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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 217

Docket No. 160929897-6897-01

RIN 0648-BG37

Taking and Importing Marine Mammals; Taking Marine Mammals Incidental to Russian River Estuary Management Activities

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule.

SUMMARY: NMFS has received a request from the Sonoma County Water Agency (SCWA) for authorization to take marine mammals incidental to Russian River estuary management activities in Sonoma County, California, over the course of five years (2017-2022). As required by the Marine Mammal Protection Act (MMPA), NMFS is proposing regulations to govern that take and requests comments on the proposed regulations.

DATES: Comments and information must be received no later than [*insert date 30 days after date of publication in the FEDERAL REGISTER*].

ADDRESSES: You may submit comments on this document, identified by NOAA-NMFS-2016-0163, by any of the following methods:

- Electronic submission: Submit all electronic public comments via the federal e-Rulemaking Portal. Go to *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2016-0163*,

click the "Comment Now!" icon, complete the required fields, and enter or attach your comments.

- Mail: Submit written comments to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East West Highway, Silver Spring, MD 20910.

Comments regarding any aspect of the collection of information requirement contained in this proposed rule should be sent to NMFS via one of the means provided here and to the Office of Information and Regulatory Affairs, NEOB-10202, Office of Management and Budget, Attn: Desk Office, Washington, DC 20503, *OIRA@omb.eop.gov*.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (e.g., name, address), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Word, Excel, or Adobe PDF file formats only.

FOR FURTHER INFORMATION CONTACT: Ben Laws, Office of Protected Resources, NMFS, (301) 427-8401.

SUPPLEMENTARY INFORMATION:

Availability

A copy of SCWA's application and any supporting documents, as well as a list of the references cited in this document, may be obtained online at:

www.nmfs.noaa.gov/pr/permits/incidental/construction.htm. In case of problems accessing these documents, please call the contact listed above (see **FOR FURTHER INFORMATION CONTACT**).

National Environmental Policy Act (NEPA)

NMFS prepared an Environmental Assessment (EA; 2010) and associated Finding of No Significant Impact (FONSI) in accordance with NEPA and the regulations published by the Council on Environmental Quality. These documents are posted at the aforementioned Internet address. Information in SCWA's application, NMFS's EA (2010), and this notice collectively provide the environmental information related to proposed issuance of these regulations for public review and comment. We will review all comments submitted in response to this notice as we complete the NEPA process, including a decision of whether the existing EA and FONSI provide adequate analysis related to the potential environmental effects of issuing an incidental take authorization to SCWA, prior to a final decision on the request.

Purpose and Need for Regulatory Action

This proposed rule, to be issued under the authority of the Marine Mammal Protection Act (MMPA) (16 U.S.C. 1361 *et seq.*), would establish a framework for authorizing the take of marine mammals incidental to SCWA's estuary management activities at the mouth of the Russian River in Sonoma County, CA. SCWA proposes to manage the naturally-formed barrier beach at the mouth of the Russian River in order to minimize potential for flooding adjacent to the estuary and to enhance habitat for juvenile salmonids, as well as to conduct biological and physical monitoring of the barrier beach and estuary. Breaching of the naturally-formed barrier beach at the mouth of the Russian River requires the use of heavy equipment and increased human presence, and monitoring in the estuary requires the use of small boats.

We received an application from SCWA requesting five-year regulations and authorization to take multiple species of marine mammals. Take would occur by Level B harassment incidental to estuary management activities due to disturbance of hauled pinnipeds. The regulations would be valid from 2017 to 2022. Please see "Background" below for definitions of harassment.

Legal Authority for the Proposed Action

Section 101(a)(5)(A) of the MMPA (16 U.S.C. 1371(a)(5)(A)) directs the Secretary of Commerce to allow, upon request, the incidental, but not intentional taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region for up to five years if, after notice and public comment, the agency makes certain findings and issues regulations that set forth permissible methods of taking pursuant to that activity, as well as monitoring and reporting requirements. Section 101(a)(5)(A) of the MMPA and the implementing regulations at 50 CFR part 216, subpart I provide the legal basis for issuing this proposed rule containing five-year regulations, and for any subsequent Letters of Authorization. As directed by this legal authority, this proposed rule contains mitigation, monitoring, and reporting requirements.

Summary of Major Provisions within the Proposed Rule

The following provides a summary of some of the major provisions within the proposed rulemaking for SCWA estuary management activities. We have preliminarily determined that SCWA's adherence to the proposed mitigation, monitoring, and reporting measures listed below would achieve the least practicable adverse impact on the affected marine mammals. They include:

- Measures to minimize the number and intensity of incidental takes during sensitive times of year and to minimize the duration of disturbances.
- Measures designed to eliminate startling reactions.
- Eliminating or altering management activities on the beach when pups are present, and by setting limits on the frequency and duration of events during pupping season.

Background

Paragraphs 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1371 (a)(5)(A) and (D)) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

An authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s); will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant); and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth. NMFS has defined "negligible impact" in 50 CFR 216.103 as "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival."

Except with respect to certain activities not pertinent here, the MMPA defines "harassment" as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has the

potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment).

Summary of Request

On September 2, 2016, we received an adequate and complete request from SCWA for authorization to take marine mammals incidental to estuary management activities. On September 20, 2016 (81 FR 64440), we published a notice of receipt of SCWA's application in the **Federal Register**, requesting comments and information related to the request for 30 days. We did not receive any comments. SCWA provided a revised draft incorporating minor revisions on November 1, 2016.

SCWA proposes to manage the naturally-formed barrier beach at the mouth of the Russian River in order to minimize potential for flooding adjacent to the estuary and to enhance habitat for juvenile salmonids, as well as to conduct biological and physical monitoring of the barrier beach and estuary. Flood control-related breaching of the barrier beach at the mouth of the river may include artificial breaches, as well as construction and maintenance of a lagoon outlet channel. The latter activity, an alternative management technique conducted to mitigate impacts of flood control on rearing habitat for Endangered Species Act (ESA)-listed salmonids, occurs only from May 15 through October 15 (hereafter, the "lagoon management period"). Artificial breaching and monitoring activities may occur at any time during the period of validity of the proposed regulations. The requested regulations would be valid for 5 years, from April 21, 2017, through April 20, 2022.

Breaching of the naturally-formed barrier beach at the mouth of the Russian River requires the use of heavy equipment (*e.g.*, bulldozer, excavator) and increased human presence,

and monitoring in the estuary requires the use of small boats. As a result, pinnipeds hauled out on the beach or at peripheral haul-outs in the estuary may exhibit behavioral responses that indicate incidental take by Level B harassment under the MMPA. Species known from the haul-out at the mouth of the Russian River or from peripheral haul-outs, and therefore anticipated to be taken incidental to the specified activity, include the harbor seal (*Phoca vitulina richardii*), California sea lion (*Zalophus californianus*), and northern elephant seal (*Mirounga angustirostris*).

Prior to this request for incidental take regulations and a subsequent Letter of Authorization (LOA), we issued seven consecutive incidental harassment authorizations (IHA) to SCWA for incidental take associated with the same ongoing activities. SCWA was first issued an IHA, valid for a period of one year, effective on April 1, 2010 (75 FR 17382), and was subsequently issued one-year IHAs for incidental take associated with the same activities, effective on April 21, 2011 (76 FR 23306), April 21, 2012 (77 FR 24471), April 21, 2013 (78 FR 23746), April 21, 2014 (79 FR 20180), April 21, 2015 (80 FR 24237), and April 21, 2016 (81 FR 22050).

Description of the Specified Activity

Overview

The proposed action involves management of the estuary to prevent flooding while preventing adverse modification to critical habitat for ESA-listed salmonids. Requirements related to the ESA are described in further detail below. During the lagoon management period, this involves construction and maintenance of a lagoon outlet channel that would facilitate formation of a perched lagoon. A perched lagoon, which is an estuary closed to tidal influence in which water surface elevation is above mean high tide, would reduce flooding while maintaining

beneficial conditions for juvenile salmonids. Additional breaches of the barrier beach may be conducted for the sole purpose of reducing flood risk. SCWA's proposed activity was described in detail in our notice of proposed authorization prior to the 2011 IHA (76 FR 14924; March 18, 2011); please see that document for a detailed description of SCWA's estuary management activities. Aside from minor additions to SCWA's biological and physical estuary monitoring measures, the specified activity remains the same as that described in the 2011 document.

Dates and Duration

The specified activity may occur at any time during the five-year period of validity for these proposed regulations (April 21, 2017 through April 20, 2022), although construction and maintenance of a lagoon outlet channel would occur only during the lagoon management period. In addition, there are certain restrictions placed on SCWA during the harbor seal pupping season. These, as well as periodicity and frequency of the specified activities, are described in further detail below.

Specified Geographical Region

The estuary is located about 97 kilometers (km) (60 miles (mi)) northwest of San Francisco in Sonoma County, near Jenner, California (see Figure 1 of SCWA's application). The Russian River watershed encompasses 3,847 km^2 (1,485 mi^2) in Sonoma, Mendocino, and Lake Counties. The mouth of the Russian River is located at Goat Rock State Beach (see Figure 2 of SCWA's application); the estuary extends from the mouth upstream approximately 10 to 11 km (6-7 mi) between Austin Creek and the community of Duncans Mills (Heckel and McIver, 1994).

Detailed Description of Activities

Within the Russian River watershed, the U.S. Army Corps of Engineers (Corps), SCWA, and the Mendocino County Russian River Flood Control and Water Conservation Improvement

District (District) operate and maintain Federal facilities and conduct activities in addition to the estuary management, including flood control, water diversion and storage, instream flow releases, hydroelectric power generation, channel maintenance, and fish hatchery production. The Corps, SCWA, and the District conducted these activities for many years before salmonid species in the Russian River were protected under the ESA. Upon determination that these actions were likely to affect ESA-listed salmonids, as well as designated critical habitat for these species, formal consultation under section 7 of the ESA was initiated. In 2008, NMFS issued a Biological Opinion (BiOp) for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the Corps, SCWA, and the District in the Russian River watershed (NMFS, 2008). This BiOp found that the activities—including SCWA's estuary management activities—authorized by the Corps and undertaken by SCWA and the District, if continued in a manner similar to recent historic practices, were likely to jeopardize the continued existence of ESA-listed salmonids and were likely to adversely modify critical habitat.

If a project is found to jeopardize a species or adversely modify its critical habitat, NMFS must develop and recommend a non-jeopardizing Reasonable and Prudent Alternative (RPA) to the proposed project, in coordination with the federal action agency and any applicant. A component of the RPA described in the 2008 BiOp requires SCWA to collaborate with NMFS and modify their estuary water level management in order to reduce marine influence (*i.e.*, high salinity and tidal inflow) and promote a higher water surface elevation in the estuary in order to enhance the quality of rearing habitat for juvenile salmonids. A program of potential incremental steps prescribed to reach that goal includes adaptive management of the outlet channel. SCWA is also required to monitor the response of water quality, invertebrate production, and salmonids in and near the estuary to water surface elevation management in the estuary-lagoon system.

The analysis contained in the BiOp found that maintenance of lagoon conditions was necessary only for the lagoon management period. See NMFS's BiOp (2008) for details of that analysis. As a result of that determination, there are three components to SCWA's estuary management activities: (1) lagoon outlet channel management, during the lagoon management period only, required to accomplish the dual purposes of flood risk abatement and maintenance of juvenile salmonid habitat; (2) traditional artificial breaching, with the sole goal of flood risk abatement; and (3) physical and biological monitoring. The latter activity, physical and biological monitoring, will remain the same as in past years and as described in our 2015 notice of proposed authorization (80 FR 14073; March 18, 2015). Please see the previously referenced **Federal Register** notice (76 FR 14924; March 18, 2011) for detailed discussion of lagoon outlet channel management, artificial breaching, and other monitoring activities.

NMFS's BiOp determined that salmonid estuarine habitat may be improved by managing the Russian River estuary as a perched, freshwater lagoon and, therefore, stipulates as an RPA to existing conditions that the estuary be managed to achieve such conditions between May 15th and October 15th. In recognition of the complexity and uncertainty inherent in attempting to manage conditions in a dynamic beach environment, the BiOp stipulates that the estuarine water surface elevation RPA be managed adaptively, meaning that it should be planned, implemented, and then iteratively refined based on experience gained from implementation. The first phase of adaptive management, which has been implemented since 2010, is limited to outlet channel management (ESA, 2015).

Proposed Mitigation

In order to issue an incidental take authorization (ITA) under section 101(a)(5)(A) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, "and

other means of effecting the least practicable adverse impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for subsistence uses." NMFS's implementing regulations require applicants for ITAs to include information about the availability and feasibility (economic and technological) of equipment, methods, and manner of conducting such activity or other means of effecting the least practicable adverse impact upon the affected species or stocks and their habitat (50 CFR 216.104(a)(11)).

SCWA has proposed to continue the following mitigation measures, as implemented during the previous ITAs, designed to minimize impact to affected species and stocks:

- SCWA crews would cautiously approach (*e.g.*, walking slowly with limited arm movement and minimal sound) the haul-out ahead of heavy equipment to minimize the potential for sudden flushes, which may result in a stampede – a particular concern during pupping season.
- SCWA staff would avoid walking or driving equipment through the seal haul-out.
- Crews on foot would make an effort to be seen by seals from a distance, if possible, rather than appearing suddenly, again preventing sudden flushes.
- During breaching events, all monitoring would be conducted from the overlook on the bluff along Highway 1 adjacent to the haul-out in order to minimize potential for harassment.
- A water level management event may not occur for more than two consecutive days unless flooding threats cannot be controlled.

In addition, SCWA proposes to continue mitigation measures specific to pupping season (March 15-June 30), as implemented in the previous ITAs:

- SCWA will maintain a one week no-work period between water level management events (unless flooding is an immediate threat) to allow for an adequate disturbance recovery period. During the no-work period, equipment must be removed from the beach.
- If a pup less than one week old is on the beach where heavy machinery would be used or on the path used to access the work location, the management action will be delayed until the pup has left the site or the latest day possible to prevent flooding while still maintaining suitable fish rearing habitat. In the event that a pup remains present on the beach in the presence of flood risk, SCWA would consult with NMFS to determine the appropriate course of action. SCWA will coordinate with the locally established seal monitoring program (Stewards' Seal Watch) to determine if pups less than one week old are on the beach prior to a breaching event.
- Physical and biological monitoring will not be conducted if a pup less than one week old is present at the monitoring site or on a path to the site.

For all activities, personnel on the beach would include up to two equipment operators, three safety team members on the beach (one on each side of the channel observing the equipment operators, and one at the barrier to warn beach visitors away from the activities), and one safety team member at the overlook on Highway 1 above the beach. Occasionally, there would be two or more additional people (SCWA staff or regulatory agency staff) on the beach to observe the activities. SCWA staff would be followed by the equipment, which would then be followed by an SCWA vehicle (typically a small pickup truck, the vehicle would be parked at the previously posted signs and barriers on the south side of the excavation location). Equipment would be driven slowly on the beach and care would be taken to minimize the number of shut-downs and start-ups when the equipment is on the beach. All work would be completed as efficiently as possible, with the smallest amount of heavy equipment possible, to minimize

disturbance of seals at the haul-out. Boats operating near river haul-outs during monitoring would be kept within posted speed limits and driven as far from the haul-outs as safely possible to minimize flushing seals.

We have carefully evaluated SCWA's proposed mitigation measures and considered a range of other measures in the context of ensuring that we prescribed the means of effecting the least practicable adverse impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another: (1) the manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals, (2) the proven or likely efficacy of the specific measure to minimize adverse impacts as planned; and (3) the practicability of the measure for applicant implementation.

Any mitigation measure(s) we prescribe should be able to accomplish, have a reasonable likelihood of accomplishing (based on current science), or contribute to the accomplishment of one or more of the general goals listed below:

(1) Avoidance or minimization of injury or death of marine mammals wherever possible (goals 2, 3, and 4 may contribute to this goal).

(2) A reduction in the number (total number or number at biologically important time or location) of individual marine mammals exposed to stimuli expected to result in incidental take (this goal may contribute to 1, above, or to reducing takes by behavioral harassment only).

(3) A reduction in the number (total number or number at a biologically important time or location) of times any individual marine mammal would be exposed to stimuli expected to result in incidental take (this goal may contribute to 1, above, or to reducing takes by behavioral harassment only).

(4) A reduction in the intensity of exposure to stimuli expected to result in incidental take (this goal may contribute to 1, above, or to reducing the severity of behavioral harassment only).

(5) Avoidance or minimization of adverse effects to marine mammal habitat, paying particular attention to the prey base, blockage or limitation of passage to or from biologically important areas, permanent destruction of habitat, or temporary disturbance of habitat during a biologically important time.

(6) For monitoring directly related to mitigation, an increase in the probability of detecting marine mammals, thus allowing for more effective implementation of the mitigation.

Based on our evaluation of SCWA's proposed measures, we have preliminarily determined that the proposed mitigation measures provide the means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Description of Marine Mammals in the Area of the Specified Activity

Harbor seals are the most common species inhabiting the haul-out at the mouth of the Russian River (Jenner haul-out) and fine-scale local abundance data for harbor seals have been recorded extensively since 1972. California sea lions and northern elephant seals have also been observed infrequently in the project area. In addition to the primary Jenner haul-out, there are eight peripheral haul-outs nearby (see Figure 1 of SCWA's application). These include North Jenner and Odin Cove to the north; Pocked Rock, Kabemali, and Rock Point to the south; and Penny Logs, Patty's Rock, and Chalanchawi upstream within the estuary.

This section provides summary information regarding local occurrence of these species. We have reviewed SCWA's detailed species descriptions, including life history information, for

accuracy and completeness and refer the reader to Sections 3 and 4 of SCWA's application instead of reprinting the information here. Please also see NMFS Stock Assessment Reports, which may be accessed online at *www.nmfs.noaa.gov/pr/sars/species.htm*.

Harbor Seals

Harbor seals inhabit coastal and estuarine waters and shoreline areas of the Northern Hemisphere from temperate to polar regions. The eastern North Pacific subspecies is found from Baja California north to the Aleutian Islands and into the Bering Sea. Multiple lines of evidence support the existence of geographic structure among harbor seal populations from California to Alaska (Carretta *et al*., 2016). However, because stock boundaries are difficult to meaningfully draw from a biological perspective, three separate harbor seal stocks are recognized for management purposes along the west coast of the continental U.S.: (1) inland waters of Washington, (2) outer coast of Oregon and Washington, and (3) California (Carretta *et al*., 2016). Placement of a stock boundary at the California-Oregon border is not based on biology but is considered a political and jurisdictional convenience (Carretta *et al*., 2016). In addition, harbor seals may occur in Mexican waters, but these animals are not considered part of the California stock. Only the California stock is expected to be found in the project area.

California harbor seals are not protected under the ESA or listed as depleted under the MMPA, and are not considered a strategic stock under the MMPA because annual human-caused mortality (43) is significantly less than the calculated potential biological removal (PBR; 1,641) (Carretta *et al*., 2016). The population appears to be stabilizing at what may be its carrying capacity and the fishery mortality is declining. The best abundance estimate of the California stock of harbor seals is 30,968 and the minimum population size of this stock is 27,348 individuals (Carretta *et al*., 2016).

Harbor seal pupping normally occurs at the Russian River from March until late June, and sometimes into early July. The Jenner haul-out is the largest in Sonoma County. A substantial amount of monitoring effort has been conducted at the Jenner haul-out and surrounding areas. Concerned local residents formed the Stewards' Seal Watch Public Education Program in 1985 to educate beach visitors and monitor seal populations. State Parks Volunteer Docents continue this effort towards safeguarding local harbor seal habitat. On weekends during the pupping and molting season (approximately March-August), volunteers conduct public outreach and record the numbers of visitors and seals on the beach, other marine mammals observed, and the number of boats and kayaks present.

Ongoing monthly seal counts at the Jenner haul-out were begun by J. Mortenson in January 1987, with additional nearby haul-outs added to the counts thereafter. In addition, local resident E. Twohy began daily observations of seals and people at the Jenner haul-out in November 1989. These datasets note whether the mouth at the Jenner haul-out was opened or closed at each observation, as well as various other daily and annual patterns of haul-out usage (Mortenson and Twohy, 1994). In 2009, SCWA began regular baseline monitoring of the haul-out as a component of its estuary management activity. Table 1 shows average daily numbers of seals observed at the mouth of the Russian River from 1993-2005 and from 2009-15.

Table 1. Average Daily Number of Seals Observed at Russian River Mouth for Each Month, 1993-2005 and 2009-15.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1993	140	219	269	210	203	238	197	34	8	38	78	163
1994	138	221	243	213	208	212	246	98	26	31	101	162
1995	133	270	254	261	222	182	216	74	37	24	38	148
1996	144	175	261	247	157	104	142	65	17	29	76	139
1997	154	177	209	188	154	119	186	58	20	29	30	112
1998	119	151	192	93	170	213	232	53	33	21	93	147
1999	161	170	215	210	202	128	216	98	57	20	74	123
2000	151	185	240	180	158	245	256	63	46	50	86	127
2001	155	189	161	168	135	212	275	75	64	20	127	185
2002	117	12	20	154	134	213	215	89	43	26	73	126
2003	-	1	26	161	164	222	282	100	43	51	109	116

2004	2	5	39	180	202	318	307	35	40	47	68	61
2005	0	7	42	222	220	233	320	145	-	-	-	-
Mean, 1993-2005	118	137	167	191	179	203	238	76	36	32	79	134
2009	-	-	-	-	-	-	219	117	17	22	96	80
2010	66	84	129	136	109	136	267	111	59	25	89	26
2011	116	92	162	124	128	145	219	98	31	53	92	48
2012	108	74	115	169	164	166	156	128	100	71	137	51
2013	51	108	158	112	162	139	411	175	77	58	34	94
2014	98	209	243	129	145	156	266	134	53	15	27	172
2015	113	171	145	177	153	219	373	120	48	33	49	138
Mean, 2011-15[1]	99	131	165	141	151	164	282	133	62	48	68	98

Data from 1993-2005 adapted from Mortenson and Twohy (1994) and E. Twohy (unpublished data). Data from 2009-15 collected by SCWA.

Months represented by dash indicate periods where data were missing or incomplete.

[1]Mean calculated as a weighted average to account for unequal sample sizes between years. See Table 4 of SCWA's application.

The number of seals present at the Jenner haul-out generally declines during bar-closed conditions (Mortenson, 1996). SCWA's pinniped monitoring efforts from 1996 to 2000 focused on artificial breaching activities and their effects on the Jenner haul-out. Seal counts and disturbances were recorded from one to two days prior to breaching, the day of breaching, and the day after breaching (MSC, 1997, 1998, 1999, 2000; SCWA and MSC, 2001). In each year, the trend observed was that harbor seal numbers generally declined during a beach closure and increased the day following an artificial breaching event. Heckel and McIver (1994) speculated that the loss of easy access to the haul-out and ready escape to the sea during bar-closed conditions may account for the lower numbers. Table 2 shows average daily seal counts recorded during SCWA monitoring of breaching events from 2009-15, representing bar-closed conditions, when seal numbers decline.

Table 2. Average Number of Harbor Seals Observed at the Mouth of the Russian River during Breaching Events (*i.e.*, Bar-Closed Conditions) by Month.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2009-15	49	75	133	99	80	98	117	17[1]	30	28	32	59

[1]No estuary management events occurred; data from earlier monitoring effort (1996-2000).

Mortenson (1996) observed that pups were first seen at the Jenner haul-out in late March, with maximum counts in May. In this study, pups were not counted separately from other age classes at the haul-out after August due to the difficulty in discriminating pups from small yearlings. From 1989 to 1991, Hanson (1993) observed that pupping began at the Jenner haul-out in mid-April, with a maximum number of pups observed during the first two weeks of May. This corresponds with the peaks observed at Point Reyes, where the first viable pups are born in March and the peak is the last week of April to early May (SCWA, 2014). Based on this information, pupping season at the Jenner haul-out is conservatively defined here as March 15 to June 30.

California Sea Lions

California sea lions range from the Gulf of California north to the Gulf of Alaska, with breeding areas located in the Gulf of California, western Baja California, and southern California. Five genetically distinct geographic populations have been identified: (1) Pacific Temperate, (2) Pacific Subtropical, (3) Southern Gulf of California, (4) Central Gulf of California and (5) Northern Gulf of California (Schramm *et al*., 2009). Rookeries for the Pacific Temperate population are found within U.S. waters and just south of the U.S.-Mexico border, and animals belonging to this population may be found from the Gulf of Alaska to Mexican waters off Baja California. Animals belonging to other populations (*e.g.*, Pacific Subtropical) may range into U.S. waters during non-breeding periods. For management purposes, a stock of California sea lions comprising those animals at rookeries within the U.S. is defined (*i.e.*, the U.S. stock of California sea lions) (Carretta *et al*., 2016). Pup production at the Coronado Islands rookery in Mexican waters is considered an insignificant contribution to the overall size of the Pacific Temperate population (Lowry and Maravilla-Chavez, 2005).

California sea lions are not protected under the ESA or listed as depleted under the MMPA. Total annual human-caused mortality (389) is substantially less than the PBR (estimated at 9,200); therefore, California sea lions are not considered a strategic stock under the MMPA. The best abundance estimate of the U.S. stock of California sea lions is 296,750 and the minimum population size of this stock is 153,337 individuals (Carretta *et al*., 2016).

Beginning in January 2013, elevated strandings of California sea lion pups were observed in southern California, with live sea lion strandings nearly three times higher than the historical average. Findings to date indicate that a likely contributor to the large number of stranded, malnourished pups was a change in the availability of sea lion prey for nursing mothers, especially sardines. Although the pups showed signs of some viruses and infections, findings indicate that this event was not caused by disease or a single infectious agent but by the lack of high quality, close-by food sources for nursing mothers. Several different kinds of one sort of virus (astroviruses, including some new species of astrovirus) were identified in a high percentage of the samples; however, the importance of this finding is still under investigation. The causes and mechanisms of this remain under investigation (*www.nmfs.noaa.gov/pr/health/mmume/californiasealions2013.htm*; accessed December 6, 2016).

Solitary California sea lions have occasionally been observed at or in the vicinity of the Russian River estuary (MSC, 1999, 2000), in all months of the year except June. Male California sea lions are occasionally observed hauled out at or near the Russian River mouth in most years: August 2009, January and December 2011, January 2012, December 2013, February 2014, and February and April 2015. Other individuals were observed in the surf at the mouth of the river or swimming inside the estuary. Juvenile sea lions were observed during the summer of 2009 at the

Patty's Rock haul-out, and some sea lions were observed during monitoring of peripheral haul-outs in October 2009. The occurrence of individual California sea lions in the action area may occur year-round, but is infrequent and sporadic.

Northern Elephant Seals

Northern elephant seals gather at breeding areas, located primarily on offshore islands of Baja California and California, from approximately December to March before dispersing for feeding. Males feed near the eastern Aleutian Islands and in the Gulf of Alaska, while females feed at sea south of 45°N (Stewart and Huber, 1993; Le Boeuf *et al*., 1993). Adults then return to land between March and August to molt, with males returning later than females, before dispersing again to their respective feeding areas between molting and the winter breeding season. Populations of northern elephant seals in the U.S. and Mexico are derived from a few tens or hundreds of individuals surviving in Mexico after being nearly hunted to extinction (Stewart *et al*., 1994). Given the recent derivation of most rookeries, no genetic differentiation would be expected. Although movement and genetic exchange continues between rookeries, most elephant seals return to their natal rookeries when they start breeding (Huber *et al*., 1991). The California breeding population is now demographically isolated from the Baja California population and is considered to be a separate stock.

Northern elephant seals are not protected under the ESA or listed as depleted under the MMPA. Total annual human-caused mortality (8.8) is substantially less than the PBR (estimated at 4,882); therefore, northern elephant seals are not considered a strategic stock under the MMPA. The best abundance estimate of the California breeding population of northern elephant seals is 179,000 and the minimum population size of this stock is 81,368 individuals (Carretta *et al*., 2016).

Censuses of pinnipeds at the mouth of the Russian River have been taken at least semi-monthly since 1987. Elephant seals were noted from 1987-95, with one or two elephant seals typically counted during May censuses, and occasional records during the fall and winter (Mortenson and Follis, 1997). A single, tagged northern elephant seal sub-adult was present at the Jenner haul-out from 2002-07. This individual seal, which was observed harassing harbor seals also present at the haul-out, was generally present during molt and again from late December through March. A single juvenile elephant seal was observed at the Jenner haul-out in June 2009 and, in recent years, a sub-adult seal was observed in late summer of 2013-14. The occurrence of individual northern elephant seals in the action area has generally been infrequent and sporadic in the past ten years.

Potential Effects of the Specified Activity on Marine Mammals and Their Habitat

This section includes a summary and discussion of the ways that components of the specified activity may impact marine mammals and their habitat. The "Estimated Take by Incidental Harassment" section later in this document will include a quantitative analysis of the number of incidents of take expected to occur incidental to this activity. The "Negligible Impact Analysis" section will include an analysis of how this specific activity will impact marine mammals and will consider the content of this section, the "Estimated Take by Incidental Harassment" section, and the "Proposed Mitigation" section, to draw conclusions regarding the likely impacts of these activities on the reproductive success or survivorship of individuals and from that on the affected marine mammal populations or stocks.

A significant body of monitoring data exists for pinnipeds at the mouth of the Russian River. In addition, pinnipeds have co-existed with regular estuary management activity for decades, as well as with regular human use activity at the beach, and are likely habituated to

human presence and activity. Nevertheless, SCWA's estuary management activities have the potential to disturb pinnipeds present on the beach or at peripheral haul-outs in the estuary. During breaching operations, past monitoring has revealed that some or all of the seals present typically move or flush from the beach in response to the presence of crew and equipment, though some may remain hauled-out. No stampeding of seals—a potentially dangerous occurrence in which large numbers of animals succumb to mass panic and rush away from a stimulus—has been documented since SCWA developed protocols to prevent such events in 1999. While it is likely impossible to conduct required estuary management activities without provoking some response in hauled-out animals, precautionary mitigation measures, described later in this document, ensure that animals are gradually apprised of human approach. Under these conditions, seals typically exhibit a continuum of responses, beginning with alert movements (*e.g.*, raising the head), which may then escalate to movement away from the stimulus and possible flushing into the water. Flushed seals typically re-occupy the haul-out within minutes to hours of the stimulus.

In the absence of appropriate mitigation measures, it is possible that pinnipeds could be subject to injury, serious injury, or mortality, likely through stampeding or abandonment of pups. However, based on a significant body of site-specific data, harbor seals are unlikely to sustain any harassment that may be considered biologically significant. Individual animals would, at most, flush into the water in response to maintenance activities but may also simply become alert or move across the beach away from equipment and crews. During 2013, SCWA observed that harbor seals are less likely to flush from the beach when the primary aggregation of seals is north of the breaching activity (please refer to Figure 2 of SCWA's application), meaning that personnel and equipment are not required to pass the seals. Four artificial breaching events were

implemented in 2013, with two of these events occurring north of the primary aggregation and two to the south (at approximately 250 and 50 m distance) (SCWA, 2014). In both of the former cases, all seals present eventually flushed to the water, but when breaching activity remained to the south of the haul-out, only 11 and 53 percent of seals, respectively, were flushed.

California sea lions and northern elephant seals have been observed as less sensitive to stimulus than harbor seals during monitoring at numerous other sites. For example, monitoring of pinniped disturbance as a result of abalone research in the Channel Islands showed that while harbor seals flushed at a rate of 69 percent, California sea lions flushed at a rate of only 21 percent. The rate for elephant seals declined to 0.1 percent (VanBlaricom, 2010). In the event that either of these species is present during management activities, they would be expected to display a minimal reaction to maintenance activities—less than that expected of harbor seals.

Although the Jenner haul-out is not known as a primary pupping beach, pups have been observed during the pupping season; therefore, we have evaluated the potential for injury, serious injury, or mortality to pups. There is a lack of published data regarding pupping at the mouth of the Russian River, but SCWA monitors have observed pups on the beach. No births were observed during recent monitoring, but may be inferred based on signs indicating pupping (*e.g.*, blood spots on the sand, birds consuming possible placental remains). Pup injury or mortality would be most likely to occur in the event of extended separation of a mother and pup, or trampling in a stampede. As discussed previously, no stampedes have been recorded since development of appropriate protocols in 1999. Any California sea lions or northern elephant seals present would be independent juveniles or adults; therefore, analysis of impacts on pups is not relevant for those species.

Similarly, the period of mother-pup bonding, critical time needed to ensure pup survival and maximize pup health, is not expected to be impacted by estuary management activities. Harbor seal pups are extremely precocious, swimming and diving immediately after birth and throughout the lactation period, unlike most other phocids which normally enter the sea only after weaning (Lawson and Renouf, 1985; Cottrell *et al*., 2002; Burns *et al*., 2005). Lawson and Renouf (1987) investigated harbor seal mother-pup bonding in response to natural and anthropogenic disturbance. In summary, they found that the most critical bonding time is within minutes after birth. As described previously, the peak of pupping season is typically concluded by mid-May, when the lagoon management period begins. As such, it is expected that mother-pup bonding would likely be concluded as well. The number of management events during the months of March and April has been relatively low in the past, and the breaching activities occur in a single day over several hours. In addition, mitigation measures described later in this document further reduce the likelihood of any impacts to pups, whether through injury or mortality or interruption of mother-pup bonding (which may lead to abandonment).

In summary, and based on extensive monitoring data, we believe that impacts to hauled-out pinnipeds during estuary management activities would be behavioral harassment of limited duration (*i.e.*, less than one day) and limited intensity (*i.e.*, temporary flushing at most). Stampeding, and therefore injury or mortality, is not expected—nor been documented—in the years since appropriate protocols were established (see "Mitigation" for more details). Further, the continued, and increasingly heavy (see SCWA's monitoring reports), use of the haul-out despite decades of breaching events indicates that abandonment of the haul-out is unlikely.

Anticipated Effects on Marine Mammal Habitat

The purposes of the estuary management activities are to improve summer rearing habitat for juvenile salmonids in the Russian River estuary and/or to minimize potential flood risk to properties adjacent to the estuary. These activities would result in temporary physical alteration of the Jenner haul-out, but are essential to conserving and recovering endangered salmonid species, as prescribed by the BiOp. These salmonids are themselves prey for pinnipeds. In addition, with barrier beach closure, seal usage of the beach haul-out declines, and the three nearby river haul-outs may not be available for usage due to rising water surface elevations. Breaching of the barrier beach, subsequent to the temporary habitat disturbance, likely increases suitability and availability of habitat for pinnipeds. Biological and water quality monitoring would not physically alter pinniped habitat. Please see the previously referenced **Federal Register** notice (76 FR 14924; March 18, 2011) for a more detailed discussion of anticipated effects on habitat.

During SCWA's pinniped monitoring associated with artificial breaching activities from 1996 to 2000, the number of harbor seals hauled out declined when the barrier beach closed and then increased the day following an artificial breaching event (MSC, 1997, 1998, 1999, and 2000; SCWA and MSC, 2001). This response to barrier beach closure followed by artificial breaching has remained consistent in recent years and is anticipated to continue. However, it is possible that the number of pinnipeds using the haul-out could decline during the extended lagoon management period, when SCWA would seek to maintain a shallow outlet channel rather than the deeper channel associated with artificial breaching. Collection of baseline information during the lagoon management period is included in the monitoring requirements described later in this document. SCWA's previous monitoring, as well as Twohy's daily counts of seals at the sandbar (Table 1) indicate that the number of seals at the haul-out declines from August to

October, so management of the lagoon outlet channel (and managing the sandbar as a summer lagoon) would have little effect on haul-out use during the latter portion of the lagoon management period. The early portion of the lagoon management period coincides with the pupping season. Past monitoring during this period, which represents some of the longest beach closures in the late spring and early summer months, shows that the number of pinnipeds at the haul-out tends to fluctuate, rather than showing the more straightforward declines and increases associated with closures and openings seen at other times of year (MSC, 1998). This may indicate that seal haul-out usage during the pupping season is less dependent on bar status. As such, the number of seals hauled out from May through July would be expected to fluctuate but is unlikely to respond dramatically to the absence of artificial breaching events. Regardless, any impacts to habitat resulting from SCWA's management of the estuary during the lagoon management period are not in relation to natural conditions but, rather, in relation to conditions resulting from SCWA's discontinued approach of artificial breaching during this period.

In summary, there will be temporary physical alteration of the beach. However, natural opening and closure of the beach results in the same impacts to habitat. Therefore, seals are likely adapted to this cycle. In addition, the increase in rearing habitat quality has the goal of increasing salmonid abundance, ultimately providing more food for seals present within the action area. Thus, any impacts to marine mammal habitat are not expected to cause significant or long-term consequences for individual marine mammals or their populations.

Estimated Take by Incidental Harassment

Except with respect to certain activities not pertinent here, section 3(18) of the MMPA defines "harassment" as: "…any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has

the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment)."

SCWA has requested, and NMFS proposes, authorization to take harbor seals, California sea lions, and northern elephant seals, by Level B harassment only, incidental to estuary management activities. These activities, involving increased human presence and the use of heavy equipment and support vehicles, are expected to harass pinnipeds present at the haul-out through disturbance only. In addition, monitoring activities prescribed in the BiOp may harass additional animals at the Jenner haul-out and at the three haul-outs located in the estuary (Penny Logs, Patty's Rock, and Chalanchawi). Estimates of the number of harbor seals, California sea lions, and northern elephant seals that may be harassed by the proposed activities is based upon the number of potential events associated with Russian River estuary management activities and the average number of individuals of each species that are present during conditions appropriate to the activity. As described previously in this document, monitoring effort at the mouth of the Russian River has shown that the number of seals utilizing the haul-out declines during bar-closed conditions. Table 3 details the total number of estimated takes for harbor seals.

Events associated with lagoon outlet channel management would occur only during the lagoon management period and are split into two categories: (1) initial channel implementation, which would likely occur between May and September; and (2) maintenance and monitoring of the outlet channel, which would continue until October 15. In addition, it is possible that the initial outlet channel could close through natural processes, requiring additional channel implementation events. Based on past experience, SCWA estimates that a maximum of three outlet channel implementation events could be required, with each event lasting up to two days.

Outlet channel implementation events would only occur when the bar is closed. Therefore, it is appropriate to use data from bar-closed monitoring events in estimating take (Table 2). Construction of the outlet channel is designed to produce a perched outflow, resulting in conditions that more closely resemble bar-closed than bar-open with regard to pinniped haul-out usage. As such, bar-closed data is appropriate for estimating take during all lagoon management period maintenance and monitoring activity. As dates of outlet channel implementation cannot be known in advance, the highest daily average of seals per month—the March average for 2009-15—is used in estimating take. For maintenance and monitoring activities associated with the lagoon outlet channel, which would occur on a weekly basis following implementation of the outlet channel, the average number of harbor seals for each month was used.

Artificial breaching activities would also occur during bar-closed conditions. Data collected specifically during bar-closed conditions may be used for estimating take associated with artificial breaching (Table 2). The number of estimated artificial breaching events is also informed by experience. For those months with more frequent historical bar closure events, we assume that two such events could occur in any given year. For other months, we assume that only one such event would occur in a given year. Please see Table 1 in SCWA's application for more information.

For monthly topographic surveys on the barrier beach, potential incidental take of harbor seals is typically calculated as one hundred percent of the seals expected to be encountered. The exception is during the month of April, when surveyors would avoid seals to reduce harassment of pups and/or mothers with neonates. For the monthly topographic survey during April, a pinniped monitor is positioned at the Highway 1 overlook and would notify the surveyors via radio when any seals on the haul-out begin to alert to their presence. This enables the surveyors

to retreat slowly away from the haul-out, typically resulting in no disturbance. For that survey, the assumption is therefore that only ten percent of seals present would be harassed. The number of seals expected to be encountered is based on the average monthly number of seals hauled out as recorded during baseline surveys conducted by SCWA in 2011-15 (Table 1).

For biological and physical habitat monitoring activities in the estuary, it was assumed that pinnipeds may be encountered once per event and flush from a river haul-out. The potential for harassment associated with these events is limited to the three haul-outs located in the estuary. In past experience, SCWA typically sees no more than a single harbor seal at these haul-outs, which consist of scattered logs and rocks that often submerge at high tide.

As described previously, California sea lions and northern elephant seals are occasional visitors to the estuary. Based on limited information regarding occurrence of these species at the mouth of the Russian River estuary, we assume there is the potential to encounter one animal of each species per month throughout the year. Lagoon outlet channel activities could potentially occur over six months of the year, artificial breaching activities over eight months, topographic surveys year-round, and biological and physical monitoring in the estuary over eight months. Therefore, we assume that up to 34 incidents of take could occur per year for both the California sea lion and northern elephant seal. Based on past occurrence records, the proposed take authorization for these two species is likely a precautionary overestimate.

Table 3. Estimated Number of Harbor Seal Takes Resulting from Russian River Estuary Management Activities.

Number of animals expected to occur[a]	Number of events[b,c]	Potential total number of individual animals that may be taken
Lagoon Outlet Channel Management (May 15 to October 15)		
Implementation: 117[d]	Implementation: 3	Implementation: 702
Maintenance and Monitoring: May: 80 June: 98	Maintenance: May: 1 June-Sept: 4/month Oct: 1	Maintenance: 1,156

July: 117 Aug: 17 Sept: 30 Oct: 28	Monitoring: June-Sept: 2/month Oct: 1	Monitoring: 552 Total: 2,410
Artificial Breaching		
Oct: 28	Oct: 2	Oct: 56
Nov: 32	Nov: 2	Nov: 64
Dec: 59	Dec: 2	Dec: 118
Jan: 49	Jan: 1	Jan: 49
Feb: 75	Feb: 1	Feb: 75
Mar: 133	Mar: 1	Mar: 133
Apr: 99	Apr: 1	Apr: 99
May: 80	May: 2	May: 160
	12 events maximum	Total: 754
Topographic and Geophysical Beach Surveys		
Jan: 99 Feb: 131 Mar: 165 Apr: 141 May: 151 Jun: 164 Jul: 282 Aug: 133 Sep: 62 Oct: 48 Nov: 68 Dec: 98	1 topographic survey/month; 100 percent of animals present Jun-Feb; 10 percent of animals present Mar-May	Jan: 99 Feb: 131 Mar: 165 Apr: 14 May: 151 Jun: 164 Jul: 282 Aug: 133 Sep: 62 Oct: 48 Nov: 68 Dec: 98 Total: 1,415
Biological and Physical Habitat Monitoring in the Estuary		
1[e]	113	113
Total		4,692

[a]For Lagoon Outlet Channel Management and Artificial Breaching, average daily number of animals corresponds with data from Table 2. For Topographic and Geophysical Beach Surveys, average daily number of animals corresponds with 2011-15 data from Table 1.

[b]For implementation of the lagoon outlet channel, an event is defined as a single, two-day episode. For the remaining activities, an event is defined as a single day on which an activity occurs. Some events may include multiple activities.

[c]Number of events for artificial breaching derived from historical data. The average number of events for each month was rounded up to the nearest whole number; estimated number of events for December was increased from one to two because multiple closures resulting from storm events have occurred in recent years during that month. The total numbers (12) likely represent an overestimate, as the average annual number of events is five.

[d]Although implementation could occur at any time during the lagoon management period, the highest daily average per month from the lagoon management period was used.

[e]Based on past experience, SCWA expects that no more than one seal may be present, and thus have the potential to be disturbed, at the three river haul-outs.

The take numbers described in the preceding text are annual estimates. Therefore, over the course of the 5-year period of validity of the proposed regulations, we propose to authorize a total of 23,460 incidents of take for harbor seals and 170 such incidents each for the California sea lion and northern elephant seal.

Analyses and Preliminary Determinations

Negligible Impact Analysis

NMFS has defined "negligible impact" in 50 CFR 216.103 as "...an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival." A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (*i.e.*, population-level effects). An estimate of the number of takes alone is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be "taken" through behavioral harassment, we consider other factors, such as the likely nature of any responses (*e.g.*, intensity, duration), the context of any such responses (*e.g.*, critical reproductive time or location, migration), as well as the number and nature of estimated Level A harassment takes (if any), and effects on habitat. We also assess the number, intensity, and context of estimated takes by evaluating this information relative to population status.

Consistent with the 1989 preamble for NMFS's implementing regulations (54 FR 40338; September 29, 1989), the impacts from other past and ongoing anthropogenic activities are incorporated into these analyses via their impacts on the environmental baseline (*e.g.*, as reflected in the regulatory status of the species, population size and growth rate where known, sources of human-caused mortality).

Although SCWA's estuary management activities may disturb pinnipeds hauled out at the mouth of the Russian River, as well as those hauled out at several locations in the estuary during recurring monitoring activities, impacts are occurring to a small, localized group of animals. While these impacts can occur year-round, they occur sporadically and for limited

duration (*e.g.*, a maximum of two consecutive days for water level management events). Seals will likely become alert or, at most, flush into the water in reaction to the presence of crews and equipment on the beach. While disturbance may occur during a sensitive time (during the March 15-June 30 pupping season), mitigation measures have been specifically designed to further minimize harm during this period and eliminate the possibility of pup injury or mother-pup separation.

No injury, serious injury, or mortality is anticipated, nor is the proposed action likely to result in long-term impacts such as permanent abandonment of the haul-out. Injury, serious injury, or mortality to pinnipeds would likely result from startling animals inhabiting the haul-out into a stampede reaction, or from extended mother-pup separation as a result of such a stampede. Long-term impacts to pinniped usage of the haul-out could result from significantly increased presence of humans and equipment on the beach. To avoid these possibilities, we have worked with SCWA to develop the previously described mitigation measures. These are designed to reduce the possibility of startling pinnipeds, by gradually apprising them of the presence of humans and equipment on the beach, and to reduce the possibility of impacts to pups by eliminating or altering management activities on the beach when pups are present and by setting limits on the frequency and duration of events during pupping season. During the past fifteen years of flood control management, implementation of similar mitigation measures has resulted in no known stampede events and no known injury, serious injury, or mortality. Over the course of that time period, management events have generally been infrequent and of limited duration.

No pinniped stocks for which incidental take authorization is proposed are listed as threatened or endangered under the ESA or determined to be strategic or depleted under the MMPA. Recent data suggests that harbor seal populations have reached carrying capacity;

populations of California sea lions and northern elephant seals in California are also considered healthy.

In summary, and based on extensive monitoring data, we believe that impacts to hauled-out pinnipeds during estuary management activities would be behavioral harassment of limited duration (*i.e.*, less than one day) and limited intensity (*i.e.*, temporary flushing at most). Stampeding, and therefore injury or mortality, is not expected—nor been documented—in the years since appropriate protocols were established (see "Proposed Mitigation" for more details). Further, the continued, and increasingly heavy (see figures in SCWA documents), use of the haul-out despite decades of breaching events indicates that abandonment of the haul-out is unlikely. Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed monitoring and mitigation measures, we preliminarily find that the total marine mammal take from SCWA's estuary management activities will have a negligible impact on the affected marine mammal species or stocks.

Small Numbers Analysis

The proposed number of animals taken for each species of pinniped can be considered small relative to the population size. There are an estimated 30,968 harbor seals in the California stock, 296,750 California sea lions, and 179,000 northern elephant seals in the California breeding population. Based on extensive monitoring effort specific to the affected haul-out and historical data on the frequency of the specified activity, we are proposing to authorize annual levels of take, by Level B harassment only, of 4,692 incidents of harassment for harbor seals, 34 incidents of harassment for California sea lions, and 34 incidents of harassment for northern elephant seals, representing 15.2, 0.01, and 0.02 percent of the populations, respectively.

However, this represents an overestimate of the number of individuals harassed annually over the duration of the proposed regulations, because these totals represent much smaller numbers of individuals that may be harassed multiple times. Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the mitigation and monitoring measures, we preliminarily find that small numbers of marine mammals will be taken relative to the populations of the affected species or stocks.

Proposed Monitoring and Reporting

In order to issue an incidental take authorization for an activity, section 101(a)(5)(A) of the MMPA states that NMFS must set forth "requirements pertaining to the monitoring and reporting of such taking." The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for incidental take authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the proposed action area.

Any monitoring requirement we prescribe should improve our understanding of one or more of the following:

- Occurrence of marine mammal species in action area (*e.g.*, presence, abundance, distribution, density).
- Nature, scope, or context of likely marine mammal exposure to potential stressors/impacts (individual or cumulative, acute or chronic), through better understanding of: (1) action or environment (*e.g.*, source characterization, propagation, ambient noise); (2) affected species (*e.g.*, life history, dive patterns); (3) co-occurrence of marine mammal species with the

action; or (4) biological or behavioral context of exposure (*e.g.*, age, calving, or feeding areas).

- Individual responses to acute stressors, or impacts of chronic exposures (behavioral or physiological).
- How anticipated responses to stressors impact either: (1) long-term fitness and survival of an individual; or (2) population, species, or stock.
- Effects on marine mammal habitat and resultant impacts to marine mammals.
- Mitigation and monitoring effectiveness.

SCWA submitted a marine mammal monitoring plan as part of the ITA application. It can be found online at *www.nmfs.noaa.gov/pr/permits/incidental/construction.htm*. The plan, which has been successfully implemented (in slightly different form from the currently proposed plan) by SCWA under previous ITAs, may be modified or supplemented based on comments or new information received from the public during the public comment period. The purpose of this monitoring plan, which is carried out collaboratively with the Stewards of the Coasts and Redwoods (Stewards) organization, is to detect the response of pinnipeds to estuary management activities at the Russian River estuary. SCWA has designed the plan both to satisfy the requirements of the IHA, and to address the following questions of interest:

1. Under what conditions do pinnipeds haul out at the Russian River estuary mouth at Jenner?

2. How do seals at the Jenner haul-out respond to activities associated with the construction and maintenance of the lagoon outlet channel and artificial breaching activities?

3. Does the number of seals at the Jenner haul-out significantly differ from historic averages with formation of a summer (May 15 to October 15) lagoon in the Russian River estuary?

4. Are seals at the Jenner haul-out displaced to nearby river and coastal haul-outs when the mouth remains closed in the summer?

Proposed Monitoring Measures

Baseline Monitoring – Seals at the Jenner haul-out would be counted for four hours every week, with no more than four baseline surveys each month. Two monitoring events each month would occur in the morning and two would occur in the afternoon with an effort to schedule a morning survey at low and high tide each month and an afternoon survey at low and high tide each month. This baseline information will provide SCWA with details that may help to plan estuary management activities in the future to minimize pinniped interaction. Survey protocols are as follows: all seals hauled out on the beach are counted every 30 minutes from the overlook on the bluff along Highway 1 adjacent to the haul-out using spotting scopes. Monitoring may conclude for the day if weather conditions affect visibility (*e.g.*, heavy fog in the afternoon). Depending on how the sandbar is formed, seals may haul out in multiple groups at the mouth. At each 30-minute count, the observer indicates where groups of seals are hauled out on the sandbar and provides a total count for each group. If possible, adults and pups are counted separately.

This primary haul-out is where the majority of seals are found and where pupping occurs, and SCWA's proposed monitoring would allow continued development in understanding the physical and biological factors that influence seal abundance and behavior at the site. In particular, SCWA notes that the proposed frequency of surveys would allow them to be able to observe the influence of physical changes that do not persist for more than ten days, like brief periods of barrier beach closures or other environmental changes, and would allow for assessment of how seals respond to barrier beach closures as well as accurate estimation of the number of harbor seal pups born at Jenner each year.

In addition to the census data, disturbances of the haul-out are recorded. The method for recording disturbances follows those in Mortenson (1996). Disturbances would be recorded on a three-point scale that represents an increasing seal response to the disturbance (Table 4). The time, source, and duration of the disturbance, as well as an estimated distance between the source and haul-out, are recorded. It should be noted that only responses falling into Mortenson's Levels 2 and 3 will be considered as harassment under the MMPA, under the terms of these proposed regulations.

Table 4. Seal Response to Disturbance.

Level	Type of response	Definition
1	Alert	Seal head orientation or brief movement in response to disturbance, which may include turning head towards the disturbance, craning head and neck while holding the body rigid in a u-shaped position, changing from a lying to a sitting position, or brief movement of less than twice the animal's body length.
2	Movement	Movements in response to the source of disturbance, ranging from short withdrawals at least twice the animal's body length to longer retreats over the beach, or if already moving a change of direction of greater than 90 degrees.
3	Flight	All retreats (flushes) to the water.

Weather conditions are recorded at the beginning of each census. These include temperature, Beaufort sea state, precipitation/visibility, and wind speed. Tide levels and estuary water surface elevations are correlated to the monitoring start and end times.

In an effort towards understanding possible relationships between use of the Jenner haul-out and nearby coastal and river haul-outs, several other haul-outs on the coast and in the Russian River estuary are monitored as well (see Figure 1 of SCWA's application). Peripheral site monitoring would occur only in the event of an extended period of lagoon conditions (*i.e.*, barrier beach closed with perched outlet channel for three weeks or more). Abundance at these sites has been observed to generally be very low regardless of river mouth condition. These sites are generally very small physically, composed of small rocks or outcrops or logs in the river, and therefore could not accommodate significant displacement from the main beach haul-out.

Monitoring of peripheral sites under extended lagoon conditions will allow for possible detection of any changed use patterns.

Estuary Management Event Monitoring, Lagoon Outlet Channel – Should the mouth close during the lagoon management period, SCWA would construct a lagoon outlet channel as required by the BiOp. Activities associated with the initial construction of the outlet channel, as well as the maintenance of the channel that may be required, would be monitored for disturbances to the seals at the Jenner haul-out.

A one-day pre-event channel survey would be made within one to three days prior to constructing the outlet channel. The haul-out would be monitored on the day the outlet channel is constructed and daily for up to the maximum two days allowed for channel excavation activities. Monitoring would also occur on each day that the outlet channel is maintained using heavy equipment for the duration of the lagoon management period. Monitoring of outlet channel construction and maintenance would correspond with that described under the "Baseline Monitoring" section previously, with the exception that management activity monitoring duration is defined by event duration. On the day of the management event, pinniped monitoring begins at least one hour prior to the crew and equipment accessing the beach work area and continues through the duration of the event, until at least one hour after the crew and equipment leave the beach.

In an attempt to understand whether seals from the Jenner haul-out are displaced to coastal and river haul-outs nearby when management events occur, other nearby haul-outs are monitored concurrently with monitoring of outlet channel construction and maintenance activities. This provides an opportunity to qualitatively assess whether these haul-outs are being used by seals displaced from the Jenner haul-out during lagoon outlet channel excavation and

maintenance. This monitoring would not provide definitive results regarding displacement to nearby coastal and river haul-outs, as individual seals are not marked or photo-identified, but is useful in tracking general trends in haul-out use during lagoon outlet channel excavation and maintenance. As volunteers are required to monitor these peripheral haul-outs, haul-out locations may need to be prioritized if there are not enough volunteers available. In that case, priority would be assigned to the nearest haul-outs (North Jenner and Odin Cove), followed by the Russian River estuary haul-outs, and finally the more distant coastal haul-outs.

Estuary Management Event Monitoring, Artificial Breaching Events – In accordance with the Russian River BiOp, SCWA may artificially breach the barrier beach outside of the summer lagoon management period, and may conduct a maximum of two such breachings during the lagoon management period, when estuary water surface elevations rise above seven feet. In that case, NMFS may be consulted regarding potential scheduling of an artificial breaching event to open the barrier beach and reduce flooding risk.

Pinniped response to artificial breaching will be monitored at each such event during the period of validity of these proposed regulations. Methods would follow the census and disturbance monitoring protocols described in the "Baseline Monitoring" section, which were also used for the 1996 to 2000 monitoring events (MSC, 1997, 1998, 1999, 2000; SCWA and MSC, 2001). The exception, as for lagoon management events, is that duration of monitoring is dependent upon duration of the event. On the day of the management event, pinniped monitoring begins at least one hour prior to the crew and equipment accessing the beach work area and continues through the duration of the event, until at least one hour after the crew and equipment leave the beach.

For all counts, the following information would be recorded in thirty-minute intervals: (1) pinniped counts, by species; (2) behavior; (3) time, source and duration of any disturbance; (4) estimated distances between source of disturbance and pinnipeds; (5) weather conditions (*e.g.*, temperature, wind); and (5) tide levels and estuary water surface elevation.

Monitoring During Pupping Season – The pupping season is defined as March 15 to June 30. Baseline, lagoon outlet channel, and artificial breaching monitoring during the pupping season will include records of neonate (pups less than one week old) observations. Characteristics of a neonate pup include: body weight less than 15 kg; thin for their body length; an umbilicus or natal pelage present; wrinkled skin; and awkward or jerky movements on land. SCWA will coordinate with the Seal Watch monitoring program to determine if pups less than one week old are on the beach prior to a water level management event.

If, during monitoring, observers sight any pup that might be abandoned, SCWA would contact the NMFS stranding response network immediately and also report the incident to NMFS's West Coast Regional Office and Office of Protected Resources within 48 hours. Observers will not approach or move the pup. Potential indications that a pup may be abandoned are no observed contact with adult seals, no movement of the pup, and the pup's attempts to nurse are rebuffed.

Staffing – Monitoring is conducted by qualified individuals, which may include professional biologists employed by NMFS or SCWA or volunteers trained by the Stewards' Seal Watch program (Stewards). All volunteer monitors are required to attend classroom-style training and field site visits to the haul-outs. Training covers the MMPA and conditions of the ITA, SCWA's pinniped monitoring protocols, pinniped species identification, age class identification (including a specific discussion regarding neonates), recording of count and

disturbance observations (including completion of datasheets), and use of equipment. Pinniped identification includes the harbor seal, California sea lion, and northern elephant seal, as well as other pinniped species with potential to occur in the area. Generally, SCWA staff and volunteers collect baseline data on Jenner haul-out use during the twice-monthly monitoring events. A schedule for this monitoring would be established with Stewards once volunteers are available for the monitoring effort. SCWA staff monitors lagoon outlet channel excavation and maintenance activities and artificial breaching events at the Jenner haul-out, with assistance from Stewards volunteers as available. Stewards volunteers monitor the coastal and river haul-out locations during lagoon outlet channel excavation and maintenance activities.

Training on the MMPA, pinniped identification, and the conditions of the ITA is held for staff and contractors assigned to estuary management activities. The training includes equipment operators, safety crew members, and surveyors. In addition, prior to beginning each water surface elevation management event, the biologist monitoring the event participates in the onsite safety meeting to discuss the location(s) of pinnipeds at the Jenner haul-out that day and methods of avoiding and minimizing disturbances to the haul-out as outlined in the ITA.

Reporting

SCWA is required to submit an annual report on all activities and marine mammal monitoring results to NMFS within ninety days following the end of the monitoring period. These reports would contain the following information:

- The number of pinnipeds taken, by species and age class (if possible);
- Behavior prior to and during water level management events;
- Start and end time of activity;
- Estimated distances between source and pinnipeds when disturbance occurs;

- Weather conditions (*e.g.*, temperature, wind, etc.);
- Haul-out reoccupation time of any pinnipeds based on post-activity monitoring;
- Tide levels and estuary water surface elevation; and
- Pinniped census from bi-monthly and nearby haul-out monitoring.

The annual report includes descriptions of monitoring methodology, tabulation of estuary management events, summary of monitoring results, and discussion of problems noted and proposed remedial measures.

SCWA must also submit a comprehensive summary report with any future application for renewed regulations and Letters of Authorization.

Summary of Previous Monitoring

SCWA complied with the mitigation and monitoring required under previous authorizations. Prior notices of proposed authorization have provided summaries of monitoring results from 2009-15; please see those documents for more information. Previous monitoring reports are available online at *www.nmfs.noaa.gov/pr/permits/incidental/construction.htm*.

While the observed take in all years was significantly lower than the level authorized, it is possible that incidental take in future years could approach the level authorized. Actual take is dependent largely upon the number of water level management events that occur, which is unpredictable. Take of species other than harbor seals depends upon whether those species, which do not consistently utilize the Jenner haul-out, are present. The authorized take, though much higher than the actual take, is justified based on conservative estimated scenarios for animal presence and necessity of water level management. No significant departure from the method of estimation is used for these proposed regulations (see "Estimated Take by Incidental Harassment") for the same activities in 2017-22.

SCWA has continued to investigate the relative disturbance caused by their activities versus that caused by other sources (see Figures 5-6 of SCWA's 2015 monitoring report as well as the 2014 report). Harbor seals are most frequently disturbed by people on foot, with an increase in frequency of people present during bar-closed conditions (see Figure 5 of SCWA's 2015 monitoring report). Kayakers are the next most frequent source of disturbance overall, also with an increase during bar-closed conditions. For any disturbance event it is often only a fraction of the total haul-out that responds. Some sources of disturbance, though rare, have a larger disturbing effect when they occur. For example, disturbances from dogs occur less frequently, but these incidents often disturb over half of the seals hauled out.

Conclusions

The following section provides a summary of information available in SCWA's 2015 monitoring report. The primary purpose of SCWA's pinniped monitoring plan is to detect the response of pinnipeds to estuary management activities at the Russian River estuary. However, as described previously, the questions listed below are also of specific interest. The limited data available thus far precludes drawing definitive conclusions regarding the key questions in SCWA's monitoring plan, but we discuss preliminary conclusions and available evidence below.

1. Under what conditions do pinnipeds haul out at the Russian River estuary mouth at Jenner?

Although multiple factors likely influence harbor seal presence at the haul-out, SCWA has shown that since 2009 harbor seal attendance is influenced by hour of day (increasing from morning through early afternoon; see Figure 2 in SCWA's monitoring plan), tidal state (decrease with higher tides; see Figure 3 of SCWA's monitoring plan), month of year (peak in July and

decrease in fall; see Figure 4 of SCWA's monitoring plan), and river mouth condition (*i.e.*, open or closed).

Daily average abundance of seals was lower during bar-closed conditions compared to bar-open conditions. This effect is likely due to a combination of factors, including increased human disturbance, reduced access to the ocean from the estuary side of the barrier beach, and the increased disturbance from wave action when seals utilize the ocean side of the barrier beach. Baseline data indicate that the highest numbers of seals are observed at the Jenner haul-out in July (during the molting season; see Figure 2 of SCWA's 2015 monitoring report), as would be expected on the basis of harbor seal biological and physiological requirements (Herder, 1986; Allen *et al*., 1989; Stewart and Yochem, 1994; Hanan, 1996; Gemmer, 2002).

Overall, seals appear to utilize the Jenner haul-out throughout the tidal cycle. Seal abundance is significantly lower during the highest of tides when the haul-out is subject to an increase in wave overwash. Time of day had some effect on seal abundance at the Jenner haul-out, as abundance was greater in the afternoon hours compared to the morning hours. More analysis exploring the relationship of ambient temperature, incidence of disturbance, and season on time of day effects would help to explain why these variations in seal abundance occur. It is likely that a combination of multiple factors (*e.g.*, season, tides, wave heights, level of beach disturbance) influence when the haul-out is most utilized.

2. How do seals at the Jenner haul-out respond to activities associated with the construction and maintenance of the lagoon outlet channel and artificial breaching activities?

SCWA has, thus far, implemented the lagoon outlet channel only once, in 2010. The response of harbor seals at the Jenner haul-out to the outlet channel implementation activities was similar to responses observed during past artificial breaching events (MSC, 1997, 1998,

1999, 2000; SCWA and MSC, 2001). The harbor seals typically alert to the sound of equipment on the beach and leave the haul-out as the crew and equipment approach. Individuals then haul out on the beach while equipment is operating, leaving the beach again when equipment and staff depart, and typically begin to return to the haul-out within thirty minutes of the work ending. Because the barrier beach reformed soon after outlet channel implementation and subsequently breached on its own following the 2010 event, maintenance of the outlet channel was not necessary and monitoring of the continued response of pinnipeds at the Jenner haul-out to maintenance of the outlet channel and management of the lagoon for the duration of the lagoon management period has not yet been possible. As noted previously, when breaching activities were conducted south of the haul-out location seals often remained on the beach during all or some of the breaching activity. This indicates that seals are less disturbed by activities when equipment and crew do not pass directly past their haul-out.

3. Does the number of seals at the Jenner haul-out significantly differ from historic averages with formation of a summer lagoon in the Russian River estuary?

The duration of closures in recent years has not generally been dissimilar from the duration of closures that have been previously observed at the estuary, and lagoon outlet channel implementation has occurred only once, meaning that there has been a lack of opportunity to study harbor seal response to extended lagoon conditions. A barrier beach has formed during the lagoon management period sixteen times since SCWA began implementing the lagoon outlet channel adaptive management plan, with an average duration of fourteen days. However, the sustained river outlet closures observed in 2014-15 during the lagoon management period provide some information regarding the abundance of seals during the formation of a summer lagoon. While seal abundance was lower overall during bar-closed conditions, overall there

continues to be a slight increasing trend in seal abundance. These observations may indicate that, while seal abundance exhibits a short-term decline following bar closure, the number of seals utilizing the Jenner haul-out overall during such conditions is not affected. Short-term fluctuations in abundance aside, it appears that the general trends of increased abundance during summer and decreased abundance during fall, which coincide with the annual molt and likely foraging dispersal, respectively, are not affected. Such short-term fluctuations are likely not an indicator that seals are less likely to use the Jenner haul-out at any time.

4. Are seals at the Jenner haul-out displaced to nearby river and coastal haul-outs when the mouth remains closed in the summer?

Initial comparisons of peripheral (river and coastal) haul-out count data to the Jenner haul-out counts have been inconclusive (see Table 2 and Figures 6-7 of SCWA's 2015 monitoring report). As noted above, SCWA will focus ongoing effort at peripheral sites during periods of extended bar-closure and lagoon formation.

Adaptive Management

The regulations governing the take of marine mammals incidental to SCWA estuary management activities would contain an adaptive management component.

The reporting requirements associated with this proposed rule are designed to provide NMFS with monitoring data from the previous year to allow consideration of whether any changes are appropriate. The use of adaptive management allows NMFS to consider new information from different sources to determine (with input from SCWA regarding practicability) on an annual or biennial basis if mitigation or monitoring measures should be modified (including additions or deletions). Mitigation measures could be modified if new data

suggests that such modifications would have a reasonable likelihood of reducing adverse effects to marine mammals and if the measures are practicable.

SCWA's monitoring program (see "Proposed Monitoring and Reporting") would be managed adaptively. Changes to the proposed monitoring program may be adopted if they are reasonably likely to better accomplish the MMPA monitoring goals described previously or may better answer the specific questions associated with SCWA's monitoring plan.

The following are some of the possible sources of applicable data to be considered through the adaptive management process: (1) results from monitoring reports, as required by MMPA authorizations; (2) results from general marine mammal and sound research; and (3) any information which reveals that marine mammals may have been taken in a manner, extent, or number not authorized by these regulations or subsequent LOAs.

Impact on Availability of Affected Species for Taking for Subsistence Uses

There are no relevant subsistence uses of marine mammals implicated by the specified activity. Therefore, we have determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

Endangered Species Act (ESA)

No marine mammal species listed under the ESA are expected to be affected by these activities. Therefore, we have determined that section 7 consultation under the ESA is not required.

National Environmental Policy Act

NMFS prepared an EA (2010) and associated FONSI in accordance with NEPA and the regulations published by the Council on Environmental Quality. These documents are posted at

the aforementioned Internet address. Information in SCWA's application, NMFS's EA (2010), and this notice collectively provide the environmental information related to proposed issuance of these regulations for public review and comment. We will review all comments submitted in response to this notice as we complete the NEPA process, including a decision of whether the existing EA and FONSI provide adequate analysis related to the potential environmental effects of issuing an incidental take authorization to SCWA, prior to a final decision on the request.

Request for Information

NMFS requests interested persons to submit comments, information, and suggestions concerning SCWA's request and the proposed regulations (see **ADDRESSES**). All comments will be reviewed and evaluated as we prepare the final rule and make final determinations on whether to issue the requested authorizations. This notice and referenced documents provide all environmental information relating to our proposed action for public review.

Classification

Pursuant to the procedures established to implement Executive Order 12866, the Office of Management and Budget has determined that this proposed rule is not significant.

Pursuant to section 605(b) of the Regulatory Flexibility Act (RFA), the Chief Counsel for Regulation of the Department of Commerce has certified to the Chief Counsel for Advocacy of the Small Business Administration that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities. SCWA is the sole entity that would be subject to the requirements in these proposed regulations, and the Sonoma County Water Agency is not a small governmental jurisdiction, small organization, or small business, as defined by the RFA. Under the RFA, governmental jurisdictions are considered to be small if they are "…governments of cities, counties, towns, townships, villages, school districts, or

special districts, with a population of less than 50,000…." As of the 2010 census, Sonoma County, CA had a population of nearly 500,000 people. Because of this certification, a regulatory flexibility analysis is not required and none has been prepared.

Notwithstanding any other provision of law, no person is required to respond to nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act (PRA) unless that collection of information displays a currently valid OMB control number. These requirements have been approved by OMB under control number 0648-0151 and include applications for regulations, subsequent LOAs, and reports. Send comments regarding any aspect of this data collection, including suggestions for reducing the burden, to NMFS and the OMB Desk Officer (see ADDRESSES).

List of Subjects in 50 CFR Part 217

Exports, Fish, Imports, Indians, Labeling, Marine mammals, Penalties, Reporting and recordkeeping requirements, Seafood, Transportation.

Dated: December 23, 2016.

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Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs,

National Marine Fisheries Service.

For reasons set forth in the preamble, 50 CFR part 217 is proposed to be amended as follows:

PART 217 – REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

1. The authority citation for part 217 continues to read as follows:

Authority: 16 U.S.C. 1361 *et seq*.

2. Add subpart A to part 217 to read as follows:

Subpart A – Taking Marine Mammals Incidental to Russian River Estuary Management Activities

Sec.

217.1 Specified activity and specified geographical region.

217.2 Effective dates.

217.3 Permissible methods of taking.

217.4 Prohibitions.

217.5 Mitigation requirements.

217.6 Requirements for monitoring and reporting.

217.7 Letters of Authorization.

217.8 Renewals and modifications of Letters of Authorization.

217.9–217.10 [Reserved]

Subpart A – Taking Marine Mammals Incidental to Russian River Estuary Management Activities

§ 217.1 Specified activity and specified geographical region.

(a) Regulations in this subpart apply only to the Sonoma County Water Agency (SCWA)

and those persons it authorizes or funds to conduct activities on its behalf for the taking of marine mammals that occurs in the area outlined in paragraph (b) of this section and that occurs incidental to estuary management activities.

(b) The taking of marine mammals by SCWA may be authorized in a Letter of Authorization (LOA) only if it occurs at Goat Rock State Beach or in the Russian River estuary in California.

§ 217.2 Effective dates.

Regulations in this subpart are effective from [EFFECTIVE DATE OF FINAL RULE] through [DATE 5 YEARS AFTER EFFECTIVE DATE OF FINAL RULE].

§ 217.3 Permissible methods of taking.

(a) Under LOAs issued pursuant to §§ 216.106 and 217.7 of this chapter, the Holder of the LOA (hereinafter "SCWA") may incidentally, but not intentionally, take marine mammals within the area described in § 217.1(b) of this chapter by Level B harassment associated with estuary management activities, provided the activity is in compliance with all terms, conditions, and requirements of the regulations in this subpart and the appropriate LOA.

§ 217.4 Prohibitions.

Notwithstanding takings contemplated in § 217.1 and authorized by an LOA issued under §§ 216.106 and 217.7 of this chapter, no person in connection with the activities described in § 217.1 of this chapter may:

(a) Violate, or fail to comply with, the terms, conditions, and requirements of this subpart or an LOA issued under §§ 216.106 and 217.7 of this chapter;

(b) Take any marine mammal not specified in such LOAs;

(c) Take any marine mammal specified in such LOAs in any manner other than as specified;

(d) Take a marine mammal specified in such LOAs if NMFS determines such taking results in more than a negligible impact on the species or stocks of such marine mammal; or

(e) Take a marine mammal specified in such LOAs if NMFS determines such taking results in an unmitigable adverse impact on the species or stock of such marine mammal for taking for subsistence uses.

§ 217.5 Mitigation requirements.

When conducting the activities identified in § 217.1(a) of this chapter, the mitigation measures contained in any LOA issued under §§ 216.106 and 217.7 of this chapter must be implemented. These mitigation measures shall include but are not limited to:

(a) General conditions: (1) A copy of any issued LOA must be in the possession of SCWA, its designees, and work crew personnel operating under the authority of the issued LOA.

(2) If SCWA observes a pup that may be abandoned, it shall contact the National Marine Fisheries Service (NMFS) West Coast Regional Stranding Coordinator immediately and also report the incident to NMFS Office of Protected Resources within 48 hours. Observers shall not approach or move the pup.

(b) SCWA crews shall cautiously approach the haul-out ahead of heavy equipment.

(c) SCWA staff shall avoid walking or driving equipment through the seal haul-out.

(d) Crews on foot shall make an effort to be seen by seals from a distance.

(e) During breaching events, all monitoring shall be conducted from the overlook on the bluff along Highway 1 adjacent to the haul-out.

(f) A water level management event may not occur for more than two consecutive days

unless flooding threats cannot be controlled.

(g) All work shall be completed as efficiently as possible and with the smallest amount of heavy equipment possible.

(h) Boats operating near river haul-outs during monitoring shall be kept within posted speed limits and driven as far from the haul-outs as safely possible.

(i) SCWA shall implement the following mitigation measures during pupping season (March 15-June 30):

(1) SCWA shall maintain a one week no-work period between water level management events (unless flooding is an immediate threat) to allow for an adequate disturbance recovery period. During the no-work period, equipment must be removed from the beach.

(2) If a pup less than one week old is on the beach where heavy machinery will be used or on the path used to access the work location, the management action shall be delayed until the pup has left the site or the latest day possible to prevent flooding while still maintaining suitable fish rearing habitat. In the event that a pup remains present on the beach in the presence of flood risk, SCWA shall consult with NMFS and the California Department of Fish and Wildlife to determine the appropriate course of action. SCWA shall coordinate with the locally established seal monitoring program (Stewards of the Coast and Redwoods) to determine if pups less than one week old are on the beach prior to a breaching event.

(3) Physical and biological monitoring shall not be conducted if a pup less than one week old is present at the monitoring site or on a path to the site.

§ 217.6 Requirements for monitoring and reporting.

(a) Monitoring and reporting shall be conducted in accordance with the approved Pinniped Monitoring Plan.

(b) Baseline monitoring shall be conducted each week, with two events per month occurring in the morning and two per month in the afternoon. These censuses shall continue for four hours, weather permitting; the census days shall be chosen to ensure that monitoring encompasses a low and high tide each in the morning and afternoon. All seals hauled out on the beach shall be counted every 30 minutes from the overlook on the bluff along Highway 1 adjacent to the haul-out using high-powered spotting scopes. Observers shall indicate where groups of seals are hauled out on the sandbar and provide a total count for each group. If possible, adults and pups shall be counted separately.

(c) Peripheral coastal haul-outs shall be visited concurrently with baseline monitoring in the event that a lagoon outlet channel is implemented and maintained for a prolonged period of over 21 days.

(d) During estuary management events, monitoring shall occur on all days that activity is occurring using the same protocols as described for baseline monitoring, with the difference that monitoring shall begin at least one hour prior to the crew and equipment accessing the beach work area and continue through the duration of the event, until at least one hour after the crew and equipment leave the beach. In addition, a one-day pre-event survey of the area shall be made within one to three days of the event and a one-day post-event survey shall be made after the event, weather permitting.

(e) For all monitoring, the following information shall be recorded in 30-minute intervals:

(1) Pinniped counts by species;

(2) Behavior;

(3) Time, source and duration of any disturbance, with takes incidental to SCWA actions recorded only for responses involving movement away from the disturbance or responses of

greater intensity (*e.g.*, not for alerts);

(4) Estimated distances between source of disturbance and pinnipeds;

(5) Weather conditions (*e.g.*, temperature, percent cloud cover, and wind speed); and

(6) Tide levels and estuary water surface elevation.

(f) Reporting: (1) Annual reporting: (i) SCWA shall submit an annual summary report to NMFS not later than ninety days following the end of a given reporting period. SCWA shall provide a final report within thirty days following resolution of comments on the draft report.

(ii) These reports shall contain, at minimum, the following:

(A) The number of seals taken, by species and age class (if possible);

(B) Behavior prior to and during water level management events;

(C) Start and end time of activity;

(D) Estimated distances between source and seals when disturbance occurs;

(E) Weather conditions (*e.g.*, temperature, wind, etc.);

(F) Haul-out reoccupation time of any seals based on post-activity monitoring;

(G) Tide levels and estuary water surface elevation;

(H) Seal census from bi-monthly and nearby haul-out monitoring; and

(I) Specific conclusions that may be drawn from the data in relation to the four questions of interest in SCWA's Pinniped Monitoring Plan, if possible.

(2) SCWA shall submit a comprehensive summary report to NMFS in conjunction with any future submitted request for incidental take authorization.

(g) Reporting of injured or dead marine mammals:

(1) In the unanticipated event that the activity defined in § 217.1(a) clearly causes the take of a marine mammal in a prohibited manner, SCWA shall immediately cease such activity

and report the incident to the Office of Protected Resources (OPR), NMFS and the West Coast Regional Stranding Coordinator, NMFS. Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS will work with SCWA to determine what measures are necessary to minimize the likelihood of further prohibited take and ensure MMPA compliance. SCWA may not resume their activities until notified by NMFS. The report must include the following information:

(i) Time and date of the incident;

(ii) Description of the incident;

(iii) Environmental conditions;

(iv) Description of all marine mammal observations in the 24 hours preceding the incident;

(v) Species identification or description of the animal(s) involved;

(vi) Fate of the animal(s); and

(vii) Photographs or video footage of the animal(s).

(2) In the event that SCWA discovers an injured or dead marine mammal and determines that the cause of the injury or death is unknown and the death is relatively recent (*e.g.*, in less than a moderate state of decomposition), SCWA shall immediately report the incident to OPR and the West Coast Regional Stranding Coordinator, NMFS. The report must include the information identified in paragraph (g)(1) of this section. Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with SCWA to determine whether additional mitigation measures or modifications to the activities are appropriate.

(3) In the event that SCWA discovers an injured or dead marine mammal and determines that the injury or death is not associated with or related to the activities defined in § 217.1(a)

(*e.g.*, previously wounded animal, carcass with moderate to advanced decomposition, scavenger damage), SCWA shall report the incident to OPR and the West Coast Regional Stranding Coordinator, NMFS, within 24 hours of the discovery. SCWA shall provide photographs or video footage or other documentation of the stranded animal sighting to NMFS.

(4) Pursuant to paragraphs (g)(2) and (3) of this section, SCWA may use discretion in determining what injuries (*i.e.*, nature and severity) are appropriate for reporting. At minimum, SCWA must report those injuries considered to be serious (*i.e.*, will likely result in death) or that are likely caused by human interaction (*e.g.*, entanglement, gunshot). Also pursuant to sections paragraphs (g)(2) and (3) of this section, SCWA may use discretion in determining the appropriate vantage point for obtaining photographs of injured/dead marine mammals.

§ 217.7 Letters of Authorization.

(a) To incidentally take marine mammals pursuant to these regulations, SCWA must apply for and obtain an LOA.

(b) An LOA, unless suspended or revoked, may be effective for a period of time not to exceed the expiration date of these regulations.

(c) If an LOA expires prior to the expiration date of these regulations, SCWA may apply for and obtain a renewal of the LOA.

(d) In the event of projected changes to the activity or to mitigation and monitoring measures required by an LOA, SCWA must apply for and obtain a modification of the LOA as described in § 217.8 of this chapter.

(e) The LOA shall set forth:

(1) Permissible methods of incidental taking;

(2) Means of effecting the least practicable adverse impact (*i.e.*, mitigation) on the

species, its habitat, and on the availability of the species for subsistence uses; and

(3) Requirements for monitoring and reporting.

(f) Issuance of the LOA shall be based on a determination that the level of taking will be consistent with the findings made for the total taking allowable under these regulations.

(g) Notice of issuance or denial of an LOA shall be published in the **Federal Register** within 30 days of a determination.

§ 217.8 Renewals and modifications of Letters of Authorization.

(a) An LOA issued under §§ 216.106 and 217.7 of this chapter for the activity identified in § 217.1(a) shall be renewed or modified upon request by the applicant, provided that:

(1) The proposed specified activity and mitigation, monitoring, and reporting measures, as well as the anticipated impacts, are the same as those described and analyzed for these regulations (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section), and

(2) NMFS determines that the mitigation, monitoring, and reporting measures required by the previous LOA under these regulations were implemented.

(b) For an LOA modification or renewal requests by the applicant that include changes to the activity or the mitigation, monitoring, or reporting (excluding changes made pursuant to the adaptive management provision in paragraph (c)(1) of this section) that do not change the findings made for the regulations or result in no more than a minor change in the total estimated number of takes (or distribution by species or years), NMFS may publish a notice of proposed LOA in the **Federal Register**, including the associated analysis of the change, and solicit public comment before issuing the LOA.

(c) An LOA issued under §§ 216.106 and 217.7 of this chapter for the activity identified

in § 217.1(a) may be modified by NMFS under the following circumstances:

(1) Adaptive Management – NMFS may modify (including augment) the existing mitigation, monitoring, or reporting measures (after consulting with SCWA regarding the practicability of the modifications) if doing so creates a reasonable likelihood of more effectively accomplishing the goals of the mitigation and monitoring set forth in the preamble for these regulations.

(i) Possible sources of data that could contribute to the decision to modify the mitigation, monitoring, or reporting measures in an LOA:

(A) Results from SCWA's monitoring from the previous year(s).

(B) Results from other marine mammal and/or sound research or studies.

(C) Any information that reveals marine mammals may have been taken in a manner, extent or number not authorized by these regulations or subsequent LOAs.

(ii) If, through adaptive management, the modifications to the mitigation, monitoring, or reporting measures are substantial, NMFS will publish a notice of proposed LOA in the **Federal Register** and solicit public comment.

(2) Emergencies – If NMFS determines that an emergency exists that poses a significant risk to the well-being of the species or stocks of marine mammals specified in LOAs issued pursuant to §§ 216.106 and 217.7 of this chapter, an LOA may be modified without prior notice or opportunity for public comment. Notice would be published in the **Federal Register** within thirty days of the action.

§§ 217.9 –217.10 [Reserved]

[FR Doc. 2016-31592 Filed: 12/29/2016 8:45 am; Publication Date: 12/30/2016]