR TISSUE. TRANSFERRED TO DFW FOR NECROPSY. EXAMINER REPORTS EXTENSIVE BLUNT FORCE TRAUMA INCLUDING PUNCTURE INSIDE MOUTH, BROKEN SPINE, RIBS AND STERNUM. POSSIBLE GAFFING THROUGH MOUTH AND BEATING OR BEING DRAWN THROUGH NET DRUM OF FISHING BOAT. NO SIGN OF ENTANGLEMENT.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2019	11	8	GILLNET FISHERY, TRIBAL	GRAYS HARBOR	WA	DEAD	REPORTED ENTANGLED IN A TRIBAL QUINULT GILLNET.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	11	12	HOOK AND LINE FISHERY	PIERCE	WA	DEAD	RECOVERED FISH HOOK FROM STOMACH. PERFORATED STOMACH AND CAUSED THE PERITONITIS. LINE ALSO CAUSE INTESTINAL INTUSSUSCEPTION. ~5 LITER OF REDDISH FLUID IN ABDOMEN. OMMENTUM RED W FIBROUS PLAQUES. BASE OF PYLORUS FISHHOOK PERFORATED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2019	12	13	SHOOTING	THURSTON	WA	DEAD	ENTRY WOUND RIGHT SIDE OF NECK, TRACKING ACROSS THROAT AND PROJECTILE FOUND IN SWOLLEN AREA ON L SIDE OF NECK. ALTHOUGH PROJECTILE DID NOT PENETRATE THROUGH THE SKULL, IT DID BLOW A HOLE IN THE BASE OF THE SKULL AS IT WENT PAST. BONE FRAGMENTS BLOWN INTO THE BRAIN TISSUE AND TISSUE HEMORRHAGED. LARGE AREAS OF HEMATOMA NEAR ENTRY WOUND AND AROUND WHERE PROJECTILE WAS FOUND.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2019	12	26	HOOK AND LINE FISHERY	LOS ANGELES	CA	DEAD	FISH HOOK IN STOMACH, SUSPECT BLUNT TRAUMA.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2019	12		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2019	12		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2019			GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2019			GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2019			GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2019			GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2019			GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2019			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	1	26	HARASSMENT	SAN DIEGO	CA	SI	NEONATE PUP SEEN WITHOUT MOTHER ON BEACH SINCE 1/26/2020 OR 1/27/2020. DEHYDRATED, SAND IN MOUTH, DIARRHEA. TEMPERATURE OF 99.7F REPORTED TO SEAWORLD RESCUE THAT PEOPLE IGNORED THE BEACH CLOSURE AND BROUGHT A DOG DOWN TO THE SEAWALL. MOM WAS FLUSHED INTO THE WATER. TWO OTHER ANIMALS WERE DISTURBED DURING THE RESCUE. SERIOUS INJURY DUE TO MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	1		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	1		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	1		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	1		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	1		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	1		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	1		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	CALIFORNIA	2020	2	15	OIL / TAR	SANTA BARBARA	CA	DEAD	PRONOUNCED TRAUMA ON CROWN OF HEAD, NO PUNCTURE WOUND OR ANY OTHER INJURY EXCEPT THAT TONGUE MISSING, AND HARD PALATE AND NASAL BONES CRUSHED. EXTENSIVE OIL/TAR OVER 80% OF COAT, FRESH DEAD. OIL/MUTILATION.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2	28	SHOOTING	LINCOLN	OR	DEAD	PREGNANT ADULT FEMALE, FRESH DEAD CONDITION. BULLET WOUND TO RIGHT THORAX CAUSED MAJOR INTERNAL TRAUMA TO 6TH RIB, RIGHT LUNG AND LIVER, AND CAUSED EXTENSIVE INTERNAL BLEEDING.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	2		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	3	7	HARASSMENT	MONTEREY	CA	SI	EMACIATED, LANUGO COAT PRESENT. HARASSED - MEMBER OF THE PUBLIC TAKING SELFIES WITH THE ANIMAL. HARASSED. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	3	14	HARASSMENT	SONOMA	CA	SI	FULL LANUGO COAT, FRESH UMBILICUS, MODERATELY UNDERWEIGHT. HARASSED - MEMBER OF PUBLIC PICKED UP ANIMAL AND THEN RETURNED IT TO BEACH, SAME PERSON SEEN CARRYING IT AGAIN AFTER THAT. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	3	25	HARASSMENT	MENDOCINO	CA	SI	EMACIATED, UMBILICUS OPEN, FULL LANUGO COAT EXCEPT FOR HIND FLIPPERS AND MUZZLE, HARASSED - CHILDREN SCARED IT BACK INTO WATER AND ANOTHER MEMBER OF THE PUBLIC WAS CARRYING THE ANIMAL AROUND. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	3	27	HARASSMENT	MARIN	CA	SI	EMACIATED, RIGHT FRONT FLIPPER SWOLLEN WITH TWO PUNCTURE WOUNDS, DISCHARGE FROM UMBILICUS. HARASSED - ANIMAL PICKED UP BY HUMAN AND PLACED UNDER BLANKET, PERSON SITTING WITH ANIMAL ON DOCK. HARRASSED. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	CALIFORNIA	2020	3	29	HARASSMENT	SAN FRANCISCO	CA	SI	MODERATELY UNDERWEIGHT, FRESH UMBILICUS STUMP PRESENT, 4 PUNCTURE WOUNDS ON HIND FLIPPERS. HARASSED - PUBLIC ATTEMPTING TO FEED SARDINES TO ANIMAL. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	3		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	3		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	4	6	DOG ATTACK	DEL NORTE	CA	SI	LETHARGIC ANIMAL WITH EVIDENCE OF DOG BITES.	SI	P9	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	4	8	HARASSMENT	SAN FRANCISCO	CA	SI	TRACKING WITH EYES ONLY. MODERATELY UNDERWEIGHT, UMBILICUS PRESENT, RIGHT EYELID LACERATION, 2 TICKS PRESENT ON HEAD. HARASSED - MEMBER OF PUBLIC TRIED PUSH ANIMAL BACK INTO WATER WITH NET. COVID-19 IMPACT: PERMISSION NEEDED BEFORE ACCESSING PARKING LOT AND CLOSED GGNRA BEACHES. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	4	20	DOG ATTACK	SAN LUIS OBISPO	CA	DEAD	HEAD TRAUMA CONSISTENT WITH DOG BITES.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	5	3	HARASSMENT	SANTA CRUZ	CA	SI	LETHARGIC, EMACIATED, FULL HAIR COAT. HARASSED - MEMBER OF THE PUBLIC TRIED TO PULL ANIMAL BACK INTO THE WATER. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	5	6	HARASSMENT	SONOMA	CA	SI	MODERATELY UNDERWEIGHT, FULL HAIRCOAT. HARASSED - MEMBER OF PUBLIC PICKED UP ANIMAL AND PUT IT IN A CAR, KIDS ON BEACH PASSING THE ANIMAL AROUND. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	5	11	VESSEL STRIKE	ORANGE	CA	SI	NEWPORT BEACH HARBOR PATROL REPORTED ANIMAL WAS STRUCK BY BOAT AND NOW FLOATING IN THE WATER. RESCUE TEAM WAS TAKEN BY HARBOR PATROL BOAT AND ANIMAL WAS EASILY SCOOPED OUT OF THE WATER. ANIMAL HAD MULTIPLE DEEP LACERATIONS INCLUDING ONE ON MUZZLE THAT WENT INTO NASAL SINUS. ANIMAL DESCRIBED AS ALIVE, BUT FINAL OUTCOME UNKNOWN. SERIOUSLY INJURED BASED ON DESCRIPTION AND ABILITY OF REPORTING PARTY TO PICK UP ANIMAL.	SI	P15	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	CALIFORNIA	2020	5	18	HARASSMENT	GRAYS HARBOR	WA	SI	ALERT, CALLING. MARKED WITH GREEN MARK AND LEFT SEAL PUP LIVE AT JETTY. DENNIS MARKED AND POSTED SIGNS. REPORTED OF PEOPLE BOTHERING, PETTING AND POURING WATER ON PUP. CHECK ON NEXT DAY AND THE PUP WAS GONE. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	5	19	HARASSMENT	SANTA CRUZ	CA	SI	TRACKING WITH BODY, UMBILICUS OPEN, EMACIATED. HARASSED - BEACHGOERS PICKED UP ANIMAL AND MOVED IT HARASSED. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	5	20	HARASSMENT	WHATCOM	WA	SI	LANUGO PUBLIC PICKED UP AND MOVED THE PUP HARASSMENT. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2020	5	22	HARASSMENT	GRAYS HARBOR	WA	SI	LIVE ON BEACH 5/22 WITH ANOTHER SEAL PUP. WDFW VOLUNTEERS POSTED SIGNS AND MONITOR PERIODICALLY. SEAL WAS MARKED WITH GREEN SPRAY PAINT. REPORTS OF PEOPLE BOTHERING SEAL AND DOGS OFF LEASH. HAD TO CALL OSPD TO GET PEOPLE TO BACK WAY AND LEAVE SEAL PUPS ALONE LATE EVENING OF 5/22. VOLUNTEERS CHECKED ON AM 5/23. THIS SEAL WAS STILL ON BEACH. OTHER SEAL WAS GONE. POSTED SIGNS AND MOVED TAPE. WHEN CHECK ON ~12PM SEAL PUP WAS DEAD.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2020	5	23	HARASSMENT	GRAYS HARBOR	WA	SI	THERE WERE AT LEAST THREE DIFFERENT SEALS OVER COURSE OF 5 DAY PERIOND. SEAL WERE MARKED WITH PAINT AND MONITORED. THIS ONE WAS THE FOR LESS THEN 24 HOURS FOUND DEAD NEXT AM. WDFW VOLUNTEER MARKED AND POSTED SIGNS. PICKED UP DEAD AND PUT ON ICE FOR WDFW TO NECROPSY. LIMITED RESPONSE AND NECROPSY DUE TO COVID 19. MARKEDLY THIN; FEW PUNCTURE WOUNDS ON HIND FLIPPERS. . HI COMPLETED; SEAL WAS ON VERY POPULAR BEACH; LOTS OF PEOPLE DOGS. REPORTS OF PEOPLE TOUCHING.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	OREGON-WASHINGTON COAST	2020	5	26	HARASSMENT	PACIFIC	WA	SI	SLIGHTLY THIN BUT ALERT AND CALLING; RETURN TO WATER AFTER PUT BUT AT LOCATION FIRST REPORT OF PUP WAS WHEN THSP PULLED OVER A TRUCK WITH A HARBOR SEAL PUP IN THE BACK. THSP CONTACTED WDFW AND NOAA ENFORCEMENT. OFFICER RESPONDED AND SINCE THEY WERE ABLE TO TELL WHERE THE SEAL PUP WAS FOUND RETURN PUP TO LOCATION AND MARKED WITH GREEN PUP WENT IMMEDIATELY IN THE WATER AND LEFT. NO FURTHER REPORTS OF PUP. LIMITED RESPONSE DUE TO COVID-19. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2020	6	22	HARASSMENT	THURSTON	WA	SI	ACTIVE AND ALERT, CALLING. WHITE FLESHY UMBILICAL (APPROX 2.5 CM), WET, SMALL AMOUNT OF PALE RED DISCHARGE. GOOD BODY CONDITION, MODERATELY DEHYDRATED. NO WOUNDS SEEN. HEART AND LUNGS CLEAR. ABDOMINAL PALPATION NORMAL, TEETH JUST STARTING TO ERUPT. ANIMAL FIRST REPORTED SWIMMING IN MARINA ON AFTERNOON OF 22 JUNE, NO MOM IN SIGHT. RECOMMENDED TO LEAVE IT TO MAKE SURE MOM DID NOT RETURN IN THE EVENING. AT 2230 ON 22 JUNE, MARINA MANAGER CALLED TO SAY MEMBER OF PUBLIC HAD REMOVED PUP FROM WATER AND PUT IT ON THE SWIM STEP OF THEIR BOAT. ADULT WAS SEEN IN THE AREA. SO ADVISED TO LEAVE PUP WHERE IT WAS AND VACATE THE IMMEDIATE AREA TO SEE IF MOM WOULD COME BACK FOR IT. PUP WAS NOT ON SWIM STEP IN THE MORNING. PUP REPORTED AGAIN ON EVENING OF 23 JUNE, STILL SWIMMING BUT APPROACHING PEOPLE AT THE EDGE OF THE DOCK AND TRYING TO SUCKLE BOATS. SPOTTED AGAIN MORNING OF 24 JUNE, SWIMMING IN A CONGESTED AREA. NO ADULT HAD BEEN SEEN SINCE 22 JUNE. PUP HAULED OUT ON SMALL FINGER DOCK AT 1830 ON 24 JUNE. JLH COLLECTED AT 1945 AND TRANSFERRED TO WORLD VETS FOR STABILIZATION AND TRANSFER TO REHAB CENTER FOLLOWING DAY. AREA OF HIGH HUMAN ACTIVITY--LIKELY IMPEDED MOM FROM RETURNING FOR PUP.	SI	P14	1.00	N	Y
HARBOR SEAL	OREGON - WASHINGTON COAST	2020	6	23	SHOOTING	CLATSOP	OR	DEAD	PUP WAS THIN; THERE WAS A VERY CLEAR SMALL BULLET HOLE SOMEWHAT LEFT OF MID-ABDOMEN WITH TREMENDOUS TRAUMA AND TISSUE DAMAGE GOING ANTERIOR TO POSTERIOR; HEAVY HEMORRHAGE/TRAUMA AROUND NECK AND AT SHOULDERS; ANTERIOR HEAD FROM FRONTAL APPEARED TO BE "BLOWN OFF"; BLOOD IN BOTH THORACIC AND ABDOMINAL CAVITIES.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	CALIFORNIA	2020	6	29	HARASSMENT	SONOMA	CA	SI	TRACING WITH BODY, MODERATELY UNDERWEIGHT, 2 CM PUSTULE ON WEBBING OF RIGHT HIND FLIPPER, SMALL ORAL LACERATION. HARASSED - MEMBER OF THE PUBLIC PICKED UP THE ANIMAL AND PUT IT IN THE WATER SEVERAL TIMES. HARASSED TRACING WITH BODY, MODERATELY UNDERWEIGHT, 2 CM PUSTULE ON WEBBING OF RIGHT HIND FLIPPER, SMALL ORAL LACERATION. HARASSED - MEMBER OF THE PUBLIC PICKED UP THE ANIMAL AND PUT IT IN THE WATER SEVERAL TIMES. AGE CLASS NOT DESCRIBED, BUT THE FACT THAT A MEMBER OF THE PUBLIC WAS ABLE TO PICK UP ANIMAL IMPLIES IT WAS A PUP. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	6		POT FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	7	14	DOG ATTACK	SAN JUAN	WA	SI	ON JULY 15TH, 2020, SJCMMSN RECEIVED A CALL ABOUT A PUP ON A PUBLIC BEACH NEAR THE CAPE SAN JUAN MARINA. RP SAID THAT HER DOGS MAY HAVE BIT THE PUP. SJCMMSN RESPONDED IMMEDIATELY TO FIND THE PUP IN THE WATER BUT LATER CAME TO SHORE. UPON EXAMINATION, AN INFECTED INJURY WAS CONFIRMED ON THE PUP'S HEAD AND NECK THAT ALIGNED WITH A DOG BITE. RESPONDRS TRANSPORTED PUP TO WOLF HOLLOW REHAB CENTER. FINAL OUTCOME UNKNOWN.	SI	P9	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	7	19	HARASSMENT	JEFFERSON	WA	SI	PUP WAS ORIGINALLY FOUND INSIDE A PLASTIC TUB FILLED HALFWAY WITH WATER, PLACED NEAR AN ACCESS POINT TO THE BEACH. VOLUNTEER GOT THE PUP OUT OF THE TUB ONTO THE BEACH AND WAS KEEPING PEOPLE AWAY UNTIL WE ARRIVED. THE SEAL HAD A GOOPY EYE, SLIGHTLY SWOLLEN SIDE OF HEAD (TEMPLE REGION), AND WAS SKINNY. DUE TO POOR CONDITION, AND NO KNOWLEDGE OF WHERE THE PUP CAME FROM - PUP WAS TRANSPORTED TO CENTER VALLEY ANIMAL HOSPITAL EUTHANIZED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2020	7	29	DOG ATTACK	MASON	WA	SI	THIN, DEHYDRATED. MULTIPLE PUNCTURE WOUNDS AROUND FACE AND BOTH SIDES OF NECK. NOT USING FRONT RIGHT FLIPPER, POSSIBLE DISLOCATION. ALERT AND MODERATELY ACTIVE. SPENDING LOTS OF TIME ON BEACH NEAR PARKING LOT. OCCASIONALLY SWIMMING. NOT CALLING. INJURIES NOT PRESENT IN PHOTOS FROM 29 AUG. INJURIES CONSISTENT WITH DOG ATTACK-- INJURIES FIRST SEEN ON 30 JULY. MAY NOT HAVE CAUSED STRANDING EVENT BUT CONTRIBUTED TO ITS POOR CONDITION AND SUBSEQUENT EUTHANASIA.	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	SOUTHERN PUGET SOUND	2020	7	29	HARASSMENT	PIERCE	WA	SI	ILLEGAL PICKUP AND HARASSMENT. SEAL WAS INITIALLY REPORTED NEAR THE BARGE THAT ON HIGH TIDE SEALS AND SEA LION USE TO HAUL OUT. IT IS ON A LAND BRIDGE SO THAT ON LOW TIDE PEOPLE CAN WALK OUT TO. REPORTED GONE NEXT DAY. PM WAS REPORTED JUST OFF TRAIL ACCESS. REPORTS OF PEOPLE BOTHER AND POURING WATER ON. DISCUSS GIVING SPACE AND TIME~3PM. 5PM RECEIVED A CALL FROM DUPONT POLICE THAT SEAL HAD BEEN CARRIED UP THE 2 MILE TRAIL BROUGHT TO THE FIRE DEPARTMENT AND THAT THEY HAD RETURNED IT TO THE BEACH. ASSUMED MATERNAL SEPARATION.	SI	P14	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2020	8	27	VESSEL STRIKE	MASON	WA	DEAD	REPORTED DEAD ON BEACH. WITH MULTIPLE OPEN WOUNDS. RP COLLECTED AND WDFW PICKED UP FROM NECROPSY. RP STATED THAT THOUGHT IT WAS HIT THE DAY BEFORE. THERE HAD BEEN PUP HANGING AROUND THEIR FLOATING DOCK. BOAT CAME IN REAL FAST THE DAY BEFORE AND PUP WAS NOT SEEN SINCE. THEN IN AM FOUND PUP DEAD ON BEACH. 6 PARALLEL LACERATIONS ON LEFT SIDE OF BODY.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	8	27	HOOK AND LINE FISHERY	KING	WA	SI	WEANED HARBOR SEAL PUP HAULED OUT ON 8/27. REPORTED ON BEACH AT 12N. BYSTANDER NOTICED FISHING LINE FROM MOUTH AT 7:40P; OTHERS' PHOTOS SHOWED HOOK INSIDE THE MOUTH. CASEY MCLEAN AND DR GREG FRANKFURTER/SR3 ARRIVED AND CAPTURED PUP WITH ASSISTANCE FROM SEAL SITTERS. THEY REMOVED THE HOOK, TREATED THE WOUND, ADMINISTERED ANTIBIOTICS AND APPLIED TAG. SEAL WAS LEFT ON BEACH AND RETURNED TO WATER SOMETIME AFTER 9P. PUP CONTINUED TO HAUL OUT DAILY WITHIN 15-20 MINUTES OF ANOTHER PUP SSW083020. REPEATED VIOLATIONS OF PERIMETER WERE SEEN, AND CALLER REPORTED PHOTOGRAPHER AND WEDDING PARTY ON BEACH TOUCHING AND POSING WITH ONE OF THE PUPS ON 8/29. BECAUSE OF HARASSMENT AND PROXIMITY TO FISHING PIERS, BOAT RAMP AND HEAVY BOAT AND PEDESTRIAN TRAFFIC, BOTH PUPS WERE RELOCATED ON 8/30. WITH ASSISTANCE FROM SR3, WORLD VETS AND WDFW MMI, PUPS WERE CAPTURED AT 2P. EXAMINED, TRANSPORTED BY BOAT AND RELOCATED AT HYDE POINT, MCNEIL ISLAND 47.2004290, -122.6421199	NSI	P5C	0.00	N	N
HARBOR SEAL	SOUTHERN PUGET SOUND	2020	8		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9	5	HOOK AND LINE FISHERY	SAN JUAN	WA	SI	SLIGHTLY EMACIATED PUP IS BRIGHT, ALERT, AND REACTIVE. NOT VOCAL. SOME TEETH ERUPTED. UMBILICUS NOT PRESENT. HARBOR SEAL PUP HAD A FISHING HOOK THROUGH THE 1ST AND 2ND DIGIT THAT WAS TRAILING APPROX. 12FT OF LINE AND A GREEN FLASHER. THE RP INTERACTED WITH THE SEAL AND CUT THE LINE OFF THE SEAL PRIOR TO CALLING SJCMMMSN. SJCMMMSN WAS INFORMED THAT A MEMBER OF THE RP PARTY APPROACHED THE SEAL AND CUT PART OF THE FISHING LINE SO THAT A MAJORITY OF THE ENTANGLED LINE WAS NOW REMOVED FROM THE SEAL, THE HOOK AND 12 INCHES OF LINES WERE STILL ATTACHED. SJCMMMSN CONDUCTED A BRIEF HEALTH EXAMINATION AND THE PUP WAS BROUGHT TO WOLF HOLLOWY REHABILITATION CENTER. FINAL OUTCOME UNKNOWN.	SI	P1	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2020	9	7	VESSEL STRIKE	PIERCE	WA	SI	SEAL WITH S-SHAPED FACIAL LACERATION CUTTING INTO BONE. ANIMAL EUTHANIZED.	DEAD	NA	1.00	N	Y
HARBOR SEAL	CALIFORNIA	2020	9	10	HOOK AND LINE FISHERY	SANTA CRUZ	CA	SI	ALERT BUT NOT ACTIVE, FISHHOOK WITH MONOFILAMENT LINE EMBEDDED IN LEFT FRONT FLIPPER AND ATTACHED TO SECOND FISH HOOK EMBEDDED IN TONGUE.	SI	P5A	1.00	N	Y
HARBOR SEAL	SOUTHERN PUGET SOUND	2020	9	10	VESSEL STRIKE	PIERCE	WA	DEAD	CARCASS FOUND WITH PROPELLER LACERATIONS ACROSS HIND FLIPPERS.	DEAD	NA	1.00	N	Y
HARBOR SEAL	OREGON- WASHINGTON COAST	2020	9	26	HOOK AND LINE FISHERY	CLATSOP	OR	DEAD	CARCASS HAD EXCELLENT BODY CONDITION; SHE HAD INGESTED TWO LARGE FISH HOOKS (CONNECTED BY LINE); ONE HOOK WAS LODGED IN THE CORNER OF THE MOUTH AND THE OTHER WAS LODGED IN THE ESOPHAGUS; THERE WAS TREMENDOUS DAMAGE CAUSED BY THE HOOKS, INCLUDING A VERY LARGE HOLE IN THE ESOPHAGUS; THERE WAS ALSO A NUMBER OF AREAS WITH HEMORRHAGE, INCLUDING BLOOD IN THE TRACHEA AND ABDOMEN.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	9		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	10	3	GILLNET FISHERY	WHATCOM	WA	DEAD	CARCASS ENTANGLED IN FISHING NETTING.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	10	3	GILLNET FISHERY	WHATCOM	WA	DEAD	CARCASS ENTANGLED IN FISHING NETTING.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	10	8	GILLNET FISHERY	PACIFIC	WA	DEAD	ANIMAL HAD EXCELLENT BODY CONDITION; THERE WERE NET/LINE MARKS ON THE NECK AND TREMENDOUS HEMORRHAGE AND TRAUMA FROM HEAD AND NECK, ACROSS THORAX AND ABDOMEN AND ON INTERNAL ORGANS; THERE WAS NOTICEABLE CREPITUS ON LEFT NECK AND NEAR SCAPULAE ASSOCIATED WITH TREMENDOUS TRAUMA.	DEAD	NA	1.00	Y	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	10	14	SHOOTING	PACIFIC	WA	DEAD	ANIMAL HAD VERY GOOD BODY CONDITION; TREMENDOUS TRAUMA AND HEMORRHAGE AROUND HEAD AND NECK, SHOULDERS, MID-ABDOMEN, AND PELVIS; SMALL BULLET HOLE ON LEFT SIDE BETWEEN THORAX AND ABDOMEN WITH ADDITIONAL INTERNAL DAMAGE; ALL INTERNAL ORGANS BLOODY WITH AREAS OF HEMORRHAGE; MODERATE LUNGWORM LOAD (RIGHT > LEFT BRONCHUS); POSSIBLY HAD BEEN IN A NET BASED ON SOME OF THE TRAUMA PATTERNS.	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	10		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	10		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	10		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	10		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	HOOD CANAL	2020	11		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	HOOD CANAL	2020	11		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	11		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	11		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020	11		GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HARBOR SEAL	WASHINGTON NORTHERN INLAND WATERS	2020			GILLNET FISHERY, TRIBAL		WA	DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2016	1	27	UNIDENTIFIED FISHERY INTERACTION	MARIN	CA	SI (PRORATE)	WHALE SWIMMING SLOWLY, RAISING PECTORAL FINS OUT OF WATER, 41 NMI SW OF PT. REYES. ONE YELLOW FLOAT/BUOY ATTACHED TO ROPE BEING PULLED BY WHALE, POSITION OF FLOAT CLOSE TO THE TAIL FLUKE, REPORTING PARTY BELIEVE CAUGHT ON/IN PECTORAL OR MOUTH. NO MARKINGS ON BUOY OR FOULING. REPORTED BY NOAA VESSEL REUBEN LASKER. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	2	4	UNIDENTIFIED FISHERY INTERACTION	LOS ANGELES	CA	SI (PRORATE)	SINGLE LINE / ROPE RUNNING BACK FROM ROSTRUM/MOUTH AREA, RUNNING BACK ON LEFT SIDE OF BLOWHOLES AND DOWN LEFT SIDE OF BODY. SWIMMING AND DIVING BUT NOT SEEN FLUKING. NEAR TRUMP GOLF COURSE OFF PALO VERDES, PHOTOS AVAILABLE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	2	21	CA SPOT PRAWN TRAP FISHERY	SAN DIEGO	CA	SI (PRORATE)	REPORTED BY USCG 2.5 MI WEST OF SCRIPPS PIER. 2 TO 3 WRAPS OF TWISTED 5/16 INCH NYLON LINE AROUND CAUDAL PEDUNCLE (= MULTIPLE WRAPS). WHALE SOMEWHAT ANCHORED, WAS FLUKING BEFORE, DURING, AND AFTER INTERVENTION. QUICKLY SWAM NORTH AFTER RELEASED FROM GEAR (=RESCUE). TEAM OBSERVED THE ANIMAL FORMING A C SHAPE WITH ITS BODY, SUGGESTING SOMETHING WAS GOING ON WITH THE HEAD. FISHERY AND GEAR IDENTIFIED BY TAG NUMBER AND INTERVIEW WITH FISHERMAN. WHALE DISENTANGLEMENT TEAM WAS ABLE TO CUT GROUNDING LINE AND FREE ANIMAL, WHICH IMMEDIATELY PICKED UP SPEED AND SWAM OFF. GEAR HAD BEEN SET NEAR LA JOLLA ON 2/20/2016, THE DAY PRIOR TO THE ENTANGLEMENT, WITH 25 TRAPS OF 8-10 LBS EACH AND 1/2 MILE OF LINE. NO CONFIRMATION THAT ALL GEAR HAS BEEN REMOVED. FULL CONFIGURATION OF GEAR UNKNOWN BEFORE AND AFTER DISENTANGLEMENT EFFORT. FINAL OUTCOME UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	3	4	VESSEL STRIKE	SAN DIEGO	CA	DEAD	WHALE WAS SIGHTED ON 3/4 BY COAST GUARD, THEN 3/5/2016 BY DIVER 9.3 NM WEST OF POINT LOMA. LINEAR SCARS ON LEADING EDGE OF FLUKES AND CAUDAL PEDUNCLE INDICATE THIS WHALE WAS ENTANGLED IN THE PAST, BUT WAS NOT LIKELY THE CAUSE OF DEATH. FRACTURED INTERVERTEBRAL DISK AND SCAPULA WITH ASSOCIATED HEMORRHAGE IN BLUBBER AND MUSCLE INDICATES TRAUMA, POSSIBLY ATTRIBUTED TO A VESSEL STRIKE.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2016	3	4	CA SPOT PRAWN TRAP FISHERY	ORANGE	CA	SI	GEAR CONFIRMED FROM BUOY NUMBER. GEAR WAS SET SAME DAY AND PHOTOS / VIDEO EXIST OF WHALE SELF-RELEASING FROM GEAR. FISHERMAN CONTACTED, DESCRIBED GEAR AS 12 POTS ON A STRING OF 5/16 INCH LINE, WITH 100 FT OF LINE BETWEEN POTS. SIGHTING INCLUDED 1 BUOY AND UNKNOWN AMOUNT OF LINE ATTACHED TO FLUKE. VERY ACTIVE ANIMAL, DESCRIBED AS AGITATED, FLUKE SLAPPING AND BREACHING. WHALE SUCCESSFULLY SHED GEAR. 2.5 MILES OFF DANA POINT. ORIGINAL CONFIGURATION AND AMOUNT OF GEAR UNKNOWN.	NSI	L10	0.00	Y	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	4	11	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI	WHALE APPEARS TO BE ANCHORED IN 10 TOTAL BUOYS AND BLUE STEEL LINE; 3 ORANGE BULLET BUOYS, 1 LARGE WHITE BULLET BUOY, 3 RED/ORANGE BULLET BUOYS, 1 DARK RED BULLET BUOY, 1 DOUBLE ORANGE BULLET BUOY AND 1 PURPLE CA DUNGENESS CRAB TAG. GEAR ORIGINATED FROM MOSS LANDING. SECOND BUOY NUMBER WAS ALSO NOTED FROM A PHOTO. A SEARCH EFFORT FOR THE WHALE WAS INITIATED, BUT THE WHALE WAS NOT RELOCATED. FISHING GEAR WAS APPARENTLY DEPLOYED IN AREA AT THE END OF MARCH. GEAR CONFIGURATION AND AMOUNT UNKNOWN. FINAL OUTCOME UNKNOWN.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	4	16	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI	3 BLACK AND WHITE BUOYS AND ROPE AROUND TAILSTOCK. GEAR CONFIRMED AS CA DUNGENESS CRAB FROM TAG/BUOY NUMBER. GEAR HAD BEEN SET IN SAN MATEO COUNTY. ANIMAL SEEN LAST ON JUNE 4TH IN MONTEREY BAY, EMACIATED AND HEAVILY SCARRED, APPARENTLY SHED GEAR FROM TAILSTOCK, BUT UNKNOWN IF GEAR REMAINED ON PECTORAL FLIPPERS. LINE SEEN DEEPLY EMBEDDED IN TAILSTOCK ON 2 OCCASIONS, WITH MANY CYAMIDS DEEP IN WOUNDS. DETERIORATING CONDITION OF ANIMAL WARRANTS SERIOUS INJURY UNDER CATEGORY L10, CONSIDERING CONSTRICTING NATURE OF ENTANGLEMENT, BUT UNKNOWN GEAR CONFIGURATION. HEALTH DECLINE.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	4	18	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	REPORTED AS ROPE AND 2 BUOYS (ONE WHITE, ONE ORANGE) ENTANGLING WHALE'S CAUDAL PEDUNCLE. WHALE NOT RELOCATED. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	4	20	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	WHALE ENTANGLED AROUND BODY (2 WRAPS = MULTIPLE WRAPS), BOTH PECTORAL FINS, AND MOUTH. TANDEM ORANGE AND PINK BULLET BUOYS, PLUS 1 DARK ORANGE OR RED BULLET BUOY ATTACHED TO BLUE OR GREEN POLYLINE. FISHERY POSITIVELY-IDENTIFIED AS CA DUNGENESS CRAB POT FROM BUOY TAG. ONE BUOY WAS BEING TRAILED 100 YARDS BEHIND WHALE. GEAR HAD BEEN SET ON MARCH 29, 2016 IN SAME AREA. WHALE DISENTANGLEMENT TEAM WAS ABLE TO ATTACH TELEMETRY PACKAGE TO WHALE AND RETURN ON 4/21/2016 TO FULLY DISENTANGLE WHALE (=RESCUE).	NSI	L10	0.00	Y	N



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	4	20	WA/OR/CA SABLEFISH POT FISHERY	HUMBOLDT	CA	SI (PRORATE)	FISHERY OBSERVER REPORTED ENTANGLEMENT WITH SABLEFISH GEAR 20 MILES OFFSHORE, 30 MILES SOUTH OF CRESCENT CITY. NARRATIVE INCLUDES DESCRIPTION OF 2 PINK BUOYS AND 200 FEET OF LINE. WHALE WAS DISENTANGLED BY FISHING VESSEL WITH OBSERVER ONBOARD. UNKNOWN IF FULLY DISENTANGLED, THUS ASSIGNED AS A PRORATED SERIOUS INJURY. NEED ADDITIONAL INFO FROM OBSERVER PROGRAM. GEAR CONFIGURATION AND AMOUNT UNKNOWN. OBSERVER PROGRAM.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	4	20	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	THRASHING WHALE SEEN AT DISTANCE WITH TWO BUOYS AND 6-8 CAUDAL PEDUNCLE WRAPS, NOT RESIGHTED. CONFIGURATION AND AMOUNT OF GEAR UNKNOWN. MULTIPLE WRAPS. PHOTOS. FINAL OUTCOME UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	5	8	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	SWIMMING WHALE WITH TWO BUOYS, ONE ORANGE AND ONE RED WITH DUNGENESS CRAB TAG, ON LEFT SIDE OF BODY, ORANGE COLORED LINE. POSSIBLE LEFT PECTORAL WRAP, FLOAT AND LINE DRAPED OVER BODY. ANIMAL APPARENTLY SELF-RELEASED FROM GEAR WAS SEEN SWIMMING GEAR FREE BY FAST RAFT TEAM. GEAR ORIGINALLY SET IN MONTEREY BAY AREA IN LATE MARCH. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	NSI	L10	0.00	Y	N
HUMPBACK WHALE	CA-OR-WA	2016	5	10	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	ENTANGLED WHALE SWIMMING SOUTH, LUNGING AT SURFACE. BUOY, HEAVY LINE FROM A CRAB POT SYSTEM WRAPPED AROUND BOTH SIDES OF THE WHALE'S FLUKES. WHALE DISENTANGLEMENT TEAM INTERVENED AND WAS ABLE TO PHOTOGRAPH WHALE AND RETRIEVE ENTANGLING GEAR (=RESCUE). ANIMAL LAST SEEN ALIVE, FREE OF GEAR, IN GOOD BODY CONDITION.	NSI	L3	0.00	Y	N
HUMPBACK WHALE	CA-OR-WA	2016	5	12	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	GREEN AND ORANGE LINES OVER BODY AND FLUKES. 2 BUOYS ASSOCIATED WITH GEAR. LAST SEEN ALIVE, LIKELY WITH REMAINING TRAILING GEAR. GEAR WAS POSITIVELY-IDENTIFIED AND MATCHED GEAR THAT WAS INVOLVED IN APRIL 11, 2016 ENTANGLEMENT IN SAME AREA. ABOUT 50 FT OF LINE AND A RED BUOY WAS REMOVED BY THE REPORTING PARTY AND THEN THE WHALE DOVE AND SWAM OFF. LINE WAS STILL VISIBLE AROUND THE TAIL, IN ADDITION TO AN ORANGE BUOY. FINAL GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	5	17	WA/OR/CA SABLEFISH POT FISHERY	LINCOLN	OR	SI	ALERT WHALE WITH GOOD BODY CONDITION WAS ENTANGLED IN VERTICAL LINE, HIGH ON THE TAIL STOCK WITH SABLEFISH POT/TRAP GEAR AND THREE POLY BALLS (ONE ORANGE, ONE BLUE, AND ONE WHITE) AND A HIGH FLYER (20 FT, ALUMINUM POLE WITH FLAG AND PHOTO SENSITIVE LIGHT WITH 3/4" LINE. WHALE WAS DESCRIBED AS SOMETIMES BEING VERTICAL IN THE WATER WHEN SURFACING TO BREATHE. EVIDENCE THAT THE WHALE WAS ANCHORED IN PLACE. PHOTO EVIDENCE SUGGESTS THE GEAR WAS ~ 40 FEET BEHIND THE WHALE = TRAILING GEAR. DISENTANGLEMENT EFFORT BY CREW OF FISHING VESSEL. SOME GEAR REMAINED ON ANIMAL AFTER DISENTANGLEMENT EFFORT (=RESCUE). WHALE DESCRIBED AS SWIMMING OFF QUICKLY AFTER SOME GEAR WAS REMOVED. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	5	17	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	WHALE BOBBING NEAR SURFACE, 2 YELLOW BUOYS ASSOCIATED. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	5	22	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	BLUE LINE COMING OUT OF THE RIGHT CORNER OF MOUTH, DOWN RIGHT SIDE OF BODY, 4 BUOYS TOTAL; RESIGHTING COMMENT: 100 FEET OF BLUE LINE, 3/4 TO 1 INCH LINE, TRAILING BEHIND WHALE, BELIEVED TO ORIGINATE FROM MOUTH; 4 BUOYS, 3 ORANGE, 1 WHITE; PURPLE TAG OF UNKNOWN SHAPE NOTED FROM PHOTOS ON BUOY. BREACHING AND PECTORAL FIN SLAPPING, SUBMERGING ALL GEAR WHEN DIVING. GEAR CONFIGURATION AND AMOUNT UNKNOWN. WHALE RESIGHTED ON 5/24, STILL ENTANGLED.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	5	22	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	WHALE TRAILING 2 BUOYS (1 ORANGE, 1 GREEN AND WHITE) APPROX. 10 FT. BEHIND FLUKES. ENTANGLEMENT BELIEVED TO INVOLVE FLUKES BUT COULD NOT BE CONFIRMED. WHALE WAS TRAVELING SLOWLY AND DID NOT SHOW FLUKES WHEN DIVING, BUT ALL VISIBLE GEAR WAS SUBMERGED WHEN WHALE DOVE. BUOYS DESCRIBED BY REPORTING PARTY AS CRAB POT BUOYS, BUT THE IDENTITY OF THE FISHERY COULD NOT BE CONFIRMED. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	5	27	UNIDENTIFIED FISHERY INTERACTION	SAN MATEO	CA	SI (PRORATE)	WHALE WITH RED / ORANGE BUOY BEING TRAILED 10 FT. BEHIND. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	6	1	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	SONOMA	CA	SI (PRORATE)	FISHING VESSEL OFF BODEGA BAY REPORTED WHALE ENTANGLED WITH THREE BUOYS CLOSE TO BODY AND TAIL. WHALE RESIGHTED 4 DAYS LATER IN SAME VICINITY AT THE SURFACE, NOT DIVING UNTIL A VESSEL APPROACHED. WHALE DRAGGED BUOYS UNDERWATER UPON DIVING. WHALE WAS SEEN AGAIN OFF SAN DIEGO ON 7/2/2016 AND 7/3/2016, STILL ENTANGLED AND SPYHOPPING, TRAILING 60-70 FT OF LINE, PLUS BUOYS. CONFIRMED DUNGENESS CRAB POT TRAP (CA) FROM PHOTOS. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	6	1	UNIDENTIFIED FISHERY INTERACTION	SANTA BARBARA	CA	SI (PRORATE)	WHALE OFF SANTA CRUZ ISLAND, FEEDING WITH OTHER WHALES, REPORTED TO BE TRAILING 3 BUOYS. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. PHOTOS APPARENTLY TAKEN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	6	2	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	WHALE-WATCHING VESSEL REPORTED WHALE WITH BLUE LINE (MULTIPLE WRAPS) BEHIND BLOWHOLE AND BEHIND DORSAL, 2 YELLOW BULLET BUOYS ON RIGHT SIDE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. PHOTOS TAKEN, INCLUDING FLUKE-ID.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	6	4	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI	MULTIPLE CONSTRICTING WRAPS AT BASE OF LEFT PECTORAL FLIPPER, LINE HANGING DOWN TO TRAP (NOT SEEN), 2 BUOYS: 1 CLOSE TO TIGHT WRAP (WITH DUNGENESS CRAB BUOY TAG POSITIVELY-IDENTIFIED, AS SEEN ON VIDEO, SECOND BUOY ~5 FEET ABOVE (TRAILER BUOY) ; LINE SCAR BY DORSAL FIN. FASTRAFT TEAM WAS ABLE TO ASSESS ANIMAL AND TAKE VIDEO / PHOTOS. DESIGNATED L2 SERIOUS INJURY DUE TO CONSTRICTING WRAPS. FINAL OUTCOME UNKNOWN.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	6	8	UNIDENTIFIED FISHERY INTERACTION	SANTA CRUZ	CA	SI (PRORATE)	REPORT FROM PERSON IN KAYAK WHO ENCOUNTERED WHALE TRAILING ORANGE AND WHITE BUOY 10 FEET BEHIND WHALE. BUOY SUBMERGED WHEN WHALE DOVE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	6	9	GILLNET FISHERY	MONTEREY	CA	NSI	GREEN MONOFILAMENT NETTING, RIGHT SIDE OF MOUTH, DRAPED OVER BODY, SOMETIMES OVER DORSAL FIN. NET EXITING MOUTH AND TRAILING. ANIMAL BREACHING. ANIMAL IN APPARENT GOOD HEALTH WITH MINIMAL AMOUNT OF GEAR. FINAL OUTCOME UNKNOWN.	NSI	L3	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	6	12	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	VANCOUVER ISLAND	BRITISH COLUMBIA	SI	LINE DEEPLY EMBEDDED IN TAILSTOCK, TRAILING 3 BUOYS. SIGNIFICANT SCARRING AROUND THE TAIL STOCK AND ROPE INJURIES ON THE ANTERIOR EDGES OF BOTH SIDES OF THE FLUKE, THE ROPE WRAP WAS AROUND THE TAIL STOCK AND THERE WAS ALSO A PERPENDICULAR ROPE WRAP ON THE RIGHT SIDE OF THE FLUKE WHICH WAS DEEP INTO THE BLUBBER/FLESH. CONSTRICTING ENTANGLEMENT AND SERIOUS INJURY UNDER CATEGORY L2. FISHERY POSITIVELY-IDENTIFIED THROUGH TAG NUMBERS. FISHERMAN HAD SET APPROX. 500 TRAPS IN BODEGA BAY, CA AREA BETWEEN MARCH 31 AND JUNE 1 OF 2016. FINAL OUTCOME UNKNOWN.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	6	12	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	RED AND WHITE BUOYS (2 TOTAL BUOYS) TRAILING ALONGSIDE BODY. LENGTH OF LINE, AMOUNT OF GEAR AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	6	14	VESSEL STRIKE	LOS ANGELES	CA	DEAD	CAME INTO LOS ANGELES HARBOR ON THE BOW OF A LARGE SHIP. WORKING LOCATION AND LIMITED TIME FOR SAMPLING BEFORE ANIMAL WAS TOWED OUT OF THE HARBOR PREVENTED US FROM PREFORMING FULL NECROPY. SHIP TRACKER DATA SHOWS A REDUCTION IN SPEED AND A 360 DEGREE MANEUVER MIGHT INDICATE THE ANIMAL WAS STRUCK AT 34 DEG 26' 52.5" N, 125 DEG 23' 01.0" W.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2016	6	17	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI	EMACIATED WHALE SWIMMING WITH 2 UNIQUE SETS OF CA DUNGENESS CRAB POT GEAR THROUGH MOUTH. THE GEAR REPRESENTS TWO SEPARATE VESSELS' BUOYS AND ROPES. CONFIRMED FROM TAG NUMBERS. FAST RAFT TEAM WAS ABLE TO ATTACH TELEMETRY TO WHALE. DESIGNATED SERIOUS INJURY BECAUSE OF EMACIATED CONDITION, WHICH IMPLIES THAT GEAR IN MOUTH HAS INTERFERED WITH FEEDING FOR SOME TIME. HEALTH DECLINE.	SI	L3	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	6	23	VESSEL STRIKE	CLALLAM	WA	SI	AN 87' USCG VESSEL STRUCK A 25-30' HUMPBACK WHALE ON ITS MIDSECTION WITH THE BOW WHILE TRAVELING AT 10-12 KNOTS. THE WHALE WAS OBSERVED 10 FEET IN FRONT OF THE CUTTER BEFORE THE COLLISION TOOK PLACE. NO APPARENT DAMAGE TO THE VESSEL AND THE ANIMAL WAS AT THE SURFACE OF THE WATER AFTER THE COLLISION. THE ANIMAL WAS OBSERVED FOR A PERIOD OF 10 MINUTES POST COLLISION, FOLLOWING THE COLLISION THE ANIMAL DOVE FOR 2 MINUTES AND THEN WAS OBSERVED AT THE SURFACE. FINAL OUTCOME UNKNOWN.	SI	L6A	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	6	24	UNIDENTIFIED FISHERY INTERACTION	SAN MATEO	CA	SI (PRORATE)	WHALE SWIMMING AND DIVING, TRAILING 2 SETS OF YELLOW/WHITE/ORANGE BUOYS ABOUT 5 FEET BEHIND THE BLOWHOLE AND TRAILING LINE 100 FEET BEHIND ANIMAL. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. FINAL OUTCOME UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	7	5	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	WHALE TRAILING YELLOW AND BLUE CRAB BUOY AND 30 FEET OF LINE. FISHERY IDENTIFIED FROM BUOY TAG. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	7	6	VESSEL STRIKE	SAN MATEO	CA	DEAD	9.7 METER MALE WITH EVIDENCE OF HEMORRHAGING AND EDEMA INTERNALLY. DORSAL AND LATERAL PROCESS FRACTURES TO CERVICAL VERTEBRAE C1-C3. NECROPSY DONE BY THE MARINE MAMMAL CENTER.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2016	7	24	VESSEL STRIKE	SAN MATEO	CA	DEAD	10.9 METER FEMALE HUMPBACK. PHOTOS SHOW GOOD BODY CONDITION. MULTIPLE FRACTURES OF CAUDAL SKULL WITH SHARDS ON BONE LOOSE IN NECROTIC TISSUE. NECROPSIED BY THE MARINE MAMMAL CENTER. FINDINGS CONSISTENT WITH BLUNT FORCE TRAUMA DUE TO VESSEL STRIKE.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2016	8	1	UNIDENTIFIED FISHERY INTERACTION	SAN LUIS OBISPO	CA	SI (PRORATE)	1 MILE WEST OF OCEANO DUNES. WHALE STAYING AT SURFACE, TRAILING 4 OR 5 BUOYS IN LINE, 30 FEET OR MORE BEHIND WHALE, BLUE ROPE ON HEAD OF WHALE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. NO RESIGHTS.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	8	6	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	ORANGE	CA	SI	PHOTOS SHOW WHALE WITH BLUE LINE THROUGH MOUTH, CONSTRICTING AROUND LEFT FLIPPER, WITH RED/PINK LACERATIONS. TWO BUOYS WITH LENGTH OF LINE IN EXCESS OF WHALE TRAILING. MULTIPLE RESIGHTS OF WHALE THROUGH 12/8/2016. PARTIAL DISENTANGLEMENT ON 9/5/2016 BUT ANIMAL STILL TRAILED GEAR. PHOTOS ON 9/14 SHOW LINE STILL WRAPPED AROUND LEFT FLIPPER, WITH DEEPER LACERATIONS THAN ORIGINAL 8/6 PHOTOS. FINAL PHOTOS OF WHALE ON 12/8 SHOW DISCOLORED DORSAL SURFACE OF WHALE. GRAYISH, WITH BIOLOGICAL GROWTH (DIATOMS?). HEALTH DECLINE AND CONSTRICTING NATURE OF ENTANGLEMENT AND DETERIORATING CONDITION WARRANTS SERIOUS INJURY. ANIMAL SEEN MONTHS LATER, WITHOUT GEAR. ON 4/20/2017, THIS SAME WHALE, WELL-KNOWN BY THE NAME 'SCARLETT' LOCALLY, WAS FOUND DEAD IN ORANGE COUNTY, CALIFORNIA.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	8	9	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI	RED/ORANGE LINE COMING OUT OF ANTERIOR BASE OF MOUTH AND WRAPPED TIGHTLY AROUND BASE OF RIGHT FLIPPER. TRAILING LINE WITH 2 BUOYS. LINE LENGTH APPEARS ROUGHLY 2X - 3X LENGTH OF WHALE. GEAR POSITIVELY-IDENTIFIED BY BUOY/TAG NUMBER. EVIDENCE OF CONSTRICTING ENTANGLEMENT. GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	8	12	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	LINE AROUND BODY BEHIND BLOWHOLE. TRAILING ONE BUOY APPROX. 20 FT BEHIND WHALE. BUOY SUBMERGES WHEN WHALE DIVES. CONFIGURATION AND AMOUNT OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	8	16	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI	EMACIATED WHALE WITH DISCOLORED GRAY SKIN AND APPARENT DIATOM GROWTH, TRAILING TWO BUOYS AND 20 FT. OF LINE. FISHERY CONFIRMED VIA BUOY TAG. CONDITION OF WHALE WARRANTS SERIOUS INJURY DESIGNATION. AMOUNT OF GEAR AND CONFIGURATION UNKNOWN, BUT LIKELY HAS INTERFERED WITH FEEDING, WHICH SUGGESTS INGESTION OF GEAR. DOCUMENTED HEALTH DECLINE.	SI	L10	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	8	16	UNIDENTIFIED FISHERY INTERACTION	SAN FRANCISCO	CA	SI (PRORATE)	WHALE SEEN WITH LINE AND A SINGLE BUOY TRAILING BEHIND IT. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	8	24	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	TRAILING 2 WHITE BUOYS WITH BLACK TOPS (10 FEET APART) AND 1 YELLOW BUOY, 100 FT BEHIND WHALE, BUOYS FOULED. CDFW DUNGENESS CRAB TRAP TAG. CONFIGURATION AND AMOUNT OF GEAR UNKNOWN. ANIMAL LAST SEEN SWIMMING WITH ENTANGLEMENT.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	8	24	UNIDENTIFIED FISHERY INTERACTION	SAN LUIS OBISPO	CA	SI (PRORATE)	2 MILES OFF MORRO ROCK. ORANGE/BROWN LINE WITH ORANGE FLOAT TRAILING FROM RIGHT SIDE OF BODY, BUT VERY CLOSE TO BODY, BUOY NEAR RIGHT PECTORAL FLIPPER; GEAR IS POSSIBLY ATTACHED TO LEFT SIDE, DRAPED OVER BACK AND FLOATING ON RIGHT SIDE. MOVING AND FEEDING WITH SOCIAL GROUP OF HUMPBACKS, DIVING. ANIMAL RESIGHTED THROUGH 8/26. PHOTOS AND VIDEO REVIEWED. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	8	24	UNIDENTIFIED FISHERY INTERACTION	SANTA BARBARA	CA	SI (PRORATE)	ONE RED POLYBALL (STILL INFLATED) BEING TRAILED A FEW YARDS BEHIND TAIL OF WHALE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	8	27	UNIDENTIFIED FISHERY INTERACTION	SAN FRANCISCO	CA	SI (PRORATE)	WHALE NEAR SE FARALLON ISLAND WITH LARGE BUOY TRAILING 30 FEET BEHIND WRAPS ON TAIL. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	8	28	UNIDENTIFIED FISHERY INTERACTION	SAN LUIS OBISPO	CA	SI (PRORATE)	ACTIVE, DIVING WHALE, TRAVELING WITH OTHER WHALES, TRAILING A SINGLE ORANGE BUOY APPROXIMATELY 20 FEET BEHIND WHALE. PHOTOS REVIEWED. UNKNOWN AMOUNT AND CONFIGURATION OF GEAR.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	8	28	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	WHALE SEEN SWIMMING AND DIVING WITH A SINGLE WRAP OF BLUE LINE APPROXIMATELY 2-3 FEET BEHIND BLOWHOLES. FLUKES SHOW EVIDENCE OF WHITE SCARRING, POSSIBLY RELATED TO THIS ENTANGLEMENT OR POSSIBLY OLDER. ANIMAL OTHERWISE APPEARS HEALTHY. PHOTOS REVIEWED. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	9	16	VESSEL STRIKE	TILLAMOOK	OR	DEAD	CAUDAL HALF OF PEDUNCLE MISSING; BASED ON DAMAGE TO CAUDAL VERTEBRA, BELIEVED TO HAVE BEEN CUT OFF BY PROPELLER; HOWEVER, UNCLEAR AS TO WHETHER DAMAGE OCCURRED PRE- OR POST-MORTEM; ALL INTERNAL ORGANS EXPELLED FROM DECOMPOSITION.; ONLY VENTRAL SIDE OF WHALE COULD BE EXAMINED.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2016	9	17	CA SPOT PRAWN TRAP FISHERY	SAN MATEO	CA	SI	CALIFORNIA SPOT PRAWN TRAP GEAR; BLUE STEEL LINE AROUND ONE PECTORAL FLIPPER AND 4 ORANGE POLY BALLS. RESIGHTED OFF SANTA BARBARA COUNTY ON 10/4/2016 YELLOW ROPE AROUND MIDSECTION AND A "4-INCH LACERATION", THOUGH THE LOCATION OF THE LACERATION IS NOT PROVIDED. PHOTOS DO NOT SHOW LACERATION AND SHOW APPARENT MARINE GROWTH ON ROPES. INTERVIEW WITH FISHERMAN INDICATES THAT ONE OF THE BUOYS IS FROM A SET MADE AT THE END OF AUGUST WEST OF SAN MATEO IN 100 FATHOMS OF WATER, WITH APPROXIMATELY 120 FATHOMS OF LINE. FISHERMAN RECOVERED HIS GEAR AND ASSUMES THAT ALL THAT REMAINS ON WHALE IS LINES AND BUOYS. DESIGNATED AS A SERIOUS INJURY. UNKNOWN AMOUNT AND CONFIGURATION OF GEAR REMAIN ON ANIMAL. FINAL OUTCOME UNKNOWN.	SI	L10	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	9	25	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	MARIN	CA	SI (PRORATE)	COAST GUARD REPORTED WHALE WITH "CRAB POTS AND LINES". WHALE TRAILING 2 ORANGE BUOYS, 1 WHITE BUOY, TRAILING 10 FEET BEHIND DORSAL FIN, CLOSE TO FLUKES. WHALE WAS ABLE TO FLUKE UP AND DIVE. UNSUCCESSFUL SEARCH FOR WHALE, AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	9	26	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	MARIN	CA	SI (PRORATE)	AERIAL PHOTO OF HUMPBACK WHALE, "POSSIBLY ANCHORED" AND "HANGING NEAR SURFACE", WITH PECTORAL FLIPPERS FLARED OUT, TRAILING APPROX. 150 FT. OF LINE AND 4 ORANGE POLYBALLS. NEAR PT. REYES. GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	10	9	UNIDENTIFIED FISHERY INTERACTION	SAN FRANCISCO	CA	SI (PRORATE)	WHALE TRAILING ONE LARGE ORANGE POLYBALL AND ONE SMALLER WHITE POLYBALL NEAR MID-BODY. SEEN AMONG A GROUP OF 30+ FEEDING WHALES. ANIMAL WAS DIVING. PHOTOS SHOW WHALE BETWEEN OBSERVER AND POLYBALLS. SO GEAR IS OBSCURED BY DORSAL SURFACE OF WHALE, BUT OTHERWISE CLEARLY SEEN. CONFIGURATION AND AMOUNT OF GEAR UNKNOWN. NO RESIGHTS.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	10	12	UNIDENTIFIED FISHERY INTERACTION	ORANGE	CA	SI	LINE AND 4 BUOYS (3 ORANGE, 1 WHITE). LINE COMES OUT OF MOUTH ON BOTH SIDES OF WHALE (SEEN FROM DRONE FOOTAGE) AND WRAPS AROUND HEAD OF WHALE POSTERIOR TO BLOWHOLES. LINE APPEARS CONSTRICTING WITH VISIBLE INDENTATION ON DORSAL SURFACE OF BODY. RIGHT PECTORAL FLIPPER APPEARS TO BE PINNED TO BODY. DISENTANGLEMENT TEAM MADE UNSUCCESSFUL ATTEMPT TO REMOVE GEAR. WHALE SEEN DIVING NORMALLY. UNDERWATER VIDEO OF ANIMAL TOO MURKY TO ASSESS SEVERITY OF ENTANGLEMENT. TRAILING LINE DOES NOT EXCEED LENGTH OF WHALE. DESIGNATED AS SERIOUS INJURY UNDER CATEGORY L2 BECAUSE OF EVIDENCE OF CONSTRICTING GEAR. .	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	10	21	GILLNET FISHERY	ORANGE	CA	NSI	WHALE IDENTIFIED AS 'COMET' WITH EITHER GILLNET OR BRAIDED NET AROUND FLUKES, BUT PEDUNCLE APPEARS FREE OF GEAR. MARINE GROWTH ON GEAR MAKES IT UNCLEAR WHETHER OR NOT NET IS MONOFILAMENT OR BRAIDED. ANIMAL DIVING AND SWIMMING NORMALLY. WHALE RESIGHTED OFF LOS ANGELES LATER THAT WEEK. BARNACLE GROWTH ON FLUKES APPEARS TO BE CONTRIBUTING TO THE CONTINUED ATTACHMENT OF NET ON FLUKES. GEAR ORIGIN UNKNOWN. NON-SERIOUS INJURY DUE TO LIMITED DRAPED GEAR ON FLUKES. WHALE SEEN AS RECENTLY AS 2019 GEAR FREE IN GOOD HEALTH.	NSI	L3	0.00	N	N



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	10	26	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	NSI	PHOTOGRAPH OF MONOFILAMENT LINE OVER FLUKES, LINE IS TAUGHT. WHALE WATCH SURVEY. ANIMAL RESIGHTED AND PHOTOGRAPHED LATER THAT DAY AND LINE IS NO LONGER VISIBLE. APPARENT SELF-RELEASE. ANIMAL WAS SEEN FEEDING. ORIGINAL AMOUNT AND CONFIGURATION OF LINE UNKNOWN. RESIGHTED GEAR FREE IN 2019.	NSI	L10	0.00	N	N
HUMPBACK WHALE	CA-OR-WA	2016	11	26	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MEXICO	MEXICO	SI (PRORATE)	WHALE TRAILING CRAB POT, 3 BUOYS AND 100 METERS OF ROPE NEAR CABO SAN LUCAS. DRAWING OF WHALE SHOWS RELATIVE LOCATION OF GEAR WRAPPED AROUND RIGHT PECTORAL FLIPPER. SELF-RELEASE OF GEAR THAT WAS COLLECTED. UNCERTAIN IF WHALE SHED ALL GEAR. PHOTOS SHOW GEAR RECOVERED FROM WHALE AND POSITIVELY-IDENTIFIED FROM LICENSE TAG NUMBER. GEAR ORIGINALLY SET IN SPRING 2017 NEAR SAN FRANCISCO. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	12	3	UNIDENTIFIED FISHERY INTERACTION	SONOMA	CA	SI (PRORATE)	WHALE TRAILING ROPE AND 4 BUOYS, 2 BUOYS NEAR HEAD, 2 NEAR FLUKES. ANIMAL SEEN NEAR BODEGA BAY, CA. THRASHING AT SURFACE, 'LOOKS EXHAUSTED'. TWO TRAILING BUOYS ARE BICOLOR (ORANGE/YELLOW AND RED). LEADING BUOYS ARE WHITE WITH LONGITUDINAL RED BAR. BUOYS LOOK RELATIVELY FRESH AND UNFOULED. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2016	12	8	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	SONOMA	CA	NSI	WHALE WRAPPED AROUND MOUTH AND LEFT SIDE NEAR BODEGA BAY DISENTANGLED FROM LINE AND 10 BUOYS BY COMMERCIAL FISHERMAN (=RESCUE). WHALE WAS BLEEDING, FISHERMEN DESCRIBED GEAR AS CUTTING INTO WHALE (=CONSTRICTING), FISHERMEN SPENT 4 HRS REMOVING ALL GEAR FROM WHALE. WHALE SWAM AROUND AFTER RELEASE FROM GEAR. FISHERY POSITIVELY-IDENTIFIED FROM TRAP TAG. THIS RECORD IS CONSIDERED SEPARATE FROM THE 12/3/2016 RECORD IN SAME REGION BECAUSE OF THE DIFFERENCE IN NUMBER AND COLOR OF BUOYS ASSOCIATED WITH ENTANGLEMENT. WHALE APPEARED HEALTHY. NON-SERIOUS INJURY DUE TO REMOVAL OF ALL GEAR AND APPARENT HEALTH OF ANIMAL.	NSI	L2	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2016	12	13	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MEXICO	MEXICO	NSI	BAJA CALIFORNIA WHALE WATCH COMPANY REPORTED WHALE ENTANGLED IN 100 FT OF ROPE AND 3 ASSOCIATED BUOYS. UNDERWATER PHOTO SHOWS LINE TRAILING BACK FROM WHALE'S MIDSECTION, APPARENTLY ON THE VENTRUM BECAUSE ORIGIN OF LINE IS NOT VISIBLE FROM DORSAL PERSPECTIVE OF PHOTO. PECTORAL FLIPPERS, FLUKES, AND PEDUNCLE APPEAR FREE OF GEAR. WHALE APPEARS ROBUST AND HEALTHY FROM PHOTOS. FISHERY POSITIVELY-IDENTIFIED FROM TRAP TAG AFTER GEAR WAS REMOVED AND COLLECTED FROM WHALE. WHALE DID NOT SHOW ANY APPARENT INJURIES POST-RELEASE. ALL GEAR APPARENTLY REMOVED (=RESCUE). BUOYS APPEAR WEATHERED AND NOT NEW.	NSI	L10	0.00	N	N
HUMPBACK WHALE	CA-OR-WA	2017	1	6	DUNGENESS CRAB POT FISHERY (RECREATIONAL)	MEXICO	MEXICO	SI	SAN BLAS, MEXICO (21.525, -105.286). WHALE DESCRIBED AS WEAK AND EMACIATED WITH HIGH CYAMID LOAD HAD MULTIPLE WRAPS ENTANGLED AROUND FLUKES AND A BROKEN POT. ONLY ONE PHOTO OF WHALE FROM BEHIND DOES NOT SHOW GEAR BUT SHOWS A GRAYISH COLORATION TO SKIN. DRAWING OF ENTANGLEMENTS DEPICTS MULTIPLE WRAPS AROUND FLUKES AND PEDUNCLE. COMPLETE GEAR CONFIGURATION UNKNOWN AND DETERMINED TO BE A SERIOUS INJURY DUE TO DOCUMENTED HEALTH DECLINE. GEAR TRACED TO OWNER VIA BUOY INFORMATION TO CALIFORNIA RECREATIONAL DUNGENESS POT THAT WAS ORIGINALLY SET IN CENTRAL CALIFORNIA WATERS ON 11/5/2016 (APPROX POSITION = 33.54, -122.54. CRAB TRAP WAS LOST ON THAT 1ST DAY (11/5/2016). DISENTANGLEMENT TEAM REMOVED ALL GEAR FROM WHALE. SERIOUS INJURY DUE TO HEALTH DECLINE.	SI	L10	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2017	4	17	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	TRAILING 100 FEET GREEN LINE, TRAILING SIDE OF BODY, 2 FLOATS, 1 RED, 1 WHITE. GEAR POSITIVELY IDENTIFIED AS CALIFORNIA DUNGENESS CRAB POT GEAR AFTER DISENTANGLEMENT TEAM (=RESCUE) CUT AND REMOVED LINE AND BUOYS BEHIND THE MOUTH. IT WAS THOUGHT THAT PERHAPS 30 FEET OF LINE REMAINED ON ANIMAL AFTER DISENTANGLEMENT MISSION. LINE APPEARED TO BE COMING OUT OF LEFT SIDE OF MOUTH. NO LINE VISIBLE ON THE LEFT PECTORAL OR FLUKE. LINE WAS INITIALLY DRAPED OVER THE BACK OF THE WHALE BUT HAD SLID OFF DURING DISENTANGLEMENT ENCOUNTER. CONFIGURATION OF REMAINING GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2017	6	17	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	SWIMMING WHALE WITH ORANGE LINE ACROSS LEFT SIDE OF BODY. GEAR CONFIGURATION AND AMOUNT UNKNOWN. WHALE NOT SEEN AGAIN, ONLY ONE PHOTO REVIEWED, SHOWS A SINGLE LINE ON LEFT SIDE OF ANIMAL.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2017	6	18	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	TWO BUOYS ON RIGHT SIDE TRAILING BEHIND THE FLUKE, LINE (LIGHT OR WHITE) APPEARS TO BE RUNNING UNDERNEATH THE BODY FROM THE RIGHT PECTORAL FIN AND/OR UNDERNEATH THE HEAD OVER THE RIGHT SIDE OF FLUKES (AS NOTED FROM PHOTO/VIDEO); ADDITIONAL SCARRING FROM OLD ENTANGLEMENT ON PEDUNCLE. FISHERY SOURCE CONFIRMED BY FISHERMAN VIA PHOTOS OF BUOYS AND TRAP NUMBERS. THE ENTANGLING GEAR HAD BEEN SET IN HALF MOON BAY. PREVIOUS SIGHTING OF THIS WHALE, KNOWN AS 'TRAINWRECK' WAS ON 5/22/2017 AND WAS NOT ENTANGLED AT THAT TIME. FINAL OUTCOME UNKNOWN, FULL CONFIGURATION AND AMOUNT OF GEAR UNKNOWN. NO VISIBLE INJURIES OTHER THAN OLD SCARRING NEAR PEDUNCLE. WHALE RESIGHTED IN 2019 GEAR FREE.	NSI	L10	0.00	Y	N
HUMPBACK WHALE	CA-OR-WA	2017	6	23	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI	BLUE LINE BEHIND DORSAL FIN, CUTTING INTO ANIMAL. GEAR AMOUNT AND CONFIGURATION UNKNOWN. SERIOUS INJURY UNDER L2 BECAUSE OF CONSTRICTING WRAP ENTANGLEMENT. ANIMAL APPEARED TO BE LUNGE FEEDING. FINAL OUTCOME UNKNOWN.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2017	6	25	MARINE DEBRIS	SAN MATEO	CA	SI	WHALE STRUGGLING AT SURFACE AND ANCHORED IN PLACE, NOT RAISING ITS FLUKES OUT OF THE WATER AT ALL. NO GEAR VISIBLE, BUT APPARENT THAT WHALE IS ANCHORED BY SOMETHING. VIDEO / PHOTO REVIEWED BY J. CARRETTA. FINAL OUTCOME UNKNOWN.	SI	L2	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2017	6	28	VESSEL STRIKE	SAN FRANCISCO	CA	SI	CITIZEN TOOK PHOTO OF PLEASURE BOAT HITTING WHALE BELOW GOLDEN GATE BRIDGE. EXTENT OF INJURIES UNKNOWN, SPEED OF VESSEL UNKNOWN, BUT PROBABLY IN EXCESS OF >10KTS BASED ON PHOTO. APPEARS VESSEL IS APPROXIMATELY SAME SIZE AS WHALE.	SI (PRORATE)	L6B	0.20	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2017	7	2	DUNGENESS CRAB POT FISHERY (WASHINGTON)		WA	SI	WHALE WITH LINE WRAPPED AROUND AND CUTTING INTO ANIMAL, MIDWAY BETWEEN FLUKES AND DORSAL HUMP. DEEP AND EXTENSIVELY-WOUNDED AREA IS HEAVILY COVERED IN BARNACLES, INDICATING THE GEAR HAS BEEN ON THE WHALE FOR SOME TIME. CONSTRICTING ENTANGLEMENT. TRAILING AT LEAST TWO BUOYS. WHALE DISENTANGLEMENT TEAM REMOVED MOST GEAR ON 7/29/2017 IN SOUTHERN CA WATERS (=RESCUE). WHALE WAS SUBSEQUENTLY SEEN, GEAR FREE, SWIMMING AND TAIL-SLAPPING ON 7/30/2017 OFF SOUTHERN CALIFORNIA. WHALE APPEARS TO BE IN GOOD HEALTH WITH EXCEPTION OF ENTANGLEMENT INJURY, WHICH APPEARS PINK IN COLOR. GIVEN SEVERITY OF INJURY, SURVIVAL OF WHALE IS UNCERTAIN. FISHERY POSITIVELY-IDENTIFIED FROM RECOVERED GEAR TAG. PHOTOS / VIDEO REVIEWED BY J. CARRETTA.	SI	L5A	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2017	7	13	WA/OR/CA SABLEFISH POT FISHERY AND CA COONSTRIPE SHRIMP POT FISHERY	DEL NORTE	CA	SI	ENTANGLEMENT INVOLVED 25 FT JUVENILE HUMPBACK WHALE TRAILING 400 YARDS OF LINE. SEVERAL SETS OF FIXED FISHING GEAR WRAPPED AROUND THE TAIL FLUKES, THE PECTORAL FINS, AND THE MOUTH. WHALE INITIALLY ENTANGLED IN SABLEFISH ANCHOR GEAR AND THEN DRAGGED THAT GEAR THROUGH SHRIMP GEAR, SO TWO FISHERIES WERE INVOLVED. THE GEAR HAD ANCHORED THE WHALE IN PLACE AND ANIMAL WAS UNABLE TO LIFT ITS FLUKES. DISENTANGLEMENT TEAM WORKED WITH LOCAL FISHERMEN IN A CAREFULLY PLANNED OPERATION TO HAUL UP SOME OF THE HEAVY GEAR WEIGHING DOWN THE TAIL. THAT CREATED ENOUGH SLACK TO LET THE WHALE SURFACE, ALLOWING THE TEAM TO MAKE THE NECESSARY CUTS TO REMOVE ALL THE ENTANGLING GEAR FROM THE WHALE. SHORT VIDEO POST-RELEASE SHOWS WHALE SWIMMING SLOWLY AT SURFACE. APPARENT BODY CONDITION APPEARS HEALTHY FROM PHOTOS. DESIGNATED AS A NON-SERIOUS INJURY DUE TO RESCUE / INTERVENTION AND COMPLETE REMOVAL OF GEAR.	NSI	L2	0.00	Y	N
HUMPBACK WHALE	CA-OR-WA	2017	7	23	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI	THICK BLUE LINE DEEPLY EMBEDDED BEHIND BLOWHOLE AND A WRAP OF LEFT PECTORAL FLIPPER, CONNECTING TO MOUTH. THE EMBEDDED LINE HAS CUT INTO THE BLUBBER LAYER OF THE WHALE. LINE AROUND LEFT FLIPPER HAS AN X-SHAPED CONFIGURATION AROUND BASE OF FLIPPER, INDICATING A CONSTRICTING WRAP. ANIMAL DESCRIBED AS AGITATED AND BREACHING, WITH TAIL SLAPPING BEHAVIOR. ANIMAL RESIGHTED 8/19/2017, STILL ENTANGLED. FINAL OUTCOME UNKNOWN.	SI	L2	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2017	8	23	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI	TWO LINES; ONE ACROSS OR JUST IN FRONT OF BLOW HOLE, ONE CLOSE BEHIND THE BLOWHOLE ON HEAD; SIGNIFICANT ABRASIONS NOTED ON UNDERSIDE OF TAIL STOCK AND LEADING EDGE OF THE FLUKE. WHALE WAS EMACIATED. GEAR AMOUNT AND CONFIGURATION UNKNOWN, BUT SERIOUS INJURY DUE TO APPARENT HEALTH DECLINE OF WHALE. .	SI	L10	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2017	8	23	UNIDENTIFIED FISHERY INTERACTION	COOS	OR	SI (PRORATE)	ENTANGLEMENT INVOLVED THE RIGHT FLIPPER AND THE TAIL, WITH LINE TRAILING TO TWO WHITE BUOYS ABOUT 50 TO 100' BEHIND THE WHALE. LINE WAS ALSO OBSERVED DESCENDING TOWARDS THE SEAFLOOR. EST - 3/8" LINE - LIGHT COLOR; DESCRIPTION DEEMED SPECIFIC AND DETAILED ENOUGH, COMING FROM A PROFESSIONAL MARINER, TO WARRANT CONFIRMATION EVEN THOUGH PHOTO IS OF LOW QUALITY AND DOES NOT PROVIDE EVIDENCE OF ENTANGLEMENT. SINGLE PHOTO REVIEWED BY J. CARRETTA, WHICH DOES NOT SHOW ENOUGH OF WHALE OR CONTEXT FOR FURTHER ASSESSMENT. GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2017	9	3	POT FISHERY, TRIBAL	SAN DIEGO	CA	SI	VIDEO SHOWS MOTIONLESS WHALE WITH HIGH CYAMID LOAD. LINE COMING OUT OF RIGHT SIDE OF MOUTH AND ANOTHER PIECE ON RIGHT PECTORAL FLIPPER. DEEP LACERATION ON HEAD OF WHALE JUST ANTERIOR TO BLOWHOLE AND ANOTHER DEEP LACERATION ON THE RIGHT FLIPPER. GEAR RECOVERED BY MEMBERS OF THE PUBLIC AND EVENTUALLY IDENTIFIED AS WASHINGTON STATE TRIBAL DUNGENESS POT GEAR. SURVIVAL OF WHALE DOUBTFUL BASED ON HEALTH DECLINE. VIDEO REVIEWED BY J. CARRETTA.	SI	L5A	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2017	9	20	UNIDENTIFIED FISHERY INTERACTION	ORANGE	CA	SI (PRORATE)	DISTANT PHOTOS OF BREACHING HUMPBACK SHOW BLUE/GREEN LINE UNDERNEATH BASE OF LEFT PECTORAL FLIPPER AND THROUGH BOTH SIDES OF MOUTH. ANIMAL APPEARED TO BE IN GOOD HEALTH. GEAR AMOUNT AND CONFIGURATION UNKNOWN. .	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2017	10	2	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI	LINE ACROSS BACK IN FRONT OF DORSAL FIN, STARTING TO BECOME EMBEDDED. RECENT PHOTO OF WHALE FROM 9/4 SHOWS WHALE WITHOUT ENTANGLEMENT, SO THIS IS A RELATIVELY RECENT ENTANGLEMENT. THERE ARE TWO LINES TRAILING BEHIND THE FLUKES. ONE GOES ABOUT 2/3RDS BODY LENGTH BACK AND IS RUNNING FREE. THE OTHER ALMOST EXACTLY THE WIDTH OF THE FLUKES WITH TWO OBJECTS ATTACHED ONE OF WHICH IS LIKELY A BULLET BUOY AT THE END AND THE OTHER IS FLATTENED AND FISHES IN THE CURRENT. THE LATTER MAY BE A WAD OF LINE AROUND ANOTHER BUOY. THE TWO LINES ARE FAIRLY SEPARATED BUT TWIST CLOSE TO THE FLUKES AND PROBABLY ARE TWISTED UNDER THE BODY. BECAUSE TWO LINES WERE DETECTED TRAILING THE ANIMAL IT IS THOUGHT THAT THERE IS NO TRAP ATTACHED. EVIDENCE OF LINE EMBEDDING IN WHALE WARRANTS A SERIOUS INJURY UNDER CATEGORY L2 (CONSTRICTING ENTANGLEMENT). THE LINE OVER THE BACK IS NOT THAT TIGHT. (SLIDE BETWEEN 39 SEC AND 40 SEC TO SEE THAT IT IS LOOSE ENOUGH ON THE LEFT SIDE TO SLIDE ANTERIORLY-POSTERIORLY.) BUT RUNS ANTERIORLY AND DOWN. THAT IT LOOPS OVER THE BACK AND RUNS FORWARD SUGGESTS TO ME THAT THE FLIPPERS MAY BE CONSTRAINED OR IT TWISTS UNDERNEATH. AND IT RUNS PROBABLY THROUGH THE MOUTH. THE RIGHT SIDE RUNS MORE ACUTELY TOWARDS THE RIGHT PEC. IT MAY RUN UNDER THE RIGHT PEC THEN TO THE GAPE OF THE MOUTH. THE LEFT SIDE RUNS MORE STRAIGHT DOWN AND I SUSPECT IS TWISTED UNDERNEATH BEFORE RUNNING FORWARD.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2017	10	6	GILLNET FISHERY	SAN JUAN	WA	SI (PRORATE)	WELL-MARKED WHALE INITIALLY SEEN WITH GREEN GILLNET AROUND ROSTRUM AND THROUGH MOUTH NEAR SAN JUAN ISLAND. WHALE SEEN SEVERAL TIMES THEREAFTER, AS LATE AS DECEMBER 2017. TEAM APPROACHED WHALE AND TOOK PHOTOS AND VIDEO AND COULD NOT FIND ANY REMAINING GILLNET. ANIMAL IS THOUGHT TO HAVE SELF-RELEASED FROM GEAR. ORIGINAL GEAR CONFIGURATION AND AMOUNT IS UNKNOWN. WHALE RESIGHTED ON 10/8/2018 GEAR FREE.	NSI	L10	0.00	Y	N
HUMPBACK WHALE	CA-OR-WA	2017	11	25	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	ORANGE LINE AROUND TORSO FORWARD OF ITS DORSAL FIN, ORANGE AND GREEN LINE REPORTED BY FISHERMAN, TRAILING 40-50 FEET OF LINE BEHIND, ANIMAL SELF-RELEASED. APPROACHED AND PHOTOGRAPHED / VIDEO BY P. STAPP. VIDEO SHOWS WHALE FREE OF GEAR AND WITHOUT APPARENT INJURY, IN THE COMPANY OF ANOTHER HUMPBACK.	NSI	L10	0.00	Y	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2017	12	6	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI	ANCHORED WITH BODY WRAP, ANIMAL NOT FLUKING. AT LEAST TWO WRAPS AROUND CAUDAL PEDUNCLE AND LINES EXTENDING TOWARDS FLIPPERS LOW ON BOTH SIDES OF BODY. MULTIPLE WRAPS. ONE GREEN LINE AND 1 RED LINE CLEARLY RUNNING FROM TANGLE OF BUOYS OVER BODY TOWARD HEAD/MOUTH. GEAR SHIFTS AS WHALE SURFACES; 2 WHITE BULLET BUOYS WITH GREEN ENDS PLUS LIGHT BLUE BUOY TAG-LICENSE NUMBER USED TO CONFIRM FISHERY. 5 BUOYS TOTAL AND A TANGLE OF LINES. AT LEAST 3 SETS INVOLVED.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2017	12	29	DUNGENESS CRAB POT FISHERY (WASHINGTON)	MEXICO	MX	SI	GREEN LINE WRAPPED TWICE AROUND BODY BEHIND HEAD AND FORWARD OF DORSAL HUMP. 2 ORANGE/YELLOW BUOYS TRAILING, BUOYS HAVE WHAT APPEARS TO BE A ROUND, PURPLE TAG (CONSISTENT WITH WA DUNGENESS CRAB). LINES APPEAR TO BE SNUGLY WRAPPED AROUND BODY AND AT LEAST ONE INDENTATION FROM LINE IS EVIDENT ON BODY. OBSERVERS WERE NOT ABLE TO RELOCATE WHALE, WHICH OTHERWISE LOOKED HEALTHY. MULTIPLE WRAPS AND CONSTRICTING ENTANGLEMENT. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. .	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	4	29	DUNGENESS CRAB POT FISHERY (WASHINGTON)	GRAYS HARBOR	WA	SI (PRORATE)	PHOTOS SHOW WHALE WITH LINES AND MULTIPLE BUOYS TRAILING BEHIND AND OVER DORSAL ASPECT OF WHALE. YELLOW OVAL TAGS VISIBLE ON TWO BUOYS (1 ON EACH). REPORTING PARTY NARRATIVE AND PHOTOS SHOW EVIDENCE OF A WHALE THAT IS ANCHORED. CHARTER VESSEL MADE UNAUTHORIZED ATTEMPT TO REMOVE GEAR FROM WHALE. AMOUNT AND CONFIGURATION OF GEAR REMAINING ON WHALE IS UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	5	13	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT		CA	SI (PRORATE)	TWO LARGE WHALES THAT APPEARED TO BE "ENTANGLED TOGETHER" 8.5 MILES OUTSIDE OF GOLDEN GATE BRIDGE. ENTANGLEMENT WAS DESCRIBED AS 4 BUOYS, 2 SETS OF "CRAB POT BUOYS" WRAPPED AROUND MAIN PART OF ONE OF THE WHALES. NO RESIGHTS. BASED ON NARRATIVE, ONLY ONE WHALE IS CONFIRMED ENTANGLED, THOUGH TWO MAY HAVE BEEN PRESENT AND IN CLOSE PROXIMITY. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2018	5	14	UNIDENTIFIED FISHERY INTERACTION	SAN LUIS OBISPO	CA	SI	SINGLE WRAP OF GREEN/BLUE LINE BEHIND BLOWHOLE AND IN FRONT OF DORSAL FIN. LINE IS SNUGLY AROUND ANIMAL. FREE-SWIMMING ANIMAL RESIGHTED NEXT DAY, OUTCOME UNKNOWN. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. CONSTRICTING ENTANGLEMENT BECAUSE LINE IS TIGHT AROUND ANIMAL.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	5	16	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	FREE-SWIMMING WHALE TRAILING 2 WHITE BUOYS APPROXIMATELY 70 FT. BEHIND FLUKES. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	5	17	DUNGENESS CRAB POT FISHERY (WASHINGTON)	GRAYS HARBOR	WA	DEAD	GREEN AND WHITE LINE WRAPPED TIGHTLY AROUND LEFT PECTORAL, PASSING THROUGH LEFT GAPE. EVIDENCE OF A WRAP AROUND THROAT (BLOATING LIKELY CAUSED ROPE TO SNAP, FRAYED ENDS VISIBLE. GREEN, ORANGE, AND WHITE LINES WRAPPED AROUND TAILSTOCK. FAINT IMPRESSIONS ACROSS VENTRAL LEFT FLUKE. TRAILING 2 CRAB POTS. ORIGINALLY SEEN WITH 2 ORANGE BUOYS (WHILE FLOATING), ONE VISIBLE IN INITIAL PHOTOS OF THE BEACH LANDING, BUT HAD BEEN REMOVED BY UNKNOWN PERSONS PRIOR TO EXAMINATION. WCR REPORTS THAT GEAR INCLUDED BOTH WA STATE AND TRIBAL FISHERIES. EVIDENCE OF CONSTRICTING WRAP.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2018	5	23	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI	MULTIPLE BUOYS AND LINES WRAPPED SNUGLY AROUND THE TAILSTOCK AREA OF THE FLUKES. MULTIPLE WRAPS WITH CONSTRICTING LINE. AT LEAST TWO SETS OF GEAR INVOLVED IN THE ENTANGLEMENT, WITH CALIFORNIA AND OREGON TAGS PRESENT. MASS OF LINES ON DORSAL SIDE OF FLUKE WITH LINE WRAPPING UNDERNEATH THE TAILSTOCK AND COMING BACK OVER TOP ON BOTH FLUKE BLADES AND MEETING AT LARGE MASS IN CENTER OF FLUKE. GEAR MASS AND DRAG POTENTIAL WARRANT THIS CASE BEING DESIGNATED A SERIOUS INJURY UNDER CRITERIA L2. . TELEMETRY BUOYS WERE ATTACHED BY WHALE DISENTANGLEMENT TEAM, BUT DID NOT REMAIN ON WHEN WHALE DOVE. FISHERMAN WAS INTERVIEWED AND HAD BEEN FISHING NEAR CRESCENT CITY NEAR TIME OF ENTANGLEMENT. FINAL OUTCOME UNKNOWN.	SI	L2	1.00	Y	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2018	5	27	DUNGENESS CRAB POT FISHERY (COMMERCIAL)	MONTEREY	CA	SI	TWISTED RED/ORANGE LINE (HYDROPRO) WRAPPED TIGHTLY TWICE AROUND BODY, FORWARD OF DORSAL FIN. ABRAIDED AND INDENTED SKIN VISIBLE FROM DRONE FOOTAGE FORWARD OF ROPE, EVIDENCE THAT ROPE HAD MOVED BACKWARDS ON BODY TO CURRENT POSITION. PECTORAL FLIPPERS NOT VISIBLE FROM CLEAR DRONE FOOTAGE. ONE BUOY (WHITE WITH BLACK ON LAST 2/3 OF BUOY) WITH YELLOW DUNGENESS CRAB TAG, POTENTIALLY PINNING RIGHT PECTORAL FLIPPER TO BODY (FROM DRONE FOOTAGE). SERIOUS INJURY UNDER L2 CRITERIA DUE TO CONSTRICTING GEAR AND MULTIPLE WRAPS THAT MAY BE PINNING PECTORAL FLIPPERS. .	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	6	29	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	SAN MATEO	CA	SI (PRORATE)	WHALE WITH LINE AROUND FLUKES WITH YELLOW AND ORANGE BUOYS AT SURFACE TRAILING ABOUT 50 YARDS BEHIND WHALE. BUOYS MOVING IN SAME DIRECTION AS WHALE AND GOING UNDERWATER WHEN WHALE DOVE. BUOYS NOT SEEN IN SAME LOCATION LATER IN THE DAY. 3 BUOYS (POTENTIALLY 4) -- 1 TRI-COLORED WITH ORANGE AND PINK/ RED WITH BLACK STRIPE IN MIDDLE WITH POSSIBLE DUNGENESS CRAB FISHERY TAG. 1 ALL ORANGE WITH SILVER OR WHITE REFLECTIVE TAPE STRIPE IN MIDDLE WITH POSSIBLE PINK TAG. 1 THAT IS HARD TO TELL IF ONE OR TWO BUT YELLOW/ORANGE IN COLOR. POTENTIAL RESIGHT IN MEXICO IN DECEMBER 2018- PHOTOS OF GEAR MATCH-FOLLOWING UP WITH RP FROM MEXICO. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. ONE POOR-QUALITY PHOTO REVIEWED BY J. CARRETTA.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	7	2	GILLNET FISHERY	LOS ANGELES	CA	DEAD	BLUE MESH GILLNET THAT HAS A STRETCH DIAMETER OF JUST UNDER 12", SMALLER THAN THAT USED IN LARGE MESH GILLNET FISHERY. TEN FLOATS ON YELLOW TWISTED POLYPRO LINE (SOME FLOATS WERE BLACK, SOME WERE WHITE); LEAD LINE W/ LEADS ALSO IN TANGLED MASS. VERY SEVERE ENTANGLEMENT THAT HAS BEEN ON THIS WHALE FOR SOMETIME AS INDICATED BY THE DEEP WOUNDS AND HEAVY CYAMID LOAD THAT IS COVERING A LOT OF THE DORSAL SURFACE OF THE BODY. MULTIPLE WRAPS OF GILLNET, ROPE, AND FLOAT FORMING TIGHT NEST AROUND PEDUNCLE AND FLUKES. CONSTRICTING ENTANGLEMENT AND HEALTH DECLINE.	DEAD	NA	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	7	7	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	GRAYS HARBOR	WA	SI (PRORATE)	HUMPBACK TRAILING A SINGLE ORANGE AND WHITE BUOY, POSSIBLY ATTACHED TO LEFT PECTORAL FLIPPER. EXTENT OF ENTANGLEMENT AND AMOUNT OF GEAR UNKNOWN. .	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2018	7	12	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	EMACIATED ADULT COW ENTANGLED WITH ATTENDENT CALF. LINE COMING OUT BOTH SIDES OF THE MOUTH. LEFT SIDE GOES UNDER THE PECTORAL FLIPPER AND HAS THREE BUOYS WITH THE FIRST AT ABOUT THE DORSAL FIN, THE THIRD JUST AT THE LEADING EDGE OF THE FLUKE. LINE COMING OUT RIGHT SIDE OF MOUTH GOES UNDER RIGHT PECTORAL FLIPPER AND DISAPPEARS AND MAY HAVE SOME WEIGHT (POT) ON THE END. ALL THREE BUOYS ORANGE COLORED AND HAVE SIGNIFICANT ALGAL GROWTH, INDICATING ENTANGLEMENT IS NOT RECENT. YELLOW DUNGENESS CRAB POT TAG ON BUOY CLOSEST TO WHALE. FINAL OUTCOME UNKNOWN. PRORATED SERIOUS INJURY WITH VALUE = 1 DUE TO EMACIATED CONDITION AND HEALTH DECLINE. .	SI (PRORATE)	L10	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	7	12	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI	DEPENDENT CALF OF ENTANGLED AND SERIOUSLY-INJURED MOTHER. ASSUMPTION UNDER L8 IS THAT DEPENDENT CALF NOT LIKELY TO SURVIVE.	SI	L8	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	7	15	UNIDENTIFIED FISHERY INTERACTION	MENDOCINO	CA	SI (PRORATE)	MULTIPLE WRAPS OF BLUE/GRAY LINE AROUND BODY WITH A RED BULLET BUOY THAT FORMED A 'BIRD'S NEST' OF GEAR ON DORSAL ASPECT OF WHALE BETWEEN DORSAL FIN AND FLUKES. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	7	18	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MEXICO	MX	DEAD	DEAD HUMPBACK WHALE STRANDED IN MEXICO WITH CALIFORNIA COMMERCIAL DUNGENESS CRAB GEAR ENTANGLEMENT. PHOTOS SHOW LINE, 2 BUOYS, AND YELLOW SHIELD TAG WITH NUMBER. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	DEAD	NA	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	7	28	GILLNET FISHERY, TRIBAL	CLALLAM	WA	SI (PRORATE)	TRIBAL FISHERMAN ENTANGLED HUMPBACK WHALE IN GILLNET IN TREATY FISHERY. THREE HOURS LATER, THE FISHERMAN REMOVED AS MUCH GEAR AS POSSIBLE AND THOUGHT THAT SOME LEADLINE GEAR STILL REMAINED ON CAUDAL PEDUNCLE. PHOTOS OF WHALE SHOW IT THRASHING ITS FLUKES. AMOUNT AND CONFIGURATION OF GEAR REMAINING ON WHALE UNKNOWN. .	SI (PRORATE)	L10	0.75	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2018	7	30	UNIDENTIFIED FISHERY INTERACTION	DOUGLAS	OR	SI (PRORATE)	BRIDLE THROUGH MOUTH THAT COMES TO A KNOT FORWARD OF DORSAL HUMP. TRAILING LINE APPEARS TO TERMINATE NEAR THE FLUKES AND SWITCHES FROM THE LEFT TO RIGHT SIDE OF THE BODY. THERE IS ALSO A SHORT LOOP OF LINE EMANATING FROM THE KNOT FORWARD OF THE DORSAL. THE FLIPPERS / FLUKES / TAILSTOCK ARE NOT INVOLVED. WHALE TRAVELING AND FLUKING AT MODERATE SPEED WITH ANOTHER HUMPBACK. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L3	0.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	8	3	GILLNET FISHERY	CLALLAM	WA	NSI	WHALE WITH GILLNET MESH ATTACHED TO RIGHT FLUKE TIP PHOTOGRAPHED ON 8/3/2018. ANIMAL WAS RESIGHTED ON 9/14/2018 BY MARINE MAMMAL LAB (JEFF HARRIS) AS FREE FROM GEAR, PHOTOS OF ENTANGLEMENT AND POST-ENTANGLEMENT EXAMINED BY J. CARRETTA.	NSI	L3	0.00	N	N
HUMPBACK WHALE	CA-OR-WA	2018	8	5	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	HUMBOLDT	CA	SI	ANCHORED 25 FT. LONG JUVENILE HUMPBACK FIRST REPORTED ON 8/5/2018 WITH LINE EMBEDDED IN DORSAL CAUDAL PENDUNCLE, WITH ASSOCIATED MASSIVE LACERATION NEARLY SEVERING FLUKES. RESEARCHERS ON R/V REUBEN LASKER SIGHTING WHALE DURING A LINE-TRANSECT SURVEY ON 8/7 AND CONTACTED CASCADIA RESEARCH. CASCADIA RESCUE TEAM WAS ABLE TO ATTACH TELEMETRY BUOY ON 8/7/2018, WITH NOAA VESSEL REUBEN LASKER STANDING BY FOR ASSISTANCE. CASCADIA TEAM RETURNED ON 8/8/2018 AND REMOVED LINE AND BUOYS ATTACHED TO A CRAB POT AND WHALE SWAM OFF. GEAR WAS RECOVERED AND RETAINED. BASED ON PHOTOS, THE PROBABILITY OF THE WHALE LOSING ITS FLUKES IS SUBSTANTIAL. SERIOUS INJURY UNDER SERIOUS INJURY CRITERIA L2 AND SEVERITY OF DAMAGE TO CAUDAL PEDUNCLE. CONSTRICTING ENTANGLEMENT. HEALTH DECLINE. .	SI	L2	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2018	8	6	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	GRAYS HARBOR	WA	DEAD	A COMMERCIAL FISHING VESSEL REPORTED A DEAD ENTANGLED HUMPBACK WHALE TO USCG. THE USCG FLEW OVER AND CONFIRMED. WHALE THROAT WAS DISTENDED FLOATING BELLY UP HIGH IN THE WATER. ORANGE BUOYS SEEN NEAR TAILSTOCK IN AERIAL PHOTOS, OBSERVERS FROM SHORE ON 07 AUG REPORTED SEEING BUOYS NEAR WHALE AND CARCASS APPEARED TO BE ANCHORED IN PLACE. ALL LINES AND BUOYS WERE REMOVED BEFORE OUR ARRIVAL. WE WERE ABLE TO CONFIRM THIS AS THE SAME ANIMAL REPORTED ON AUGUST 6TH USING PIGMENTATION ON THE PLEATS FROM BOTH SIGHTINGS. TWO DEEP IMPRESSIONS WITH A THREE-STRAND LINE PATTERN ON THE RIGHT PECTORAL AND LINE MARKS AND ABRASIONS AROUND TAIL STOCK AND PEDUNCLE INDICATED THAT THE WHALE HAD BEEN ENTANGLED RECENTLY. THE TEAM COLLECTED STILL PHOTOGRAPHS AND UNDERWATER IMAGES FROM A GOPRO MOUNTED ON A POLE. NECROPSY: THREE ADDITIONAL LINEAR ABRASIONS ACROSS THE FLUKE TOWARD THE PEDUNCLE. DEEP IMPRESSIONS INDICATE CONSTRICTING ENTANGLEMENT.	DEAD	NA	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	8	11	GILLNET FISHERY, TRIBAL	CLALLAM	WA	SI	FISHERMAN PARTICIPATING IN SOCKEYE GILLNET TREATY FISHERY REPORTED ENTANGLING A WHALE ON 8/11/2018. ESTIMATED TIME OF ENTANGLEMENT WAS 2130 HRS LOCAL. WHALE WAS WRAPPED IN CORKLINE OF NET AND HAD PULLED JACKLIGHT AND FLAGPOLE UNDERWATER. FISHERMAN'S NARRATIVE NOTED WHALE WAS VERY WOUND UP IN NET. EXTENSIVE CONSTRICTING ENTANGLEMENT. WHALE DIED THE NEXT DAY, CARCASS SANK WITH GEAR. NO NECROPSY.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2018	8	11	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	SAN DIEGO	CA	SI	ENTANGLED JUVENILE HUMPBACK SUFFERING A HEALTH DECLINE. ANIMAL'S BODY HAS PATCHES OF RUST-COLORED WHALE LICE. COLORATION OF SKIN APPEARS TO BE LIGHT / DULL, WITH SLOUGHING SKIN. YELLOW POLY LINE SEEN WRAPPED MULTIPLE TIMES AROUND PEDUNCLE, WHERE LINE IS EMBEDDED. MULTIPLE WRAPS AND CONSTRICTING ENTANGLEMENT. APPROXIMATELY 10 FT OF LINE TRAILING BEYOND FLUKES. LARGE AREAS OF ABRADED, RAW PINK SKIN RELATED TO ENTANGLEMENT. .	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	8	11	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	CURRY	OR	SI (PRORATE)	TRAILING TWO BUOYS APPROXIMATELY 1 TO 2 BODY LENGTHS BEHIND ANIMAL. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2018	8	12	GILLNET FISHERY, TRIBAL	CLALLAM	WA	SI (PRORATE)	REPORT OF A HUMPBACK WHALE TRAILING A CORKLINE AND CORKS. PHOTO SHOWS WHALE TRAILING GEAR THAT IS AT LEAST AS LONG AS WHALE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	N	Y
HUMPBACK WHALE	CA-OR-WA	2018	8	26	UNIDENTIFIED FISHERY INTERACTION	SAN FRANCISCO	CA	SI (PRORATE)	WHALE TRAILING 2 BUOYS, A MAIN BUOY (RED/ORANGE) AND A TRAILER BUOY (YELLOW), THE TRAILER WAS ABOUT 20FT BEHIND THE WHALE. THE ATTACHMENT POINT IS UNKNOWN, THE ANIMAL WAS OBSERVED FLUKE-UP DIVING, BUT NO GEAR WAS SEEN ON THE FLUKES DURING THE DIVES. GEAR CONFIGURATION AND AMOUNT UNKNOWN. .	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	8	30	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	CLALLAM	WA	SI (PRORATE)	WHALE REPORTED ENTANGLED IN TWO COMMERCIAL CRAB POT BUOYS. (1 YELLOW AND 1 RED WITH A LOT OF GROWTH ON BOTH). THIS WAS WITNESSED FROM 200 YARDS AWAY. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	9	4	SPOT PRAWN TRAP/POT FISHERY (RECREATIONAL)	MONTEREY	CA	SI	SINGLE WRAP AROUND WHALE RIGHT AT THE TAIL STOCK WITH LINE APPEARING TO LOOP OVER ITSELF OR WRAP AROUND ITSELF UNDER THE FLUKES. WHITE BUOY AND ORANGE POLYBALL CLOSE TO ANIMAL FROM AERIAL PHOTOS. WHALE DESCRIBED AS ANCHORED IN PLACE WITH A FLATTENED BODY POSITION WITHOUT MUCH MOVEMENT. SKIN RAW AND RED/PINK ON DORSAL ASPECT ON CAUDAL PEDUNCLE. EXTENSIVE SCUFF MARKS ON HEAD AND DORSAL FIN AREA. EVIDENCE THAT GEAR HAD MIGRATED FROM FRONT TO REAR OF ANIMAL. THE WHALE BECAME AGITATED WHEN A DISENTANGLEMENT TEAM APPROACHED, AND AT THAT TIME, THE WHALE SHED THE GEAR ON ITS OWN. WHALE REMAINED IN AREA FOR 5 MINUTES, THEN SLOWLY STARTED SWIMMING AWAY, INCREASINGLY USING ITS FLUKES. FISHERY IDENTIFIED FROM RECOVERED GEAR. INTERVIEW WITH FISHERMAN INDICATED GEAR (WITH 3 TRAPS) HAD BEEN SET THE PRIOR DAY. NON-SERIOUS INJURY DUE TO SHED GEAR AND SHORT TIME DURATION OF ENTANGLEMENT.	NSI	L2	0.00	Y	N
HUMPBACK WHALE	CA-OR-WA	2018	9	17	UNIDENTIFIED FISHERY INTERACTION	CLATSOP	OR	SI (PRORATE)	ENTANGLED IN LINE AND FLOATS, BUT NO DESCRIPTION OF WHERE ON ANIMAL. CONFIRMED BASED ON TWO INDEPENDENT SIGHTINGS FROM FISHERMEN. THE ANIMAL WAS UNABLE TO BE RELOCATED BY USCG. NO FURTHER SIGHTINGS. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2018	9	21	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	SAN DIEGO	CA	DEAD	DEAD HUMPBACK CALF FOUND DURING CCES 2018 MARINE MAMMAL CRUISE. WHALE HAD LINE AND BUOYS WRAPPED AROUND TAIL. FISHERY CONFIRMED FROM TAG ON BUOY. .	DEAD	NA	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	9	27	UNIDENTIFIED FISHERY INTERACTION	SAN LUIS OBISPO	CA	SI	HUMPBACK NOT MOVING MUCH WITH CONSTRICTING LINE BETWEEN HEAD AND DORSAL FIN, POSSIBLY ANCHORED. LINE IS INDENTING INTO SKIN AND OTHER INDENTATION MARKS ARE SEEN FROM WHERE LINE HAS MIGRATED TOWARDS REAR OF WHALE. PRIVATE VESSEL INSTRUCTED PASSENGER TO JUMP INTO WATER AND CLIMB ON TOP OF WHALE TO CUT LINE AWAY. UNAUTHORIZED DISTENTANGLEMENT EVENT. WHALE DANGEROUSLY THRASHED ITS FLUKES UPON THIS INTERACTION AND APPEARED TO SWIM OFF AFTER CITIZEN CUT LINE. UNKNOWN IF ALL GEAR WAS REMOVED, THIS IS CONSIDERED A PARTIAL DISENTANGLEMENT. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. VIDEO REVIEWED BY J. CARRETTA.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	9	29	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	NSI	HUMPBACK CALF WITH BLUE/GREEN LINE TRAILING 40-50 FEET WITH THREE BUOYS (GREEN/WHITE) ATTACHED TO RIGHT PECTORAL FLIPPER. GREEN CA DUNGENESS CRAB TAG SEEN ON THE FIRST BUOY. BASED ON AERIAL PHOTOS, LINE MAY BE ATTACHED TO UNDERSIDE OF FLIPPER. WHALE OTHERWISE IN GOOD HEALTH AS SHOWN IN PHOTOS. ACCOMPANIED BY MOTHER. .	NSI	L3	0.00	N	N
HUMPBACK WHALE	CA-OR-WA	2018	9	30	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	SAN LUIS OBISPO	CA	SI (PRORATE)	LINE ATTACHED TO WHALE AT UNKNOWN LOCATION AND CONFIGURATION WITH A RED AND WHITE BUOY ON THE SIDE OF THE WHALE NEAR THE PECTORAL FLIPPER. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. REPORTING PARTY DESCRIBED AS CRAB POT GEAR.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	9	30	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	SAN LUIS OBISPO	CA	SI (PRORATE)	WHALE TRAILING 3 BUOYS TOTAL. 1 "CRAB STYLE" LARGER BUOY WITH 2 SMALLER BUOYS. REPORTING PARTY THOUGHT THEY MAY HAVE ALL BEEN WHITE OR HAD SOME WHITE ON THEM BUT COULDN'T REMEMBER FOR SURE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. DIFFERENTIATED FROM OTHER 9/30/2018 ENTANGLEMENT IN SAME AREA BY NUMBER AND COLOR OF BUOYS.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2018	10	12	DUNGENESS CRAB POT FISHERY (OREGON)	SAN MATEO	CA	SI	MULTIPLE WRAPS OF LINE EMBEDDED DEEPLY AT FLUKE INSERTION WITH 400 FEET OF TRAILING LINE. CONSTRICTING ENTANGLEMENT. WHALE HAD SEVERAL LARGE PATCHES OF ORANGE-COLORED CYAMIDS, INDICATING A HEALTH DECLINE. INITIAL DISENTANGLEMENT RESPONSE REMOVED APPROXIMATELY 350 FEET OF TRAILING LINE. A 2ND DISTENTANGLEMENT EFFORT REMOVED MOST OF THE LOOSE GEAR, BUT EMBEDDED LINE REMAINED. FISHERY POSITIVELY-IDENTIFIED FROM PERMIT TAG ON RECOVERED GEAR. PHOTOS / VIDEO REVIEWED BY J. CARRETTA.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	10	12	CA SPOT PRAWN TRAP FISHERY	MONTEREY	CA	SI (PRORATE)	HUMPBACK CALF ENTANGLED IN CONFIRMED COMMERCIAL SPOT PRAWN GEAR WHICH WAS SET 2 DAYS PRIOR TO OBSERVATION AND PARTIAL RELEASE BY FISHERMAN. LARGE ORANGE BUOY NEAR FORWARD PART OF THE BODY WITH UNKNOWN ATTACHMENT POINT, LIKELY MOUTH OR PECTORAL FLIPPERS. FADED YELLOW BUOY TRAILING ABOUT 30FT BEHIND. BOTH ONLY VISIBLE WHEN SURFACING. FISHERMEN WINCHED UP CALF TO SIDE OF THE BOAT TO MAKE DISENTANGLEMENT CUTS. VERTICAL ASPECT PHOTO SHOWS LINE AND BUOY STILL ON TAIL AFTER REMOVED FROM GROUNDING LINE. NO FURTHER ACTION TAKEN AS WHALE SWAM OFF. AMOUNT AND CONFIGURATION OF REMAINING GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	10	13	VESSEL STRIKE	MARIN	CA	DEAD	NECROPSY FINDINGS. WHALE WAS IN GOOD BODY CONDITION, A BIT THIN, BUT WITH ADEQUATE BLUBBER LAYER. THERE WERE AREAS OF HEMORRHAGE OVER THE DORSAL SURFACE OF THE CRANIUM AND ON THE DORSAL THORAX IMMEDIATELY CRANIAL TO THE DORSAL FIN AND EXTENDING TOWARDS THE CRANIUM. THE VERTEBRAE AND VERTEBRAL DISKS WERE DISBURSED THROUGHOUT THE BODY, MANY OF WHICH HAD PERIOSTEAL DISCOLORATION (BONE BRUISING). THE RIBS WERE INTACT BUT ALSO HAD SIMILAR BONE BRUISING. THE LEFT SCAPULA WAS FOUND 3 METERS AWAY FROM THE BODY WITH FRACTURES AND BONE BRUISING. THE CRANIUM HAD BONE BRUISING ON THE DORSAL SURFACE AND FRACTURES ON THE PARAOCCIPITAL PROCESSES, AND OTIC BULLA.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2018	10	15	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	MENDOCINO	CA	SI (PRORATE)	REPORTING PARTY NOTED 2 ORANGE CRAB POT BUOYS NEAR THE TAIL OF THE WHALE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2018	11	3	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI	PHOTOS SHOW WHALE WITH LARGE DIAGONAL, NARROW-DIAMETER WOUND BETWEEN DORSAL HUMP AND BLOWHOLE. ORIENTATION OF WOUND IS FROM DORSAL SURFACE, EXTENDING DIAGONALLY TOWARDS REAR AND VENTRUM OF WHALE, CONSISTENT WITH A CONSTRICTING LINE EXPERIENCING DRAG. INDENTATION AND LARGE AREAS OF BODY COVERED WITH CYAMIDS, INDICATING A HEALTH DECLINE. PHOTOS INCONCLUSIVE ON WHETHER LINE IS STILL EMBEDDED IN WHALE, BUT INJURY IS CONSISTENT WITH CONSTRICTING ENTANGLEMENT. .	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	11	4	UNIDENTIFIED POT/TRAP FISHERY ENTANGLEMENT	MONTEREY	CA	NSI	LOOSE DRAPED TRAILING LINE (30 FEET) WITH NO APPARENT TENSION AND SINGLE RED AND WHITE BUOY APPEAR TO BE LOOSELY CONNECTED TO UNDERSIDE OF FLUKES, PERHAPS ATTACHED VIA BARNACLES. WHALE FREE-SWIMMING. .	NSI	L3	0.00	N	N
HUMPBACK WHALE	CA-OR-WA	2018	11	17	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	SI	TIGHT WRAP OR WRAPS RIGHT AT THE FLUKE INSERTION WITH SHORT GREEN LINE TRAILING UNDERNEATH FLUKE AND TWO BUOYS APPROX 3 FEET BEHIND THE FLUKES AND ONLY COME TO THE SURFACE WHEN WHALE IS FLUKE UP DIVING. LACERATION IN FLUKE REGION EVIDENT FROM . EVIDENCE OF CONSTRICTING WRAP.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2018	12	3	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MARIN	CA	SI (PRORATE)	MULTIPLE WRAPS OF LINE OVER / AROUND BODY IN FRONT OF THE DORSAL FIN WITH EVIDENCE THE GEAR HAS MOVED FROM BACK DUE TO ABRASIONS WITH ASSOCIATED SKIN DISCOLORATION. TWO BUOYS NEXT TO THE BODY NEAR THE WRAPS. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. POOR-QUALITY .	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2019	3	24	UNIDENTIFIED FISHERY INTERACTION	VENTURA	CA	SI (PRORATE)	SINGLE ORANGE POLYBALL TRAILING FROM SWIMMING WHALE. BALL SUBMERGES WHEN WHALE DIVES. PHOTOS SHOW WHALE LIFTING FLUKES OUT OF WATER. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2019	4	14	DUNGENESS CRAB POT FISHERY (OREGON)	MEXICO	MEXICO	SI (PRORATE)	WHALE REPORTED IN LORETO MEXICO TRAILING ONE YELLOW BULLET BUOY WITH ODFW TAG AND TWO YELLOW TRAILER BUOYS 10 TO 20 FEET BEHIND WHALE. GEAR HAD BEEN SET NEAR COOS BAY, OREGON, DATE NOT GIVEN. ENTANGLEMENT WAS ON TAILSTOCK WITH SCARRING ON CAUDAL PEDUNCLE. WHALE DISENTANGLED IN MEXICO. PHOTOS OF RECOVERED GEAR REVIEWED BY J. CARRETTA. FULL GEAR AMOUNT AND CONFIGURATION UNKNOWN. UNCONFIRMED IF ALL GEAR REMOVED.	SI (PRORATE)	L10	0.75	Y	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2019	5	5	UNIDENTIFIED FISHERY INTERACTION	SANTA BARBARA	CA	SI (PRORATE)	WHITE FLOATING LINE TRAILING 40 FEET BEHIND WHALE. GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2019	5	28	VESSEL STRIKE	KING	WA	SI	VESSEL STRIKE AT 20:18 LOCAL TIME. A JUVENILE HUMPBACK WHALE SURFACED APPROX 5 FT IN FRONT OF BOW OF 460 FOOT LONG CAR AND PASSENGER FERRY THAT WAS ACCELERATING. SPEED ASSUMED TO BE 5 KTS OR MORE, BASED ON TIME AND LOCATION OF TRANSIT. MULTIPLE PASSENGERS FELT A THUMP AND REPORTED LARGE AMOUNTS OF BLOOD AND OBSERVED WHALE FOR SEVERAL MINUTES OF STRUGGLING AT THE SURFACE. THEN THE ANIMAL DISAPPEARED AT APPROX 20:30PM. THE WSF CAPTAIN CONFIRMED THE STRIKE OF THE WHALE. USCG CONDUCTED SEARCHES BUT WERE UNABLE TO RELOCATE CARCASS. PHOTO PROVIDED BY THE WSF CAMERAS CONFIRM SPECIES AND AGE CLASS ESTIMATE. BASED ON ACCOUNTS OF "FOUNTAINS OF BLOOD", THE SIZE (460 FT) AND SPEED (5 KTS OR GREATER) AND THE SIZE OF THE WHALE, THIS WAS LIKELY A FATAL STRIKE. NATIONAL DATABASE REFERENCE NW-2019-1211867.	SI	L7A	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2019	6	29	DUNGENESS CRAB POT FISHERY (WASHINGTON)	CLALLAM	WA	SI (PRORATE)	WDFW WARDENS DESCRIBED A WHALE ENTANGLED WITH TWO WA STATE DUNGENESS CRAB BUOYS AROUND TAIL. PHOTOS SHOW ONE OR MORE BUOYS AT SURFACE APPROXIMATELY 20-30 FEET BEHIND DORSAL HUMP. GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2019	7	9	DUNGENESS CRAB POT FISHERY (WASHINGTON)	MARIN	CA	SI	PHOTOS SHOW ENTANGLEMENT WITH TIGHT WRAP AROUND TAILSTOCK WITH LINE THAT IS DEEPLY CUTTING INTO THE WHALE. WHALE APPEARS ANCHORED IN PLACE. CONSTRICTING ENTANGLEMENT. PHOTOS ALSO SHOW RECOVERED TRAP TAGS. ENTANGLEMENT APPEARS TO BE CAUGHT UP IN THE MOORING LINE OF THE UCSD CDIP BUOY THAT IS IN THE AREA. 3 BUOYS AND BLUE POLY LINE + CDIP BUOY SEE ATTACHED PHOTO OF MOORING; 3 BUOYS WOULD INDICATE AN OFFSHORE SET. WHALE PARTIALLY DISENTANGLED BY CASCADIA RESEARCH WITH SMALL AMOUNT OF REMAINING GEAR RESPONDERS BELIEVE MAY FALL OUT ON ITS OWN.	NSI	L3	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2019	7	21	VESSEL STRIKE	MARIN	CA	DEAD	CARCASS ORIGINALLY REPORTED TO TMMC IN THE SURF AT WILDCAT BEACH IN POINT REYES NATIONAL SEASHORE ON 7/21/2019. PRNS STAFF CONFIRMED THE CARCASS WAS STILL IN THE SAME LOCATION ON 7/22/2019. CAS, TMMC, AND PRNS CONDUCTED A COMPLETE NECROPSY ON 7/23/2019. ALTHOUGH THE ENTIRE CARCASS WAS INTACT, THE SKULL WAS FRACTURED WITH THE POSTERIOR PORTION OF THE CRANIUM LOOSE ON THE BEACH. ON NECROPSY THE ROSTRUM WAS FRACTURED AND HAD SOME BONE BRUISING. COD WAS BLUNT FORCE TRAUMA CONSISTENT WITH SHIP STRIKE.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2019	7	23	UNIDENTIFIED FISHERY INTERACTION	SAN JUAN	WA	SI (PRORATE)	LINE RUNNING FULL LENGTH OF BODY, DRAPED OVER FLUKES, CAUGHT ON BARNACLES. THE ANCHOR POINT OF THE LINE MAY INVOLVE THE MOUTH. WHALE INITIALLY SEEN IN CANADIAN WATERS WHERE DISENTANGLEMENT TEAM RESPONDED. WHALE WAS RESIGHTED IN U.S. WATERS WITHOUT LINE ON RIGHT SIDE OF ANIMAL, IMPLYING THAT GEAR SHIFTED OR WAS SHED, BUT UNKNOWN. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2019	8	1	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	WHALE WATCH VESSEL REPORTED ENTANGLED HUMPBACK IN LARGE FEEDING AGGREGATION WITH 2 ORANGE/RED BULLET BUOYS WITH BLUE/GREEN LINE AND OLIVE COLORED CDFW COMMERCIAL DUNGENESS CRAB TAG. DESCRIBED AS LIKELY MOUTH OR PECTORAL ENTANGLEMENT WITH BUOYS TRAILING BEHIND RIGHT SIDE OF WHALE. BUOYS DON'T ALWAYS POP UP WHEN WHALE SURFACES. PHOTOS SHOW THAT BUOYS ARE QUITE WEATHERED. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2019	8	6	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	WHALE WATCH NATURALIST REPORTED ENTANGLEMENT OF FREE-SWIMMING ANIMAL IN A FEEDING GROUP WITH THIN-GAUGE LINE OR MONOFILAMENT OVER FLUKE. PHOTOS INCONCLUSIVE, SHOW A WHALE FLUKING UP AT A DISTANCE WITH GEAR NOT VISIBLE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2019	8	7	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	VENTURA	CA	SI	WHALE STRUGGLING TO SWIM NEAR SANTA CRUZ ISLAND. MULTIPLE CONSTRICTING WRAPS AROUND BODY WITH A DEEP, WIDE SCAR COVERED IN CYAMIDS. GEAR WAS OLD AND FADED. WHALE FOUND DEAD ONE WEEK LATER, GEAR CONFIRMATION DETERMINED VIA COLLECTION. GEAR WAS THOUGHT TO BE SET BETWEEN POINT CONCEPTION AND PIEDRAS BLANCAS AND MAY HAVE BEEN FROM 2017/2018 SEASON. .	DEAD	L2	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2019	8	8	UNIDENTIFIED FISHERY INTERACTION	CLALLAM	WA	SI	LINE THROUGH MOUTH - OUT OF RIGHT MOUTH AND UNDER RIGHT FLIPPER TO PEDUNCLE, OUT OF LEFT MOUTH AND UNDER LEFT FLIPPER TO PEDUNCLE, WITH MULTIPLE WRAPS OF THE PEDUNCLE AND FLUKES AND A MESS OF LOOSE LINE AROUND THE PEDUNCLE. PHOTOS SHOW CONSTRICTING WRAPS OF LINE AROUND PEDUNCLE, CUTTING INTO THE ANIMAL WITH MULTIPLE PEDUNCLE LACERATIONS. MULTIPLE SCARS IN ADDITION TO THESE LACERATIONS. FREE-SWIMMING WHALE REACTED LITTLE TO DISENTANGLEMENT TEAM AND WAS EASILY APPROACHED. SUCCESSFULLY DISENTANGLED, WITH ONLY A SMALL PIECE OF GEAR REMAINING THAT MAY FALL OUT ON ITS OWN.	NSI	L3	0.00	Y	N
HUMPBACK WHALE	CA-OR-WA	2019	8	12	HOOK AND LINE FISHERY	MONTEREY	CA	SI (PRORATE)	LOOP OF MONOFILAMENT LINE AROUND TAIL STOCK, CONNECTED UNDER FLUKE, DARK 3 INCH OBJECT THAT LOOKS LIKE A FISHING SINKER NEAR CONNECTION POINT. SUPERFICIAL SCARS ON FLUKES AND PEDUNCLE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	N	Y
HUMPBACK WHALE	CA-OR-WA	2019	8	15	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI	BLUE-GREEN TWISTED LINE TRAILING 60 FEET BEHIND WHALE. LINE CAUGHT ON SOME TUBERCLES ON THE TIP OF THE ROSTRUM BUT MAY HAVE MOVED AFT AND APPEARS AT THE WATER LINE ON THE LEFT SIDE AROUND THE MOUTH-LINE AND GOES OVER THE BODY FORWARD OF THE DORSAL FIN. THE OTHER END OF LINE IS UNDER THE ANIMAL, AND THERE IS AT LEAST ONE TIGHT WRAP AROUND THE PEDUNCLE. CONSTRICTING ENTANGLEMENT. UNAUTHORIZED ATTEMPT TO DISENTANGLE WHALE RESULTED IN TRAILING 50 FEET OF LINE CUT OFF, LEAVING TIGHT WRAP AROUND PEDUNCLE.	SI	L2	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2019	9	1	VESSEL STRIKE	MARIN	CA	SI	SHIP STRIKE WITNESSED BY A MEMBER OF THE PUBLIC AND REPORTED TO THE USCG, AND RESPONDED TO BY THE WHALE WATCHING VESSEL KITTY KAT. STRUCK BY CONTAINER SHIP MSC AZOV (CAPTAIN DENIES), IN SF BAY. WHALE FLOATED ON THE SURFACE, BLEEDING, UNTIL IT FINALLY APPEARED TO HAVE DIED. IT WAS LAST SEEN FLOATING NEAR KIRBY COVE, JUST WEST OF THE GOLDEN GATE BRIDGE. IT DID NOT APPEAR ANY PLACE ON THE OUTER COAST AFTER THIS LAST SIGHTING. **ON OCTOBER 7TH, A REPORT WAS MADE TO CAS OF A "WHALE SOCK" (BLUBBER BUT NO BONES) AT MUSSEL ROCK PARK IN DALY CITY. THIS PARTICULAR AREA IS KNOWN FOR ITS HIGH DEPOSITION OF DEAD MARINE MAMMALS. CAS RESPONDED TO COLLECT TISSUES FOR DNA ANALYSIS AND THE BLUBBER WAS NOT LOCATED. IT IS UNKNOWN IF THIS IS THE REMNANT OF THIS HUMPBACK, AS THERE WERE NOT IDENTIFIABLE FEATURES.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2019	10	2	UNIDENTIFIED FISHERY INTERACTION	LOS ANGELES	CA	SI (PRORATE)	PHOTOS FROM AERIAL FISH SPOTTER PLANE SHOW HUMPBACK WHALE TRAILING LINE FROM FLUKES. WHALE HAS MANY LIGHT PATCHES OF SKIN DORSALLY AND A HEAVY CYAMID LOAD ON THE ROSTRUM AND BLOWHOLE AREA. POOR BODY CONDITION. MULTIPLE PHOTOS APPEAR TO SHOW DAMAGED OR MISSING RIGHT FLUKE BLADE AND WHALE IS SWIMMING ONLY WITH PECTORAL FLIPPERS. HEAVY MARINE GROWTH ON TRAILING LINE, IMPLYING ENTANGLEMENT IS NOT NEW. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. ASSIGNED SERIOUS INJURY WITH PRORATION FACTOR EQUAL TO 1 DUE TO HEALTH DECLINE. .	SI (PRORATE)	L10	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2019	10	23	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	HUMBOLDT	CA	DEAD	WHALE WITH GOOD BODY CONDITION STRANDED ALIVE ENTANGLED IN GEAR AND WAS EUTHANIZED. GEAR DESCRIPTION: TWO CYLINDRICAL BULLET BUOYS AND A MASS OF ORANGE LINE ON ITS LEFT SIDE AND POSSIBLY AROUND THE LEFT PECTORAL WITH LINE GOING THROUGH THE MOUTH AND COMING OUT THE RIGHT SIDE AND ENDING AT THE CRAB POT JUST IN FRONT OF THE RIGHT PECTORAL FLIPPER. APPROXIMATELY 235 FEET OF ROPE RECOVERED. WOUNDS NOTED ON TAIL THAT IMPLY WHALE MAY HAVE BEEN 'HOG-TIED' PRIOR TO STRANDING. GEAR RECOVERED AND POSITIVELY-IDENTIFIED TO FISHERY. GEAR SETS SOMETIME AFTER JANUARY 2019 IN 23 FATHOMS OF WATER. .	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2019	11	21	DUNGENESS CRAB POT FISHERY (COMMERCIAL)	SAN DIEGO	CA	SI	STATIONARY WHALE, LIKELY ANCHORED IN PLACE, WITH NO MOVEMENT FOR 2 TO 3 HOURS. TWO CYLINDRICAL BULLET BUOYS AND A MASS OF LINE ON ITS LEFT SIDE AND POSSIBLY AROUND THE LEFT PECTORAL WITH LINE GOING THROUGH THE MOUTH AND COMING OUT THE RIGHT SIDE AND ENDING AT THE CRAB POT JUST IN FRONT OF THE RIGHT PECTORAL FLIPPER. SEVERE DAMAGE TO CAUDAL PEDUNCLE AND FLUKES, DEEP WOUNDS, PROGRESSING TOWARDS SEVERING / AMPUTATION OF TAIL. CONSTRICTING ENTANGLEMENT. ANIMAL IN POOR HEALTH WITH MANY CYAMIDS ON DORSAL SURFACE. SEA WORLD INTERVENED AND DISENTANGLED WHALE. UNKNOWN IF ALL GEAR WAS REMOVED. NO STATE POT/TRAP TAG ASSOCIATED WITH RECOVERED LINE AND TRAP. .	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2019	12	4	UNIDENTIFIED FISHERY INTERACTION	SANTA CRUZ	CA	SI (PRORATE)	WHALE IS TRAILING TWO BUOYS GREEN/YELLOW AND PINK/ORANGE WITH A 15 FOOT YELLOW LINE ATTACHED. THE BUOYS ARE GOING UP AND DOWN WITH EACH DIVE AND SINK AFTER THE WHALE HAS GONE DOWN AND SURFACE PRIOR TO THE WHALE. ENTANGLEMENT REPORTED AS COMING FROM THE FRONT OF THE ANIMAL EITHER NEAR THE MOUTH OR THE PECTORAL FLIPPERS. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2019	12	9	DUNGENESS CRAB POT FISHERY (RECREATIONAL)	SANTA CRUZ	CA	SI	PHOTOS SHOW FREE-SWIMMING HEALTHY WHALE TRAILING 2 ORANGE BUOYS APPROXIMATELY 30 FEET BEHIND. WHALE IS SWIMMING AND RAISING FLUKES OUT OF THE WATER. SOME SCARRING NOTED ON TAILSTOCK. ENTANGLEMENT DIAGRAM SHOWS LINE WRAPPED AROUND BODY (SINGLE WRAP) BEHIND BLOWHOLE AND AT BASE OF PECTORAL FINS. DIAGRAM OF GEAR CONFIGURATION PLUS PHOTOS IMPLIES LOOSELY WRAPPED GEAR IN A BRIDLE AROUND WHALE. RECREATIONAL GEAR SET OUTSIDE MOSS LANDING HARBOR. FISHERMAN HAS LOST 3 POTS SINCE THE BEGINNING OF THE SEASON WITH ONE OF THEM REPORTED LOST EARLY LAST WEEK, AROUND THE TIME OF THE FIRST ENTANGLEMENT REPORT. HE FISHERS BOTH ROUND AND SQUARE POTS WEIGHTED, LIKELY SQUARE DANIELSON TRAP USING LEADED LINE AND TRAILER BUOYS. THE FISHED DEPTHS RANGE FROM 130-200 FEET WITH 300 FEET OF LINE. HE USES REBAR AND BAR BELLS AS WEIGHT (TYPICALLY 20 LBS). THE FISHERMAN BELIEVES HE HAD 300 FEET OF LINE ON THE TRAP IN TOTAL. HE BELIEVES THE LOST TRAP WENT MISSING AROUND THE SAME TIME THE ENTANGLEMENT WAS REPORTED BASED ON THE LAST TIME THEY WERE SERVICED. WHALE WAS DISENTANGLED ON 12/13/2019, APPROXIMATELY 140 FEET OF LINE RECOVERED. PHOTOS OF ENTANGLED WHALE AND RECOVERED GEAR REVIEWED BY J. CARRETTA.	NSI	L3	0.00	N	N
HUMPBACK WHALE	CA-OR-WA	2020	2	14	GILLNET FISHERY	SAN DIEGO	CA	SI	GILLNET WRAPPED AROUND BOTTOM JAW, CAUGHT ON FRONT RIGHT TUBERCLE DRAPED OVER BODY, WRAPPED TIGHTLY AROUND BODY AND TRAILING OVER FLUKES. LEFT PECTORAL POSSIBLY PINNED. BASED ON AMOUNT OF GEAR AND TIGHT WRAP, CONSIDERED AN EXTENSIVE CONSTRICTING ENTANGLEMENT.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2020	2	28	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	BLACK LINE THROUGH MOUTH RUNNING DOWN BOTH SIDES OF THE BODY, LINE APPEARS TO BE WEIGHTED GIVEN THE INJURIES/RUBBING OFF OF LONG LINEAR PATCH OF SKIN ALONG THE SIDES BEHIND THE PECTORAL FINS. THE INNER LEADING EDGE ADJACENT TO THE TAIL STOCK OF THE FLUKES IS RUBBED RAW. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2020	4	13	CA SPOT PRAWN TRAP FISHERY	SANTA BARBARA	CA	SI (PRORATE)	JUVENILE HUMPBACK CONFIRMED ENTANGLED ENTANGLED AND ANCHORED IN PLACE TO A SPOT PRAWN SET; AT LEAST 4 WRAPS OF LIGHT YELLOW TWISTED LINE TIGHTLY AROUND CAUDAL PEDUNCLE (MULTIPLE SCARS ALONG TAILSTOCK); THEN LINE GOES STRAIGHT DOWN (TWISTING ON ITSELF) TO TRAP; OTHER END OF LINE IS TRAILING OBLONG ORANGE POLY BALL ABOUT 5 FT BEHIND. FISHERMAN INTERVIEWED AND CONFIRMED 10 TRAPS, WITH 120 POUND WEIGHTS; SET ON 4/10/2020; 400 FT OF SINKING LINE RUNNING FROM THE BUOY DOWN, 800FT OF FLOATING LINE RUNNING FROM THERE TO THE ANCHOR. PARTIAL GEAR REMOVAL BY RESCUE TEAM. FINAL GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2020	4	15	UNIDENTIFIED FISHERY INTERACTION	ORANGE	CA	SI	DEPENDENT CALF (SWIMMING WITH LARGER ANIMAL, PRESUMED MOTHER) NEAR CATALINA ISLAND ENTANGLED IN DARK COLORED MESH NETTING ("LOOKED FAIRLY FRESH") WRAPPED ON RIGHT FLUKE BLADE AND TAILSTOCK, TRAILING DARK LINE WITH AT LEAST VERY SMALL 4 RED/ORANGE FLOATS. ENTANGLEMENT LIKELY TO BECOME CONSTRICTING AS ANIMAL GROWS. VIDEO REVIEWED BY J. CARRETTA AND A. HENRY.	SI	L10	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2020	5	16	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	MONTEREY	CA	SI (PRORATE)	CALIFORNIA DUNGENESS CRAB POT COMMERCIAL GEAR CONFIRMED FROM TAGS. PHOTO SHOWS TWO BUOYS AND MULTIPLE TWISTED LINES WRAPPED AROUND FLUKES AND CAUDAL PEDUNCLE AND CUTTING INTO WHALE WITH AREAS OF PINK / WHITE FLESH EXPOSED. CONSTRICTING ENTANGLEMENT. WHALE RESCUE TEAM DISENTANGLED WHALE AND CUT AWAY ALL GEAR. OUTCOME UNKNOWN.	SI (PRORATE)	L2	0.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2020	6	13	DUNGENESS CRAB POT FISHERY (WASHINGTON)	MARIN	CA	DEAD	CARCASS WITH CONSTRICTING PEDUNCLE WRAP ALMOST COMPLETELY AMPUTATING FLUKE. LEFT BLADE MISSING AND RIGHT BLADE NECROTIC. COMMERCIAL DUNGENESS CRAB POT (OREGON). THE ENTANGLEMENT WAS TIGHTLY WRAPPED AROUND PEDUNCLE AT THE INSERTION POINT. THE ENTANGLEMENT HAD CUT ENTIRELY THROUGH THE PEDUNCLE WITH THE FLUKE AND ENTANGLEMENT ATTACHED BY ONLY THE CORD IN HER PEDUNCLE. CONSISTED OF 2 DIFFERENT COLOR BRAIDED ROPES (3/8 INCH FLOATING ORANGE LINE WITH A BLUE TRACER AND WHITE SINKING LINE WITH BLUE TRACER). FOUR BULLET BUOYS ATTACHED (ONE LARGE WHITE-MAIN BUOY; TWO BUOYS WITH ORANGE TIP WITH YELLOW BUTT; ONE SMALLER ORANGE BUOY). THE ENTIRE LEFT SIDE OF THE FLUKE WAS MISSING AND UNKNOWN IF THE CAUSE WAS THE ENTANGLEMENT OR SCAVENGING. BASED ON INTERVIEW WITH FISHERMAN, GEAR WAS SET SOMETIME BETWEEN MID APRIL AND LATE MAY.	DEAD	NA	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2020	7	3	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI	SINGLE LINE ACROSS THE TOP OF THE BODY CUTTING INTO FLESH ANTERIOR TO DORSAL FIN CONNECTED TO A MASS OF TANGLED LINES ON THE RIGHT SIDE OF BODY. CONSTRICTING ENTANGLEMENT. NOTHING TRAILING THE WHALE SO EITHER THERE IS SOMETHING STILL ON THE LINE BELOW THAT IS CAUSING THE DRAG TO PULL THROUGH THE WHALES FLESH; PERHAPS LEFT PECTORAL FLIPPER IS INVOLVED. ABLE TO RELOCATE THE WHALE JUST AS IT STARTED CHIN SLAPPING WHICH GAVE US GOOD LOOKS AT THE DIFFERENT PARTS OF THE BODY. THEN IT BEGAN TAIL SLAPPING. IT APPEARED AS IF IT WAS TRYING TO THROW THE GEAR.	SI	L2	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2020	7	6	VESSEL STRIKE	KING	WA	SI	FERRY STRIKE. VESSEL SIZE IS 362 FEET AND SPEED WAS 13 KTS. PHOTO IMMEDIATELY AFTER STRIKE SHOWS INJURY TO RIGHT SIDE OF ANIMAL NOT PRESENT IN PHOTOS TAKEN AT SIGHTINGS IN DAYS PRIOR. VIDEO JUST AFTER STRIKE SHOWED WHALE ACTING ABNORMALLY AND ANIMAL LAST SEEN 24 MINUTES AFTER IMPACT. PASSENGERS ABOARD PUGET SOUND EXPRESS WERE WATCHING 2 HUMPBACK WHALES AND WITNESSED A FERRY STRIKE TO THE SMALLER OF THE TWO WHALES AT 12:15. WHALE PRESUMED DEAD AFTER EXHAUSTIVE SEARCHES ON 06 JUL AND 07 JULY DURING WHICH THE LARGER OF 2 WHALES WAS SIGHTED BUT SMALLER ONE WAS NOT. NATIONAL DATABASE REFERENCE NW-2020-1226706.	SI	L6A	1.00	N	Y



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Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2020	7	26	VESSEL STRIKE	GRAYS HARBOR	WA	DEAD	CAUSE OF MORTALITY BLUNT FORCE TRAUMA CONSISTENT WITH SHIP STRIKE. VESSEL SIZE AND SPEED UNKNOWN. SEVERAL BROKEN RIBS ON LEFT SIDE NEAR VETERBRAL CONNECTION. MASSIVE INTERNAL BLEEDING IN CHEST CAVITY, HEMATOMA IN BLUBBER/MUSCLE NEAR L PECTORAL FIN. HEALED IMPRESSIONS CONSISTENT WITH ENTANGLEMENT ON TAILSTOCK (WRAP) AND LEADING EDGES OF FLUKES AT INSERTIONS AND A LINE OF IMPRESSIONS ALONG THE THROAT PLEATS BETWEEN THE PEC FINS (APPEARED TO HAVE BEEN WRAPPED)–THESE ARE NOT SUSPECTED TO BE RELATED TO MORTALITY. VESSEL SIZE AND SPEED UNKNOWN.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2020	7	30	UNIDENTIFIED FISHERY INTERACTION	LINCOLN	OR	DEAD	HAKE TRAWL VESSEL PULLED UP A DEAD HUMPBACK IN THEIR NET. BLOATED ANIMAL WITH LARGE MISSING AND SLOUGHING PATCHES OF SKIN. OBVIOUSLY DEAD BEFORE PULLED UP. VESSEL REPORTED THAT CARCASS HAD BUOYS ATTACHED TO AND THERE ARE TWO ORANGE BUOYS SHOWN FROM THE DECK CAMERA PHOTOS. .	DEAD	NA	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2020	8	31	UNIDENTIFIED FISHERY INTERACTION	CLALLAM	WA	SI (PRORATE)	REPORTING PARTY SAW A LINE WRAPPING THE WHOLE BODY BETWEEN THE DORSAL FIN AND FLIPPERS AND IT SURFACED AGAIN AFTER THE BREACH AND HE SAW THE LINE AGAIN - WHICH HE DESCRIBED THE ENTANGLING MATERIAL AS YELLOW 5/8" LINE. OBSERVATION OCCURRED WITHIN 60 FT. OF VESSEL. FULL CONFIGURATION AND AMOUNT OF GEAR UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
HUMPBACK WHALE	CA-OR-WA	2020	9	7	UNIDENTIFIED FISHERY INTERACTION	MENDOCINO	CA	DEAD	FRESH DEAD WITH FAIR BODY CONDITION. PHOTOS SHOWED PROBABLE ENTANGLEMENT INJURIES INCLUDING A) AMPUTATED FLUKES, B) LACERATIONS, ABRASIONS, AND PENETRATING WOUNDS TO THE DORSAL RIDGE AS WELL AS C) A POSSIBLE LINE IMPRESSION ON THE DORSAL SURFACE POSTERIOR TO THE BLOWHOLES DIRECTLY OVER THE SCAPULAE, D) POSSIBLE ABRASIONS ON THE RIGHT PECTORAL FIN, AND E) POSSIBLE LATERAL BRUISING ON THE RIGHT ABDOMEN. CHRONIC ENTANGLEMENT RESULTING IN AMPUTATION OF FLUKES.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
HUMPBACK WHALE	CA-OR-WA	2020	9	27	VESSEL STRIKE	CLALLAM	WA	DEAD	ANIMAL HAD BEEN SEEN ALIVE BY LOCAL WHALE WATCH COMPANY ON 9-22. EVIDENCE OF BLUNT FORCE TRAUMA, CONSISTENT WITH SHIP STRIKE. FIELD OF SUBCUTANEOUS HEMORRHAGE ON LATERAL RIGHT MANDIBLE, CONCENTRATED IN FRONT 1/3 OF MANDIBLE AND RADIATING TO INSERTION OF PECTORAL FIN. TRAUMA MAY EXTEND TOWARD LEFT SIDE MANDIBLE. NO BROKEN BONES OBSERVED BUT CANNOT RULE OUT THE POSSIBILITY OF SMALL FRACTURES THAT WERE MISSED. LAYING ON BACK AND UNABLE TO EXAMINE TOP OF HEAD. EXTENT OF TRUAMAUTIC INJURIES UNDERTERMINED BUT LIKELY SIGNIFICANTLY CONTRIBUTED TO MOBILITY AND MORTALITY. VESSEL SIZE AND SPEED UNKNOWN.	DEAD	NA	1.00	N	Y
HUMPBACK WHALE	CA-OR-WA	2020	10	11	UNIDENTIFIED FISHERY INTERACTION	SAN DIEGO	CA	SI	WHALE WITH OBVIOUS ENTANGLEMENT INJURY AT FLUKE INSERTION POINT AND SCARS / APPARENT RUB MARKS ALONG THE DORSAL MIDLINE POSTERIOR TO DORSAL FIN INDICATING GEAR HAD MOVED ALONG THAT PART OF THE WHALE. WHALE IS ALSO NOT USING ITS FLUKES WHILE TRAVELING (=LIMITED MOBILITY). HEAVY CYAMID LOAD AND DISCOLORED SKIN INDICATING A HEALTH DECLINE. NO GEAR ACTUALLY PRESENT ON WHALE (=GEAR FREE), BUT PHOTOS AND UAV VIDEO ARE UNEQUIVOCAL THAT THIS WHALE WAS PREVIOUSLY-ENTANGLED AND HAS UNDERGONE A HEALTH DECLINE. CONFIGURATION AND AMOUNT OF GEAR UNKNOWN.	SI	L10	1.00	Y	Y
HUMPBACK WHALE	CA-OR-WA	2020	10	13	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	TWO GREEN LINES ON LEFT SIDE OF ROSTRUM AND LINE ACROSS THE ANIMALS BACK, WHICH IS HARD TO SEE IN THE PHOTO. GEAR CONFIGURATION AND AMOUNT UNKNOWN. PRESUMED FULL SELF RELEASE, SEEN GEAR FREE BY HAPPY WHALE IN NOVEMBER.	NSI	L10	0.00	Y	N
HUMPBACK WHALE	CA-OR-WA	2020	10	15	UNIDENTIFIED FISHERY INTERACTION	JEFFERSON	WA	DEAD	WHALE STRANDED ALIVE BUT DIED BY THE FOLLOWING MORNING. NECROPSY IDENTIFIED NUMEROUS SCRAPES, SCRATCHES, AND CIRCULAR OR OBLONG SKIN LESIONS WITH WIDE MARGINS AND DEPRESSED CENTERS. THE WHALE LICE (CYAMID) BURDEN WAS HEAVY ALONG THE BACK AND SIDES AND EXTENDING VENTRALLY ALONG THE HEAD AND MOUTH. DEEP CONSTRICTING WRAP INJURY ENCIRCLED THE TAILSTOCK WITH ASSOCIATED TISSUE NECROSIS AND ABRADED SKIN. SIMILAR ABRASIONS WERE ON THE RIGHT PECTORAL FIN, AND THE LEFT PECTORAL FIN APPEARED SWOLLEN. HEALED COOKIE CUTTER BITES WERE ON BOTH PECTORAL FINS, AND A LARGE HEALED NOTCH WAS ON THE DISTAL END OF THE TRAILING LEFT PECTORAL FIN.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
MINKE WHALE	CA-OR-WA	2017	5	28	SHOOTING	PACIFIC	WA	DEAD	TREMENDOUS HEMORRHAGE ASSOCIATED WITH BEING SHOT THROUGH LEFT SKULL; EXTENSIVE HEMORRHAGE ON LEFT DORSAL THORAX AND LEFT FLIPPER; RIGHT SIDE OF WHALE COULD NOT BE EXAMINED (HEAVY EQUIPMENT REQUIRED)	DEAD	NA	1.00	N	Y
MINKE WHALE	CA-OR-WA	2019	8	3	UNIDENTIFIED FISHERY INTERACTION	SAN MATEO	CA	SI (PRORATE)	SINGLE BUOY AND ROPE AROUND BASE OF FLUKES, 'ROPES GOING DOWN' (PRESUMABLY TO DEPTH). WHALE WATCH CAPTAIN WAS WITH WHALE FOR 20 MINUTES, SAID ENTANGLEMENT LOOKED RECENT. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2016	1	22	MARINE DEBRIS	SAN LUIS OBISPO	CA	NSI	ANIMAL DISTENTANGLED FROM WHITE PACKING BAND ON SITE. NO INFORMATION ON ANIMAL'S CONDITION.	NSI	P7B	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA BREEDING	2016	1	24	CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2016	1	30	MARINE DEBRIS	SAN LUIS OBISPO	CA	SI	ANIMAL DISENTANGLED FROM WHITE PACKING STRAP CONSTRICTING BODY; ANIMAL RELEASED ON SITE.	NSI	P7B	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA	2016	2	21	HARASSMENT	SAN MATEO	CA	NSI	WEANED PUP BEING HARASSED BY PUBLIC. RELOCATED TO ANO NUEVO.	NSI	P9	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA BREEDING	2016	4	10	OPEN ACCESS CA HALIBUT BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2016	4	27	MARINE DEBRIS	MONTEREY	CA	SI	EMACIATED, LETHARGIC, MULTIPLE MINOR SKIN WOUNDS WITH FEW ABSCESSSES, HARSH LUNG SOUNDS, MULTIPLE SMALL CORNEAL OPACITIES NOTED BILATERALLY. PIECE OF WHITE PLASTIC TUBE FOUND IN STOMACH DURING POST-MORTEM EXAM.	DEAD	NA	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2016	5	24	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2016	6	16	SHOOTING		OR	DEAD	EXTENSIVE HEMORRHAGE IN HEAD AND AT THORAX AND SCAPULAE AREA; SMALL PELLET-LIKE HOLES IN HEAD AND ONE IN ORBITAL BONE.	DEAD	NA	1.00	N	Y

## Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
NORTHERN ELEPHANT SEAL	CALIFORNIA	2016	11	5	MARINE DEBRIS	SAN MATEO	CA	SI	ANIMAL DESCRIBED AS HAVING EXCELLENT BODY CONDITION, ENTANGLED IN UNDESCRIBED MATERIAL. DISENTANGLED / RELEASED ON SITE.	NSI	P7B	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	2	3	HARASSMENT	SAN LUIS OBISPO	CA	SI	PUBLIC WAS TOUCHING AND HARASSING A PUP. PICKED UP TREATED AND RELEASED BY REHAB FACILITY.	SI	P14	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	2	23	HARASSMENT	MARIN	CA	SI	PUBLIC HARASSING A MILDLY UNDERWEIGHT PUP.	SI	P14	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	2	26	HARASSMENT	SAN MATEO	CA	SI	PUBLIC HARASSING A MILDLY UNDERWEIGHT PUP.	SI	P14	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	3	27	OIL / TAR	SAN LUIS OBISPO	CA	SI	MALNOURISHED ANIMAL WITH OIL / TAR ON IT BEING HARASSED BY PEOPLE.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	3	30	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	EMACIATED ANIMAL WITH THREE FISH HOOKS IN CHIN AND REAR FLIPPER.	SI	P5B	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	4	2	MARINE DEBRIS	SAN LUIS OBISPO	CA	SI	PACKING STRAP ENTANGLEMENT AROUND NECK. ANIMAL DISENTANGLED IN THE FIELD WITHOUT SEDATION. ANIMAL LEFT AT SITE, NO FURTHER DETAILS ON EXTENT OF INJURY. CONSERVATIVELY ASSIGNED AS A SERIOUS INJURY DUE TO LACK OF DETAILS ON INJURY SEVERITY.	SI	P7B	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	4	10	OIL / TAR	MONTEREY	CA	SI	MALNOURISHED ANIMAL WITH OIL / TAR ON IT BEING HARASSED BY PEOPLE.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	4	11	OIL / TAR	ORANGE	CA	SI	MALNOURISHED ANIMAL WITH OIL / TAR ON IT BEING HARASSED BY PEOPLE.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	4	12	OIL / TAR	ORANGE	CA	SI	MALNOURISHED ANIMAL WITH OIL / TAR ON IT BEING HARASSED BY PEOPLE.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	4	12	OIL / TAR	ORANGE	CA	SI	MALNOURISHED ANIMAL WITH OIL / TAR ON IT BEING HARASSED BY PEOPLE.	SI	P9	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	4	14	OIL / TAR	ORANGE	CA	SI	MALNOURISHED ANIMAL WITH OIL / TAR ON IT BEING HARASSED BY PEOPLE.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	4	14	HARASSMENT	SONOMA	CA	NSI	ANIMAL IN GOOD BODY CONDITION RELOCATED BECAUSE OF HARASSMENT BY PEOPLE AND DOGS.	NSI	P9	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	4	19	HARASSMENT	SAN DIEGO	CA	SI	UNDERWEIGHT ANIMAL WITH ORANGE PAINT ON DORSUM.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	4	25	OIL / TAR	ORANGE	CA	SI	UNDERWEIGHT ANIMAL WITH OIL AND TAR PATCHES AND PUNCTURE WOUND ON NECK.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	5	4	OIL / TAR	ORANGE	CA	SI	UNDERWEIGHT ANIMAL WITH TAR ON FACE AND ABDOMEN.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	5	26	HARASSMENT	MARIN	CA	NSI	HARASSED BY PEOPLE AND DOGS. RELOCATED TO A DIFFERENT BEACH.	NSI	P9	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	6	9	OIL / TAR	ORANGE	CA	SI	UNDERWEIGHT ANIMAL WITH TAR PATCHES ON BODY.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	6	14	MS CATCHER VESSELS MIDWATER TRAWL	OFFSHORE	WA	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	6	18	HARASSMENT	SAN DIEGO	CA	NSI	ANIMAL IN GOOD BODY CONDITION RELOCATED BECAUSE OF HEAVY LEVEL OF HARASSMENT BY PEOPLE.	NSI	P9	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	7	18	HARASSMENT	SAN DIEGO	CA	NSI	ANIMAL IN GOOD BODY CONDITION RELOCATED BECAUSE OF HEAVY LEVEL OF HARASSMENT BY PEOPLE.	NSI	P9	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	8	13	VESSEL STRIKE	MONTEREY	CA	DEAD	CLEAR PROPELLER STRIKE WOUNDS ON SIDE OF ANIMAL.	DEAD	NA	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	9	12	GULF OF ALASKA PACIFIC COD LONGLINE	OFFSHORE	AK	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	11	14	CA SWORDFISH DRIFT GILLNET FISHERY		CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	11	16	GULF OF ALASKA SABLEFISH LONGLINE	OFFSHORE	AK	SI	OBSERVER PROGRAM. ANIMAL WITH WHITE MATERIAL AROUND NECK DUMPED BACK OVERBOARD AFTER BEING BROUGHT ON DECK. OBSERVER NOTED THAT THE ANIMAL WAS INJURED.	SI	P4	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	11	17	CA SWORDFISH DRIFT GILLNET FISHERY		CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	12	5	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	MORTALITY SELF-REPORT FROM VESSEL OPERATOR.	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2017	12	11	CA SWORDFISH DRIFT GILLNET FISHERY		CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	3	6	OIL / TAR	SAN LUIS OBISPO	CA	SI	PATCHES OF OIL/TAR ON AN EMACIATED ELEPHANT SEAL IN MULTIPLE LOCATIONS: 5-6CM PATCH ON CAUDAL DORSUM, 0.5-1CM PATCHES ON VENTRUM, LEFT LATERAL BODY, AND ALONG LEFT FRONT FLIPPER.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	3	27	OIL / TAR	MONTEREY	CA	SI	MALNOURISHED ANIMAL ON A BEACH WITH PEOPLE POLING IT WITH STICKS, MULTIPLE TAR PATCHES PRESENT ON RIGHT/LEFT HIPS AND FLIPPERS.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	3	27	HARASSMENT	MONTEREY	CA	NSI	ANIMAL BEING HARASSED BY PEOPLE ON BUSY BEACH THROWING SAND AT SEAL. IN GOOD BODY CONDITION (MILDLY UNDERWEIGHT BUT NOT UNUSUAL) AND EXHIBITING REGULAR BEHAVIOR BUT NOT AVOIDING HARASSMENT. RELOCATED TO POINT LOBOS STATE RESERVE (WHALERS COVE), CARMEL-BY-THE-SEA, MONTEREY COUNTY, CA, USA ON MARCH 29 2018.	NSI	P9	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	4	4	OIL / TAR	MONTEREY	CA	NSI	MILDLY UNDERWEIGHT SEAL WITH TAR PATCHES PRESENT ON NECK AND SHOULDERS, GUMMY EYES. PEOPLE GETTING CLOSE TO TAKE PICTURES AND TOUCHING ANIMAL, PEOPLE TOSSING SAND AT IT.	NSI	P9	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	4	21	OIL / TAR	SANTA CRUZ	CA	SI	MALNOURISHED ANIMAL WITH TAR/OIL PATCHES, SMALL PUNCTURE WOUND ON RIGHT CHEEK.	SI	P9	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	4	28	HOOK AND LINE FISHERY	LOS ANGELES	CA	SI	MALNOURISHED ANIMAL DESCRIBED AS HAVING INTERACTED WITH HOOK AND LINE FISHERY. NO DETAILS ON INJURY TYPE OR SEVERITY, OR OUTCOME. ASSUMING HOOKS WERE IN OR NEAR MOUTH DUE TO CONDITION OF ANIMAL.	SI	P5A	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	5	2	CA HALIBUT AND WHITE SEABASS SET GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	5	26	OIL / TAR	GRAYS HARBOR	WA	SI	UNDERWEIGHT ANIMAL WITH TAR/OIL ON BODY.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	5	30	HOOK AND LINE FISHERY	SAN DIEGO	CA	NSI	ANIMAL IN GOOD BODY CONDITION WITH ONE FISHING HOOK IN LEFT REAR FLIPPER, AND ANOTHER HOOK ABOVE LEFT REAR FLIPPER. BOTH HOOKS REMOVED AND ANIMAL WAS RELEASED ON SITE.	NSI	P5C	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	6	4	UNIDENTIFIED HUMAN INTERACTION	GRAYS HARBOR	WA	SI	HIND FLIPPER HAD BLOOD AND PUNCTURE WOUNDS, LACERATION ON RIGHT SIDE. ANIMAL WAS LETHARGIC, EMACIATED AND HAD MODERATE, YELLOWISH MUCOPURULENT DISCHARGE FROM THE EYES. ANIMAL WAS TAGGED AS A WEANED PUP ON 2/23/18 ON DRAKES BEACH IN POINT REYES NATIONAL SEASHORE. IT WAS RECORDED THAT THE ANIMAL WAS FEMALE, TAG NUMBER S834. ON 6/5 SEAL WAS EUTHANIZED DUE IT BEING UNRESPOSIVE ON THE BEACH. LACERATION ON RIGHT SIDE, SMALL LACERATION ON RIGHT FLIPPER, POSSIBLY DOG OR COYOTE.	DEAD	NA	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	9	4	MARINE DEBRIS	MENDOCINO	CA	DEAD	MARINE DEBRIS ENTANGLEMENT. WRAPPED UP IN ROPE WITH BARNACLES ON IT.	DEAD	NA	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	10	14	HARASSMENT	MARIN	CA	NSI	PATIENT FOUND LYING IN THE MIDDLE OF A GRAVEL ROAD WITH TOWELS ON IT THAT SOMEONE PUT OVER. PATIENT WAS ALSO MOLTING. NO OTHER DETAILS ON ANIMAL'S CONDITION.	NSI	P9	0.00	N	N
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	10	20	BERING SEA AND ALEUTIAN ISLANDS ATKA MACKEREL TRAWL	OFFSHORE	AK	SI	OBSERVER PROGRAM. ANIMAL RETURNED TO WATER INJURED. ALSO REPORTED VIA MMAP PROGRAM WITH CONDITION REPORTED AS "LISTNESSNESS / INABILITY TO DEFEND".	SI	P4	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
NORTHERN ELEPHANT SEAL	CALIFORNIA	2018	10	29	MARINE DEBRIS	LOS ANGELES	CA	SI	A JUVENILE NORTHERN ELEPHANT SEAL WAS HAULED OUT AT SAN CLEMENTE ISLAND. THE ANIMAL HAD A WIDE (10 - 15 CM) RUBBER BAND CONSTRICTING ITS NECK. THE ANIMAL'S BODY CONDITION WAS GOOD, BUT THE RUBBER BAND IS MADE OF THICK MATERIAL AND WILL CONTINUE TO CONSTRICT THE ANIMAL AS IT GROWS.	SI	P8A	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2019	1	15	VEHICLE COLLISION	SAN LUIS OBISPO	CA	DEAD	ANIMAL WAS STRUCK BY CAR AND KILLED 1/15/19 PM ON HWY 1.	DEAD	NA	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2019	1	21	HARASSMENT	MARIN	CA	SI	MILDLY UNDERWEIGHT, MATERNAL SEPARATION, KERATOPATHY, AND RESPONDERS WERE TOLD THAT A MAN DRAGGED THE ANIMAL ~100 FEET TO THE WATER. IT HAULED BACK OUT WHERE IT WAS RESCUED. IT WAS ALSO REPORTED THAT PEOPLE WERE TAKING PHOTOS WITH THE ANIMALS AND THEIR DOGS.	SI	P14	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2019	3	23	DOG ATTACK	LOS ANGELES	CA	SI	DOG BITE WOUNDS. NO FURTHER DETAILS.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2019	6	4	WEST COAST GROUND FISH TRAWL	UNKNOWN	UNKNOWN	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2019	6	26	CATCH SHARES POT	OFFSHORE	OR	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2019	6	29	MIDWATER HAKE TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2019	7	15	SHOOTING	PACIFIC	WA	DEAD	EXTERNALLY, THE ANIMAL HAD GOOD BODY CONDITION; HEAD WAS PARTIALLY SCAVENGED AND BLOODY; PELLETS AND HEMORRHAGE IN HEAD (PELLETS WERE FOUND IN SKULL).	DEAD	NA	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2019	10	6	MIDWATER ROCK FISH TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2019			CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y



Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
NORTHERN ELEPHANT SEAL	CALIFORNIA	2020	1	2	VESSEL STRIKE	CLATSOP	OR	DEAD	MODERATELY DECOMPOSED ANIMAL WITH PROPELLER CUTS AND BROKEN BONES.	DEAD	NA	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2020	1	6	DUNGENESS CRAB POT FISHERY (CALIFORNIA)	SAN FRANCISCO	CA	DEAD	NO BIOLOGICAL SAMPLES COLLECTED COLLECTED: 1. RED PLASTIC CRAB POT GEAR TAG AND SAMPLE PIECES OF TWO LINES TANGLED AROUND THE GEAR AND CARCASS. MUMMIFIED ELEPHANT SEAL CARCASS (IDENTIFIED TO SPECIES BASED ON APPEARANCE OF HIND FLIPPER. TAG NUMBER WAS A TIER 7 WITH 2015-2017 DATES.	DEAD	NA	1.00	Y	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2020	3	10	OIL / TAR	MARIN	CA	SI	OIL/TAR EMACIATED, LETHARGIC, SMALL AMOUNT OF TAR ON DORSAL RIGHT MIDLINE. PARTIAL BLACKCOAT. HARASSED - PEOPLE ON THE BEACH APPROACHING AND PETTING ANIMAL.	SI	P1	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2020	4	17	DOG ATTACK	MARIN	CA	SI	EMACIATED, ALERT BUT NOT ACTIVE, DOG BITE TO HIND END, SKIN LACERATIONS AND PUNCTURE WOUNDS TO RIGHT PELVIC LIMB. HARASSED.	SI	P9	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2020	4	21	OIL / TAR	DEL NORTE	CA	SI	ANIMAL WAS LETHARGIC AND WAS IMMOBILE DUE TO POSSIBLE RIGHT FRONT FLIPPER INJURY. ANIMAL ALSO HAD TAR VISIBLE IN SEVERAL AREAS OF ITS BODY.	SI	P1	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2020	5	20	SHOOTING	PACIFIC	WA	DEAD	ANIMAL WAS EXTREMELY DECOMPOSED, BUT IT WAS APPARENT FROM WHAT WAS LEFT THAT THE ANIMAL HAD EXCELLENT BODY CONDITION; ANIMAL WAS CLEARLY SHOT IN THE HEAD (HOLE IN SKULL) AND POSSIBLY IN THE ABDOMEN BASED ON HEMORRHAGE IN THAT AREA.	DEAD	NA	1.00	N	Y
NORTHERN ELEPHANT SEAL	CALIFORNIA	2020	11	18	MARINE DEBRIS	HUMBOLDT	CA	SI	GREEN TWINE WRAPPED AROUND JAW SUBADULT MALES REPORTED WITH LOWER JAW ENTANGLEMENT. ANIMAL LOCATED IN LOST COAST ROOKERY. NO STRANDING. FIELD DISENTANGLEMENT EXECUTED ON 11/28/20 ANIMAL APPEARED HEALTHY.	NSI	P7B	0.00	N	N
NORTHERN FUR SEAL	EASTERN PACIFIC-CALIFORNIA	2016	10	23	AT-SEA HAKE PELAGIC TRAWL		OR	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
NORTHERN FUR SEAL	EASTERN PACIFIC-CALIFORNIA	2016	12	3	DOG ATTACK	SAN FRANCISCO	CA	DEAD	PUP NECROPSIED, CAUSE OF DEATH DETERMINED TO BE CANINE ATTACK.	DEAD	NA	1.00	N	Y
NORTHERN FUR SEAL	EASTERN PACIFIC-CALIFORNIA	2017	3	4	TRAWL FISHERY UNIDENTIFIED	CLATSOP	OR	DEAD	CARCASS WITH SECTION OF BOTTOM TRAWL NET (CONFIRMED) AROUND THE FUR SEAL'S NECK (3-STRAND POLYPROPYLENE).	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
NORTHERN FUR SEAL	EASTERN PACIFIC-CALIFORNIA	2017	3	8	TRAWL FISHERY UNIDENTIFIED	LINCOLN	OR	DEAD	ONE OF TWO JUVENILES FOUND ENTANGLED IN GREEN TRAWL NET MATERIAL.	DEAD	NA	1.00	N	Y
NORTHERN FUR SEAL	EASTERN PACIFIC-CALIFORNIA	2017	3	8	TRAWL FISHERY UNIDENTIFIED	LINCOLN	OR	DEAD	ONE OF TWO JUVENILES FOUND ENTANGLED IN GREEN TRAWL NET MATERIAL.	DEAD	NA	1.00	N	Y
NORTHERN FUR SEAL	CALIFORNIA	2017	8	18	LIMITED ENTRY SABLEFISH HOOK AND LINE	OFFSHORE	CA	NSI	SEAL BOMB USED AS DETERRENT TO ANIMAL FEEDING ON CATCH. ALIVE, NO VISIBLE SIGN OF INJURY. OBSERVER PROGRAM.	NSI	P9	0.00	N	N
NORTHERN FUR SEAL	EASTERN PACIFIC-CALIFORNIA	2018	1	22	MARINE DEBRIS	DOUGLAS	OR	SI	PLASTIC STRING, CORD OR STRAP WRAPPED AROUND NECK, CUTTING INTO INTEGUMENT. THIS YOUNG MALE NORTHERN FUR SEAL WAS TRANSFERRED BRIEFLY TO OREGON COAST AQUARIUM ON 1/22/18. IT WAS DISENTANGLED, HELD OVERNIGHT, AND RELEASED THE NEXT DAY.	NSI	P7B	0.00	N	N
NORTHERN FUR SEAL	CALIFORNIA	2018	10	27	OIL / TAR	SAN LUIS OBISPO	CA	SI	PATIENT FOUND LETHARGIC AND EMACIATED COVERED IN OIL/TAR, MATTED FUR, AND PEOPLE HARASSING SEAL.	SI	P9	1.00	N	Y
NORTHERN RIGHT WHALE DOLPHIN	CA-OR-WA	2016	4	10	UNIDENTIFIED FISHERY INTERACTION	UNKNOWN	OR	DEAD	EXTENSIVE FOOTROPE ROLLER MARKS ON ANIMAL; FLUKE EDGES AND PART OF PECTORALS CUT OFF; BROKEN RIBS; VARIOUS HEMORRHAGIC AREAS; COPIOUS AMOUNT OF CLEAR PINK FLUID IN BRAIN CASE; THE DOLPHIN HAD EXCELLENT BODY CONDITION	DEAD	NA	1.00	Y	Y
NORTHERN RIGHT WHALE DOLPHIN	CA-OR-WA	2016	9	30	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
NORTHERN RIGHT WHALE DOLPHIN	CA-OR-WA	2017	1	10	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
NORTHERN RIGHT WHALE DOLPHIN	CA-OR-WA	2017	11	12	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2016	5	15	SCIENTIFIC RESEARCH	OFFSHORE	CA	DEAD	KILLED IN A MIDWATER TRAWL.	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2016	7	18	SCIENTIFIC RESEARCH	OFFSHORE	WA	DEAD	ONE OF SEVEN PACIFIC WHITE SIDED DOLPHINS CAUGHT IN A SURFACE TRAWL	DEAD	NA	1.00	N	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2016	7	18	SCIENTIFIC RESEARCH	OFFSHORE	WA	DEAD	ONE OF SEVEN PACIFIC WHITE SIDED DOLPHINS CAUGHT IN A SURFACE TRAWL	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2016	7	18	SCIENTIFIC RESEARCH	OFFSHORE	WA	DEAD	ONE OF SEVEN PACIFIC WHITE SIDED DOLPHINS CAUGHT IN A SURFACE TRAWL	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2016	7	18	SCIENTIFIC RESEARCH	OFFSHORE	WA	DEAD	ONE OF SEVEN PACIFIC WHITE SIDED DOLPHINS CAUGHT IN A SURFACE TRAWL	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2016	7	18	SCIENTIFIC RESEARCH	OFFSHORE	WA	DEAD	ONE OF SEVEN PACIFIC WHITE SIDED DOLPHINS CAUGHT IN A SURFACE TRAWL	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2016	7	18	SCIENTIFIC RESEARCH	OFFSHORE	WA	DEAD	ONE OF SEVEN PACIFIC WHITE SIDED DOLPHINS CAUGHT IN A SURFACE TRAWL	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2016	7	18	SCIENTIFIC RESEARCH	OFFSHORE	WA	DEAD	ONE OF SEVEN PACIFIC WHITE SIDED DOLPHINS CAUGHT IN A SURFACE TRAWL	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2016	7	18	SCIENTIFIC RESEARCH	OFFSHORE	WA	SI	IN ADDITION TO THE 7 DEAD DOLPHINS RETRIEVED DEAD FROM THIS TRAWL ON 7/18/2016, AN 8TH ANIMAL WAS SEEN VIA VIDEO CAMERA ATTACHED TO NET ESCAPING ALIVE THROUGH THE MARINE MAMMAL EXCLUDER DEVICE. CONDITION OF ANIMAL UNKNOWN UPON ESCAPE AND BASED ON DEAD CONDITION OF 7 ASSOCIATED ANIMALS THAT WERE TRAPPED FOR A SUFFICIENT DURATION TO RESULT IN DEATH, THIS IS BEING ASSIGNED AS A SERIOUS INJURY DUE TO UNKNOWN EFFECTS OF CAPTURE MYOPATHY.	SI	S7B	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2017	5	12	GILLNET FISHERY	CLATSOP	OR	DEAD	DORSAL FIN AND FLIPPER TIPS CUT OFF. HEMORRHAGING AND HEAVY BRUISING.	DEAD	NA	1.00	Y	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2017	5	30	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	WA	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2017			CATCH SHARES BOTTOM TRAWL	OFFSHORE	CA	DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2018	6	14	SCIENTIFIC RESEARCH	OFFSHORE	CA	DEAD	MALE 175 CM CAUGHT IN TRAWL	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2018	6	14	SCIENTIFIC RESEARCH	OFFSHORE	CA	DEAD	CAUGHT AND KILLED IN TRAWL GEAR.	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2018	7	24	SCIENTIFIC RESEARCH	OFFSHORE	OR	DEAD	CAUGHT AND KILLED IN TRAWL GEAR.	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2018	7	24	SCIENTIFIC RESEARCH	OFFSHORE	OR	DEAD	CAUGHT AND KILLED IN TRAWL GEAR.	DEAD	NA	1.00	N	Y
PACIFIC WHITE-SIDED DOLPHIN	CA-OR-WA	2018	8	28	SCIENTIFIC RESEARCH	OFFSHORE	CA	DEAD	CAUGHT AND KILLED IN TRAWL GEAR.	DEAD	NA	1.00	N	Y
RISSO'S DOLPHIN	CA-OR-WA	2016	1	21	GILLNET FISHERY	SAN DIEGO	CA	DEAD	FISHERY INTERACTION: DORSAL FIN HAS BEEN CLEANLY CUT OFF, FLUKES AT THE PEDUNCLE HAVE BEEN CLEANLY CUT OFF EXPOSING BONE (MINIMUM TOTAL BODY LENGTH AT THIS POINT = 267.9 CM). ANIMAL WAS IN ADVANCED DECOMPOSITION AND HAD BEEN SCAVENGED, OTHER POSSIBLE MARKINGS ARE CBD. SEX ID PER GENETICS. MUTILATION / CUTTING OFF OF BODY PARTS CONSISTENT WITH HOW ANIMALS ARE REMOVED FROM GILLNETS.	DEAD	NA	1.00	Y	Y
SPERM WHALE	CA-OR-WA	2020	10	1	UNIDENTIFIED FISHERY INTERACTION	VENTURA	CA	SI	JUVENILE SPERM WHALE PHOTOGRAPHED OFF SANTA CRUZ ISLAND. ENTANGLEMENT APPEARS TO MAINLY INVOLVE THE PEDUNCLE AND TAIL BUT IT IS POSSIBLE THAT THERE IS MORE LINE ON THE WHALE. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. THE GEAR APPEARS TO BE SOME THICKER GAUGE POLY PRO LINE LIKE BLUE SPECTRA AND IS WRAPPED AROUND THE PEDUNCLE AND DRAGGING BEHIND APPROX 10 FT OR SO. PHOTO OF PEDUNCLE UNDERWATER SHOWS LINE CUTTING INTO PEDUNCLE BELOW THE SKIN, WITH WHITISH WOUNDS VISIBLE AND MULTIPLE SCARS SURROUNDING THE WOUND. CONSTRICTING ENTANGLEMENT BASED ON LINE CUTTING INTO WHALE.	SI	L2	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
STRIPED DOLPHIN	CA-OR-WA	2016	1	30	GILLNET FISHERY	CLATSOP	OR	DEAD	GAFF INJURY ON PEDUNCLE; ROSTRUM BROKEN; "TEAR" IN TISSUE AT MELON/ROSTRUM JUNCTION; LUNGS FILLED WITH SAND, HIGHLY INFLATED, AND VERY FRIABLE; A SIGNIFICANT AMOUNT OF BLOODY FLUID IN THORACIC CAVITY; CREPITUS AROUND KIDNEYS; FAIRLY HEAVY PARASITE LOAD.	DEAD	NA	1.00	Y	Y
STRIPED DOLPHIN	CA-OR-WA	2016	1	30	GILLNET FISHERY	CLATSOP	OR	SI	LUNGS HIGHLY INFLATED AND HEMORRHAGED; INDENTATIONS WITH 3-CM SPACING DORSALLY; A SIGNIFICANT AMOUNT OF BLOODY FLUID IN THORACIC AND ABDOMINAL CAVITIES.	DEAD	NA	1.00	Y	Y
STRIPED DOLPHIN	CA-OR-WA	2016	2	1	GILLNET FISHERY	CLATSOP	OR	DEAD	GAFF INJURY AT PEDUNCLE; BLOWHOLE BLOODY; DARK RED FLUID IN THORACIC CAVITY; A SIGNIFICANT AMOUNT OF CEREBRAL SPINAL FLUID IN BRAINCASE; HEAVY LOAD OF LUNG PARASITES; CREPITUS ENCASED THE KIDNEYS; ADRENALS ABNORMAL.	DEAD	NA	1.00	Y	Y
STRIPED DOLPHIN	CA-OR-WA	2017	2	25	UNIDENTIFIED FISHERY INTERACTION	TILLAMOOK	OR	DEAD	MASSIVE BRUISING AND HEMORRHAGE WITH LINE MARKS; RIGHT LOWER JAW BROKEN; RIB MARKS ON RIGHT LUNG; THROAT CUT FROM FLIPPER TO FLIPPER.	DEAD	NA	1.00	Y	Y
STRIPED DOLPHIN	CA-OR-WA	2020	7	8	GILLNET FISHERY	CLATSOP	OR	SI	ANIMAL WITH COMPOUND FRACTURE OF JAW, NET MARKS AND GASHES STRANDED ALIVE. EUTHANIZED.	DEAD	NA	1.00	Y	Y
UNIDENTIFIED DOLPHIN		2017	12	2	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	MORTALITY SELF-REPORT FROM VESSEL OPERATOR.	DEAD	NA	1.00	Y	Y
UNIDENTIFIED DOLPHIN		2017	12	4	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	MORTALITY SELF-REPORT FROM VESSEL OPERATOR.	DEAD	NA	1.00	Y	Y
UNIDENTIFIED DOLPHIN		2016	10	1	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	SI	CAUGHT IN FORENET, THE CREW REMOVED AND RELEASED OVER THE STERN. SERIOUS INJURY BECAUSE ANIMAL WAS REMOVED FROM WATER AND WAS ON DECK. OBSERVER PROGRAM.	SI	S4	1.00	Y	Y
UNIDENTIFIED DOLPHIN		2017	8	2	CA SPOT PRAWN TRAP FISHERY	VENTURA	CA	DEAD	TAIL WRAPPED IN LINE OF A SPOT PRAWN TRAP. NO NECROPSY, NO FURTHER DETAILS.	DEAD	NA	1.00	Y	Y
UNIDENTIFIED DOLPHIN		2018	10	22	CA SWORDFISH DRIFT GILLNET FISHERY	OFFSHORE	CA	DEAD	OBSERVER PROGRAM	DEAD	NA	1.00	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
UNIDENTIFIED FUR SEAL		2019	5	25	DOG ATTACK	CLATSOP	OR	SI	CHASED INTO OCEAN YOUNG FUR SEAL, EITHER YEARLING OR JUVENILE, ATTACKED BY OFF-LEASH DOG ON BEACH; OWNER OF DOG ALLOWED DOG TO CONTINUE ITS ATTACK. OUTCOME AND HEALTH STATUS UNKNOWN. CONSERVATIVELY ASSIGNED AS SERIOUS INJURY.	SI	P9	1.00	N	Y
UNIDENTIFIED FUR SEAL		2020	11	15	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	NSI	HOOKED IN MOUTH (PART NOT SPECIFIED) BY 18/0 OFFSET ROUND OR FLAT CIRCLE HOOK (5.0MM DIAMETER). SOON AFTER THE ANIMAL WAS OBSERVED, IT CAME FREE OF THE GEAR: NO GEAR LEFT ON ANIMAL. OBSERVER PROGRAM.	NSI	P5C	0.00	N	N
UNIDENTIFIED FUR SEAL		2020	11	19	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	NSI	HOOKED IN MOUTH (PART NOT SPECIFIED) BY 18/0 OFFSET FLAT CIRCLE HOOK (5.0MM DIAMETER). SOON AFTER THE ANIMAL WAS OBSERVED, IT CAME FREE OF THE GEAR: NO GEAR LEFT ON ANIMAL. OBSERVER PROGRAM.	NSI	P5C	0.00	N	N
UNIDENTIFIED OTARIID		2019	8		GILLNET FISHERY, TRIBAL			DEAD	NORTHWEST INDIAN FISHERIES COMMISSION REPORT	DEAD	NA	1.00	N	Y
UNIDENTIFIED PINNIPED		2016	11	8	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
UNIDENTIFIED PINNIPED		2016	11	8	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
UNIDENTIFIED PINNIPED		2016	11	8	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
UNIDENTIFIED PINNIPED		2016	11	12	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
UNIDENTIFIED PINNIPED		2016	11	12	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
UNIDENTIFIED PINNIPED		2016	11	12	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
UNIDENTIFIED PINNIPED		2016	11	13	CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
UNIDENTIFIED PINNIPED		2019			CATCHER PROCESSOR MIDWATER TRAWL	OFFSHORE	OR	NSI	ANIMAL BRIEFLY ENTANGLED AND RELEASED WITHOUT APPARENT INJURY. OBSERVER PROGRAM.	NSI	P4	0.00	N	N
UNIDENTIFIED SEA LION		2019	3	6	CATCH SHARES BOTTOM TRAWL			DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
UNIDENTIFIED SEA LION		2019	7	25	CATCH SHARES BOTTOM TRAWL			DEAD	OBSERVER PROGRAM.	DEAD	NA	1.00	Y	Y
UNIDENTIFIED SEAL		2019	1	18	HAWAII LONGLINE SHALLOW SET FISHERY	OFFSHORE	CA	SI	HOOKED IN MOUTH (HOOK OBSERVED IN UPPER HALF) BY 18/0 OFFSET FLAT CIRCLE HOOK (5.0MM DIAMETER). ANIMAL WAS STRUGGLING AND VOCALIZING, AND CREW QUICKLY CUT THE LINE: HOOK, 6.3M MONOFILAMENT LEADER, 75G WEIGHT, AND 9.3M BRANCHLINE LEFT ON ANIMAL. OBSERVER PROGRAM.	SI	P5A, P6	1.00	Y	Y
UNIDENTIFIED WHALE		2016	4	28	UNIDENTIFIED FISHERY INTERACTION	SAN FRANCISCO	CA	SI (PRORATE)	WHALE SWIMMING NORTH WITH 2 BUOYS TRAILING, GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
UNIDENTIFIED WHALE		2016	5	13	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	WHALE TRAILING A BLUE BUOY OFF JULIA PFEIFFER BURNS STATE PARK, TRAVELING NORTH WITH OTHER WHALES. DESCRIBED AS BIG BLUE PLASTIC BUOY STUCK TO WHALE'S SIDE. AMOUNT OF GEAR AND CONFIGURATION UNKNOWN. PHOTOS INCONCLUSIVE FOR SPECIES ID. PROBABLE SUBSEQUENT RESIGHTS IN MONTEREY BAY THE NEXT DAY, UNIDENTIFIED WHALE DESCRIBED AS DRAGGING BLUE OBJECT.	SI (PRORATE)	L10	0.75	Y	Y
UNIDENTIFIED WHALE		2016	5	15	UNIDENTIFIED FISHERY INTERACTION	SAN MATEO	CA	SI (PRORATE)	NORTHBOUND WHALE TRAILING TWO CRAB BUOYS ABOUT 50-70 FT. BEHIND. 1 BUOY ORANGE AND THE OTHER SMALLER AND WHITE ABOUT 5 FEET FROM ORANGE BUOY. GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
UNIDENTIFIED WHALE		2016	5	23	UNIDENTIFIED FISHERY INTERACTION	MONTEREY	CA	SI (PRORATE)	UNKNOWN VESSEL REPORTED ENTANGLEMENT IN 'CRAB GEAR' TO USCG. GEAR AMOUNT AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
UNIDENTIFIED WHALE		2016	9	28	UNIDENTIFIED FISHERY INTERACTION	MARIN	CA	SI (PRORATE)	WHALE NOT MOVING, WITH ASSOCIATED LINE AND ORANGE BUOY. IN SAME AREA AS 9/26/2016 HUMPBACK WHALE THAT WAS NOT MOVING AND TRAILING 4 ORANGE POLYBALLS. AMOUNT AND CONFIGURATION OF GEAR UNKNOWN. EVIDENCE ANIMAL IS ANCHORED.	SI (PRORATE)	L10	0.75	Y	Y

Appendix 1. Human-marine mammal interaction records reviewed for injury and mortality, 2016-2020.

Species	Stock	YYYY	MM	DD	Source	County	State	Initial	Narrative	Final	SI.Criteria	MSI.Value	LOF	PBR
UNIDENTIFIED WHALE		2018	5	13	UNIDENTIFIED FISHERY INTERACTION	VENTURA	CA	SI (PRORATE)	UNIDENTIFIED WHALE SWIMMING NORTH JUST OUTSIDE SURF LINE TRAILING A STYROFOAM BUOY NEAR THE DORSAL FIN. GEAR TYPE, AMOUNT AND CONFIGURATION UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
UNIDENTIFIED WHALE		2018	6	2	VESSEL STRIKE	VENTURA	CA	SI (PRORATE)	A CONTAINER VESSEL (HORIZON SPIRIT) STRUCK A WHALE APPROXIMATELY 12NM SW OF SAN NICOLAS ISLAND. VESSEL REDUCED SPEED AFTER IMPACT. WHALE WAS ESTIMATED AT 45 FT IN LENGTH. SERIOUS INJURY BASED ON SIZE AND SPEED OF VESSEL (272 FEET AND >10 KTS).	SI	L6A	1.00	N	Y
UNIDENTIFIED WHALE		2018	8	20	UNIDENTIFIED FISHERY INTERACTION	CURRY	OR	SI (PRORATE)	REPORT OF A WHALE TRAILING AN ORANGE BUOY FROM ITS MOUTH. GEAR CONFIGURATION AND AMOUNT UNKNOWN.	SI (PRORATE)	L10	0.75	Y	Y
UNIDENTIFIED WHALE		2018	10	2	VESSEL STRIKE	MONTEREY	CA	SI (PRORATE)	NEWS REPORT: A BREACHING WHALE CAUSED A 10-FOOT-LONG BOAT TO CAPSIZE WITH SEVEN PEOPLE ONBOARD IN BREAKWATER COVE. NO DETAILS ON POTENTIAL INJURY TO WHALE. PRORATED SERIOUS INJURY UNDER CRITERION L7B.	SI (PRORATE)	L7B	0.14	N	Y
UNIDENTIFIED WHALE		2018	10	2	VESSEL STRIKE	MONTEREY	CA	SI (PRORATE)	NEWS REPORT: OFF HOPKINS POINT, ACCORDING TO WITNESS MARGE BRIGADIER, A MAN WHO WAS BOATING WITH THE WOMAN SAID THEY WERE CRUISING THROUGH THE WATER WHEN THEY HIT A BUMP. "THEY HIT SOMETHING THAT HE THOUGHT COULD ONLY HAVE BEEN A WHALE. WOMAN WAS THROWN AGAINST A 20-FOOT-LONG POWER BOAT'S GLASS WINDSHIELD AND SUFFERED MODERATE INJURIES TO HER HEAD AND ARM. NEWS VIDEO SHOWS BROKEN WINDSHIELD AND BLOOD. NO DETAILS ON POTENTIAL INJURY TO WHALE. PRORATED SERIOUS INJURY UNDER CRITERION L6B.	SI (PRORATE)	L6B	0.20	N	Y
UNIDENTIFIED WHALE		2020	8	11	VESSEL STRIKE	LOS ANGELES	CA	DEAD	M/V HORIZON PACIFIC (CONTAINER VESSEL) REPORTED THEY HAD STRUCK A WHALE IN POSITION 33-14N 119-12.3W. AT 0800T THE M/V HORIZON PACIFIC UPDATED THAT THE WHALE HAS FALLEN OFF THE BULB OF THE SHIP IN POSITION 33-33-50N 118-25.50W. FRESH DEAD. VESSEL SIZE =247 FEET, CRUISING SPEED = 20 KTS (> 65 FT AND >10 KTS). SPEED IS ASSUMED, NOT KNOWN, BASED ON LOCATION OF REPORTED STRIKE AND VESSEL PROFILE LISTED AT VESSELFINDER.COM.	DEAD	NA	1.00	N	Y