DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 216

[Docket No. 210901–0173]

RIN 0648–AU02

Swim With and Approach Regulation for Hawaiian Spinner Dolphins Under the Marine Mammal Protection Act

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

ACTION: Final rule.

SUMMARY: We, NMFS, establish a regulation under the Marine Mammal Protection Act (MMPA) to prohibit swimming with and approaching a Hawaiian spinner dolphin within 50 yards (45.7 meters (m)) (for persons, vessels, and objects), including approach by interception. These regulatory measures are intended to prevent take of Hawaiian spinner dolphins from occurring in marine areas where viewing pressures are most prevalent; the swim-with and approach prohibitions apply in waters within 2 nautical miles (nmi; 3.7 kilometers (km)) of the Hawaiian Islands and in designated waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe. Although unauthorized take of marine mammals, including harassment of spinner dolphins, already is and continues to be prohibited under the MMPA throughout their range, the purpose of this regulation is to identify and prohibit specific human activities that result in take (including harassment) of Hawaiian spinner dolphins, and thus reduce disturbance and disruption of important Hawaiian spinner dolphin behaviors in areas where human-dolphin interactions are most likely to occur. This regulation is expected to reduce take of Hawaiian spinner dolphins and the impact of human viewing and interaction on these animals in the main Hawaiian Islands (MHI).

DATES: This final rule is effective October 28, 2021.

ADDRESSES: Copies of this rule and the Final Environmental Impact Statement (FEIS) and Record of Decision can be obtained from the website. *https://www.fisheries.noaa.gov/action/enhancing-protections-hawaiian-spinner-dolphins.* Written requests for copies of these documents should be addressed to Kevin Brindock, Deputy Assistant Regional Administrator, Protected Resources Division, National Marine Fisheries Service, Pacific Islands Regional Office, 1845 Wasp Blvd., Bldg. 176, Honolulu, HI 96818, Attn: Hawaiian Spinner Dolphin Final Rule.

FOR FURTHER INFORMATION CONTACT: Kevin Brindock, NMFS, Pacific Islands Region, Deputy Assistant Regional Administrator, Protected Resources Division, 808–725–5146; or Trevor Spradlin, NMFS, Office of Protected Resources, Deputy Chief, Marine Mammal and Sea Turtle Conservation Division, Office of Protected Resources, 301–427–8402.

SUPPLEMENTARY INFORMATION: We developed this final rule after considering comments submitted in response to an Advance Notice of Proposed Rulemaking (ANPR), as well as information from the public scoping period and public comment period for the Draft Environmental Impact Statement (DEIS) and the proposed rule, from community meetings and hearings on the proposed rule, and from relevant scientific literature and a dedicated scientific research project.

Background

Viewing wild marine mammals in Hawai'i has been a popular recreational activity for both tourists and residents over the past several decades. Historically, most marine mammal viewing focused on humpback whales (*Megaptera novaeangliae*) during the winter months when the whales migrate from their feeding grounds off the coast of Alaska to Hawai'i's warm and protected waters to breed and calve. However, increased marine mammal viewing has focused on small cetaceans, with a particular emphasis on Hawaiian spinner dolphins (*Stenella longirostris longirostris*), which can be predictably found close to shore in shallow waters throughout the MHI.

The number of commercial operators engaged in wild dolphin viewing has grown dramatically in Hawai'i in recent years (O'Connor 2009, Impact Assessment 2018), putting new pressures on easily accessible groups of resting Hawaiian spinner dolphins. Wiener (2016) found that on the Wai'anae coast of O'ahu and the Kona coast of Hawai'i Island, 752,762 people are estimated to have participated in boat-based commercial dolphin tours annually in 2013, which is 632,762 more than a preliminary estimate conducted statewide in 2008 (O'Conner *et al.* 2009). Supporting this finding, Impact Assessment (2018) documented the number of spiritual retreats (*i.e.,* organized retreats centered on dolphin encounters, dolphin-assisted therapy, and dolphin-associated spiritual practices) on Hawai'i Island as increasing from 5 in 2007 to 47 in 2017. Similarly, commercial boat tours that facilitate close in-water dolphin interactions increased on Hawai'i Island from 6 to 47 over the same period. In addition, a number of residents and visitors venture on their own, independent of commercial operators, to view and interact with spinner dolphins.

The expectation for close interactions with wild dolphins has been encouraged by some operators and various news and social media outlets, which routinely contradict established wildlife viewing guidelines by promoting close vessel or in-water encounters with the dolphins. As noted by Wiener, Needham, and Wilkenson (2009) when interviewing dolphin swim-with tourists, participants verbalized extreme disappointment if they did not participate in up-close activities during wild dolphin encounter trips, even when operators said that it would not be in the best interest of the animals.

We have received many complaints that spinner dolphins are being routinely disturbed by people attempting to closely approach and interact with the dolphins by boat or other watercraft (*e.g.,* kayaks), or in the water (*e.g.,* snorkel or ''swim-with-wild-dolphins'' activities). For example, Tyne (2015), who studied spinner dolphins along the Kona coast of Hawai'i Island, noted that the spinner dolphin population there is chronically exposed to human tourism activities more than 82 percent of the time during daylight hours, with a median interval between exposure events of 10 minutes. Heenehan *et al.* (2014) observed up to 13 tour boats jockeying for position on a single dolphin group, with up to 60 snorkelers in the water. In addition, officials from the Hawai'i Department of Land and Natural Resources (DLNR) and the U.S. Marine Mammal Commission (MMC), as well as various members of the public, including representatives of the Native Hawaiian community, scientific researchers, wildlife conservation organizations, public display organizations, and some commercial tour operators have expressed their concerns over human-dolphin interactions.

In 2010, we recognized 5 island-associated stocks and one pelagic stock of Hawaiian spinner dolphins in our annual Stock Assessment Report (SAR), identifying genetic distinctions and site fidelity differences as reasons to separately manage stocks found in waters surrounding the Hawaiian

Islands (Andrews 2009, Andrews *et al.* 2010, Hill *et al.* 2009, Carretta *et al.* 2011). Three of the five island-associated stocks (the Kaua'i/Ni'ihau stock, O'ahu/four Islands stock, and Hawai'i Island stock) are found near the MHI and are considered resident stocks. These three stocks reside in waters surrounding their namesake islands out to approximately 10 nmi (18.5 km) (Hill *et al.* 2010), and population estimates for each stock are relatively small. The most recent SAR indicates that the Hawai'i Island stock, which is thought to be the largest stock, has an estimated 665 individuals (Coefficient of Variation (CV)=0.09) (Tyne *et al.* 2014, Carretta *et al.* 2019). The Kaua'i/Ni'ihau and O'ahu/4 Islands stocks are estimated to be around 601 (CV=0.20) and 355 (CV=0.09) individuals, respectively (Carretta *et al.* 2019).

Island-associated spinner dolphins, such as those found in the MHI, have complex social structures and behavioral patterns linked to specific habitats that support their high energetic demands. The rigid, cyclical, and patterned behavior of a Hawaiian spinner dolphin's day is well documented from decades of scientific research on spinner dolphins off the Kona coast on Hawai'i Island (Norris and Dohl 1980, Norris *et al.* 1994). The daily pattern of Hawaiian spinner dolphins has been characterized as ''working the night shift,'' because the energetically demanding task of foraging is accomplished nightly when spinner dolphins move offshore in large groups to feed. Spinner dolphins feed on fish, shrimp, and squid found in the mesopelagic boundary community, part of the pelagic zone that extends from a depth of 200 to 1,000 m (~660 to 3,300 feet) below the ocean surface. Spinner dolphins maximize their foraging time by actively moving with, or tracking, the horizontal migration of the mesopelagic boundary community throughout the night, as it moves inshore until midnight and then offshore around sunrise (Benoit-Bird and Au 2003). Spinner dolphins are acoustically very active during foraging activities (Norris *et al.* 1994), working cooperatively in large groups using coordinated movements to maximize foraging potential (Benoit-Bird 2004).

During the day, spinner dolphins return in smaller groups to areas closer to shore to socialize, nurture their young, and rest in preparation for nightly foraging (Norris *et al.* 1994, Tyne *et al.,* 2017). These smaller groups visit specific habitats that are located along the coastlines of the MHI. These preferred daytime habitats of spinner dolphins are areas that provide space with optimal environmental conditions for resting, socializing, and nurturing young, and are referred to hereafter as ''essential daytime habitats.'' Spinner dolphins' essential daytime habitats are located close to offshore feeding areas, which minimizes the energetic cost of nightly travel to and from these areas (Norris *et al.* 1994, Thorne *et al.* 2012). Additionally, essential daytime habitats have large patches of sand bottom habitat, which increases the dolphins' ability to visually (instead of acoustically) detect predators while resting, and thus minimizes the energetic costs of vigilance (Norris *et al.* 1994). Throughout the day, spinner dolphins take advantage of the physical characteristics of essential daytime habitats to engage in specific patterned resting behaviors to recuperate between foraging bouts. The physical characteristics of these essential daytime habitats, combined with specific patterned resting behaviors, play an important role in supporting the dolphins' activity and energetic budgets.

Commercial operators and individuals interested in viewing or interacting with Hawaiian spinner target essential daytime habitats (Sepez 2006). In addition, organized retreats centered on dolphin encounters, dolphin-assisted therapy, and dolphin-associated spiritual practices have flourished in certain areas, further increasing the intensity of dolphin-directed activities in nearshore areas and especially within essential daytime habitats (Sepez 2006, Impact Assessment 2018).

The effects of dolphin-directed activities on spinner dolphins, especially activities that involve close approaches by humans, have been well documented. Peer-reviewed scientific literature documents disturbance of individual spinner dolphins as well as changes to spinner dolphin group behavioral patterns and effects of swimmers on dolphins' daily resting behavioral patterns (Norris *et al.* 1994; Lammers 2004; Danil *et al.* 2005; Courbis 2007; Courbis and Timmel 2009; Timmel *et al.* 2008; Forest 2001; Heenehan *et al.* 2017; Ostman-Lind *et al.* 2004; Ostman-Lind 2009; Thorne *et al.* 2012; and Wiener 2016).

There are several studies that have investigated the importance of adequate rest, and the negative impacts that can occur if animals do not obtain adequate rest (*e.g.,* Cirelli & Tononi 2008; Siegel 2008). Studies involving Hawaiian spinner dolphins reported behaviors that suggest a heightened state of alertness in response to swimmers and vessels. Responses include aerial displays, tail-slapping, or other visible behavior changes when closely approached by vessels and swimmers (Forest 2001, Courbis and Timmel 2008); avoidance behaviors, including increased swimming speed, directional changes, moving around and away from swimmers and vessels, or leaving the area in response to human pursuit (Ostman-Lind *et al.* 2004, Courbis 2004, Courbis and Timmel 2008); and aggressive behaviors directed at people, including charging or threat displays (Norris *et al.* 1985, Norris *et al.* 1994). In some resting areas with consistent levels of exposure to human activity, Hawaiian spinner dolphin resting activity is characterized by such vigilance that it does not represent a natural resting state (Danil *et al.* 2005; Tyne 2018). Vigilance, or enhanced brain function, is essential for active behaviors such as foraging, socializing, and avoiding predators. However, remaining in a state of constant vigilance without recovering with adequate rest can hinder the abilities of spinner dolphins to effectively forage and avoid predators (Dukas & Clark 1995; Benoit-Bird & Au 2003; Tyne *et al.* 2018). Thus, an inability to achieve a natural resting state could potentially cause negative population-wide impacts to spinner dolphins over time.

Additionally, when marine mammals respond to disturbance events, they can incur a cost in the form of the energy expended to respond (Williams *et al.* 2006), as well as the lost opportunity to engage in natural fitness-enhancing behavior (Lusseau 2003). For example, spinner dolphins disturbed during rest engage in avoidance or distress behaviors (Timmel *et al.* 2008; Danil *et al.* 2005; Forest 2001; Courbis 2008), which require energy. This disturbance detracts from the dolphins' abilities to recuperate from energetically demanding behaviors like foraging, transiting to and from offshore foraging grounds, and nurturing their young. In this example, the lack of consistent, undisturbed resting periods can reduce the amount of energy available to forage and care for young.

The predictable temporal and spatial patterns of MHI resident spinner dolphins' nearshore distribution and daytime behaviors result in concentrated daily viewing and interaction pressure on individual dolphins and groups over extended periods of time. As stated above, several researchers have observed disruption of Hawaiian spinner dolphin behavioral patterns in response to human activity that suggest the potential for biologically significant impacts. In other small cetacean populations, chronic disturbance to natural behavioral patterns has been linked to biologically

significant impacts, such as habitat abandonment, reduced female reproductive success, impeded activity and energy budgeting, and increased vigilance (Bejder 2005; Bejder *et al.* 2006a, 2006b; Lusseau and Bejder 2007; Williams *et al.* 2006; Lusseau 2003; Johnston 2014). Researchers investigating impacts of human disturbance to spinner dolphin populations outside of Hawai'i observed a decrease in residency times in a Tahitian resting bay (Gannier & Petiau 2006) and abandonment of a resting bay in Samadai Reef, Egypt (Nature Conservation Sector 2006; Notarbartolo-di-Sciara *et al.* 2009) in response to high levels of human activity.

Similarly, over time, chronic disturbance to the MHI's resident spinner dolphins could ultimately lead to habitat displacement and/or long term impacts to their individual fitness. These types of impacts may be amplified for Hawaiian spinner dolphins because they are theorized to be more vulnerable to disturbance than other marine mammal populations. Bejder (2005) suggests resident, closed, or isolated populations (*i.e.,* local populations with barriers to gene flow, similar to Hawaiian spinner dolphins) are more at risk from negative stressors, such as disturbance from human activity, because the impacts to multiple individuals' health and fitness are quickly reflected in the overall fitness of the population.

Spinner dolphins also exhibit spatially and temporally constrained behavioral patterns in their daily cycle that likely make it more difficult to compensate for high levels of disturbance. Spinner dolphins are reported to have high fidelity to specific daytime resting and evening foraging areas and reside in these areas during certain times of the day (Norris & Dohl 1980; Norris *et al.* 1994; Benoit-Bird & Au 2009; Thorne *et al.* 2012; Tyne *et al.* 2015). This spatially and temporally constrained behavioral strategy allows spinners dolphins to both forage efficiently and limit their risk of predation while resting (Johnston 2014). Disruption to essential behaviors (*e.g.,* resting) by human activity drive individuals to respond by either moving away from the disturbance to continue the behavior somewhere else, or remaining in the area as an attempt to continue the behavior, despite the disturbance. The ability of a population to adapt and persist through a disturbance is a measure of its resilience (Hollins 1973), and populations that are more constrained, like the island-associated stocks of Hawaiian spinner dolphins, are less resilient to disturbance than populations that exhibit more flexible behavioral strategies (Lusseau *et al.* 2009). Accordingly, the rigid daily cycle of small resident spinner dolphin populations of the MHI likely makes them more vulnerable to negative impacts from human disturbance (Tyne *et al.* 2017).

Disturbances to dolphins' daily behavioral patterns may result in ''take,'' as defined and prohibited under the MMPA and its implementing regulations, and the chronic nature of these problems in Hawai'i and observed changes to spinner dolphin behavioral patterns over time are a cause for concern. Prohibiting approach within 50 yards (45.7 m) of Hawaiian spinner dolphins and eliminating swim-with activities is expected to minimize disturbance that would result in take.

This regulation adopts a 50 yard (45.7 m) approach buffer around spinner dolphins, which is consistent with well-established national and regional guidelines, including the recommended viewing distance for the Dolphin SMART program, our regional Responsible Marine Wildlife Viewing Guidelines (publicly available at *https://www.fisheries.noaa.gov/pacific-islands/marine-life-viewing-guidelines/viewing-marine-wildlife-hawaii*), and our national viewing guidelines for dolphins and porpoises (publicly available at *https://www.fisheries.noaa.gov/topic/marine-life-viewing-guidelines#guidelines-&-distances*).

The 50 yard (45.7 m) approach regulation, which includes a prohibition on swimming with dolphins, is intended to reduce the degree of behavioral disruption from close approaches by vessels and swimmers, while placing the least restrictive burden on the viewing public. As indicated in the proposed rule (81 FR 57854, August 24, 2016) and the FEIS, research indicates that spinner dolphins exhibit changes and disruptions to natural behaviors from close approach by swimmers (Danil *et al.* 2005, Courbis and Timmel 2008) and that swimmer presence within 150 m (approximately 164 yards) reduces the likelihood of spinner dolphins being in a resting state (Symons 2013, Johnston *et al.* 2014). Approach by vessels and watercraft have also been shown to disrupt and alter spinner dolphin behavior (Ross 2001, Forest 2001, Timmel *et al.* 2008). In the MHI, several studies note that close approach by vessels disrupt dolphin behaviors at various distances ranging from 10 m to 300 m (Forest 2001, Timmel *et al.* 2008). At Midway Atoll in the Northwestern Hawaiian Islands, Ross (2001) found that spinner dolphins were affected by vessel presence at distances as great as 500 m and that the effects increased as the distance decreased. Although Johnson *et al.'s* (2013) work in the MHI found the likelihood that dolphins were resting was higher when vessels were present between 50 and 150 m, they noted that these results may be influenced by the fact that vessels were present in proximity to the dolphins most of the time.

It is possible that implementing an approach restriction at a greater distance (*e.g.,* 100 or 150 yards (91.4 or 137.1 m)) could provide better protection from disturbance. However, we also recognized that not all approaches within 100 or 150 yards (91.4 or 137.1 m) result in take of spinner dolphins, and that swimmers may have difficulty judging and achieving greater distances around these animals because spinner dolphins are fast moving and relatively small (81 FR 57862, August 24, 2016). We have therefore determined that a 50 yard (45.7 m) approach distance is appropriate, as this will provide increased protection and safety for these spinner dolphins, has been a recommended viewing distance in long-lasting regional and national guidelines, and will not unreasonably restrict the public from observing these animals. We caution that disruptive human behaviors can still result in take at distances greater than 50 yards (45.7 m), and that compliance with the 50 yard (45.7 m) requirement does not necessarily absolve those behaviors from enforcement action

Marine wildlife viewing can be a powerful tool to promote species awareness and conservation. Dolphin and whale watching experiences provide an avenue for the public to learn about conservation issues and increase empathy towards these animals (Wilson & Tisdell 2002; Wiener 2016). Implementing a 50 yard approach rule will still allow the wildlife viewing public to experience spinner dolphins in a way that will minimize disturbance to the animals' natural behaviors. These safe encounters, particularly if coupled with educational interpretation and/or trained tour guides, will likely benefit spinner dolphin conservation and bring an awareness to conservation issues for other protected marine species.

Changes From Proposed Rule

In a proposed rule published on August 24, 2016 (81 FR 57854), we proposed a regulation under the MMPA to prohibit (with exceptions) swimming with and approaching a Hawaiian spinner dolphin within 50 yards (45.7 m) (for persons, vessels, and objects),

including approach by interception, within 2 nmi of the MHI and designated waters in between the islands of Lāna'i, Maui, and Kaho'olawe. This proposed rule was published along with a DEIS describing alternative actions and announcements for six public hearings occurring in September 2016.

There are a number of changes that were made to this proposed rule following the public input process and the review of new data. These changes are outlined in the following paragraphs.

In the proposed rule, we refer to the ''designated waters in between the islands of Lāna'i, Maui, and Kaho'olawe.'' In the final rule we changed the text to read, ''designated waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe.'' This change does not alter the boundaries of the area described in the proposed rule.

In the proposed rule, we specified that the rule was applicable in all waters within 2 nmi of the MHI and in all waters located between the islands of Lāna'i, Maui, and Kaho'olawe.

In the final rule, we specify that the rule was applicable in all waters within 2 nautical miles (nmi) of the main Hawaiian Islands, and in all waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe.

In the proposed rule, we listed six exceptions to this rule:

(1) Any person who inadvertently comes within 50 yards (45.7 m) of a Hawaiian spinner dolphin or is approached by a spinner dolphin, provided the person makes no effort to engage or pursue the animal and takes immediate steps to move away from the animal;

(2) Any vessel that is underway and is approached by a Hawaiian spinner dolphin, provided the vessel continues normal navigation and makes no effort to engage or pursue the animal. For purposes of this exception, a vessel is defined as a watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water (1 U.S.C. 3); a vessel is underway if it is not at anchor, made fast to the shore, or aground;

(3) Any vessel transiting to or from a port, harbor, or in a restricted channel when a 50 yard distance will not allow the vessel to maintain safe navigation;

(4) Vessel operations necessary to avoid an imminent and serious threat to a person or vessel;

(5) Activities authorized through a permit or authorization issued by the National Marine Fisheries Service to take Hawaiian spinner dolphins; and

(6) Federal, state, or local government vessels, aircraft, personnel, and assets when necessary in the course of performing official duties.

Upon review of the comments received during the public comment period, we decided to add two exceptions for: (1) Vessels that are anchored or aground and approached by spinner dolphins, provided they do not make any effort to engage or pursue the animal(s), and (2) commercial fishing vessels that incidentally take spinner dolphins during the course of commercial fishing operations, provided such vessels operate in compliance with a valid marine mammal authorization in accordance with MMPA Section 118(c). This change is fully described below in the response to Comment 6.

In response to a public comment, we also amended exception (2) to read ''Any vessel that is underway and is approached by a Hawaiian spinner dolphin, provided the vessel continues normal navigation and makes no effort to engage or pursue the animal.'' This amendment to the exception, adds ''Hawaiian'' to spinner dolphins to specify the island-associated stocks of spinner dolphins that are found near the MHI and are considered resident stocks.

Current MMPA Prohibitions and NMFS Guidelines and Regulations

Under section 102 of the MMPA, 16 U.S.C. 1361 *et seq.,* it is unlawful for any person, vessel, or other conveyance to ''take'' any marine mammal in waters under the jurisdiction of the United States (16 U.S.C. 1372). The prohibition against take includes acts that ''harass'' marine mammals (16 U.S.C. 1362(13)). Harassment means any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal in the wild (Level A Harassment), or has the potential to disturb a marine mammal in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B Harassment) (16 U.S.C. 1362 (18); see also 50 CFR 216.3).

In addition, NMFS' regulations implementing the MMPA further define the term ''take'' to include ''the negligent or intentional operation of an aircraft or vessel, or the doing of any other negligent or intentional act which results in disturbing or molesting a marine mammal; and feeding or attempting to feed a marine mammal in the wild'' (50 CFR 216.3).

Section 112 of the MMPA authorizes NOAA to implement regulations that are ''necessary and appropriate to carry out the purpose'' of the MMPA (16 U.S.C. 1382). NMFS has developed regulations under the MMPA to protect marine mammals from take. An example of this type of regulation is a 100 yard (91.4 m) approach limit for humpback whales within 200 nmi of the islands of Hawai'i (81 FR 62010; September 8, 2021). This regulation also prohibits approach by interception and prohibits approach by aircraft within 1,000 feet (304.8 m). In addition to regulations, NMFS has developed national and regional guidelines for conducting responsible marine wildlife viewing to help the public avoid causing any take (harassment or disturbance) of protected wildlife species. The NMFS Pacific Islands Regional Office's viewing guidelines for Hawai'i recommend that people view wild dolphins from a safe distance of at least 50 yards (45.7 m) and advise against trying to chase, closely approach, surround, swim with, or touch the animals. To support the guidelines in Hawai'i, NMFS has partnered with the State of Hawai'i and the Hawaiian Islands Humpback Whale National Marine Sanctuary over the past several years to promote safe and responsible wildlife viewing practices through the development of outreach materials, training workshops, signage, and public service announcements. See the proposed rule for more examples and discussion of additional regulations and guidelines.

Need for Additional Action

Despite the prohibitions, guidelines, outreach, and stewardship efforts currently in place, close interactions between humans and spinner dolphins continue to occur in Hawai'i's waters (see Background and the proposed rule for more discussion). Based on extensive review and analysis through internal scoping, external scoping via an ANPR (70 FR 73426, December 12, 2005), public scoping for the DEIS, the best available scientific information, and public comments on the proposed rule, we have determined that the existing prohibitions, regulations, and guidelines need to be strengthened to protect Hawaiian spinner dolphins from various forms of take from human activities that cause harassment or disturbance. Despite the existing regulations and guidelines, chronic disturbance to spinner dolphins continues to occur and additional action is required to protect spinner dolphins from take. We therefore deem it necessary and appropriate to adopt additional regulations to protect Hawaiian spinner dolphins from activities that result in take, including harassment or other forms of disturbance as currently defined by 0statute and regulation.

Development of the Regulation

In 2005, NMFS convened a Spinner Dolphin Working Group with representatives from the MMC, state and Federal agencies, and scientific researchers who work on spinner dolphin conservation concerns. The group evaluated the best available information at the time to understand the scope of the tourist and recreational activities targeting spinner dolphins. In December 2005, we published an ANPR in the **Federal Register** (70 FR 73426, December 12, 2005) to solicit input from the public on potential ways to enhance protections for spinner dolphins and mitigate activities of concern (*e.g.,* close approach and swim-with activities). This was followed by a Notice of Intent (NOI) to Prepare an EIS under the National Environmental Policy Act (NEPA) (71 FR 57923; October 2, 2006), in which we identified a preliminary list of potential regulations for future consideration and comment, which included partial time-area closures in certain spinner dolphin essential daytime habitats, a minimum distance limit for approaching dolphins in the wild, restrictions on certain human behaviors in NMFS-identified spinner dolphin resting areas, and complete closure of all known spinner dolphin resting areas in the MHI.

During the ANPR and the NOI comment periods, five public scoping meetings were held on the islands of Kaua'i, O'ahu, Maui, and Hawai'i, and oral statements were taken at each meeting. NMFS received a combined total of 4,641 public comments in response to the ANPR and the NOI (this includes all emails, letters, and public testimonies). Comments were submitted by concerned citizens, tour operators, scientific researchers, conservation and education groups, and Federal, state, and other government entities.

Comments received throughout both public comment periods varied widely and recommended numerous actions to consider, ranging from no regulations to permanent closure of areas used by the dolphins for rest and shelter. Additionally, public comments raised concerns about various topics that should be addressed in the EIS or proposed action. These concerns are grouped by topic in the final scoping report, and include the following: Hawaiian spinner dolphin biology and behavior; cultural issues; cumulative effects; data/data gaps; direct and indirect effects; education/outreach; enforcement; guidelines/solutions for other species or from other countries; human-dolphin interaction; medical benefits from swimming with dolphins; the MMPA; monitoring; the NEPA; public and stakeholder involvement; regulatory regime; social and economic issues; spiritual and religious issues; take and harassment; traditional Hawaiian knowledge; and welfare of the dolphins. Although comments varied greatly, a consistent theme was the need for effective and enforceable regulations.

As a result of stakeholder concerns expressed through these public comments, and to prepare the proposed rule and associated DEIS, we made multiple site visits to areas where concerns have been raised regarding Hawaiian spinner dolphin disturbance in the MHI. During these visits, we met with concerned members of the public to gather information relevant to this analysis. Additionally, we coordinated with state and Federal agencies, and used the public comments generated from the ANPR and NOI to develop a range of actions and mitigation measures that are reflected in numerous alternatives considered in the DEIS.

Presentations made at the public scoping meetings, the April 2007 EIS public scoping summary report, a list of the attendees, the ANPR, public comments, and background materials are provided at *https://www.fisheries.noaa.gov/action/enhancing-protections-hawaiian-spinner-dolphins.*

During the initial scoping period for the DEIS, we received comments that recommended gathering additional information on Hawaiian spinner dolphins, including monitoring local populations to determine impacts to numbers and overall health of the MHI resident spinner dolphins. In response to this recommendation and to inform this rulemaking effort, NMFS internal grant funding was awarded to the ''Spinner Dolphin Acoustics, Population Parameters, and Human Impact Research'' (SAPPHIRE) project, conducted jointly by Duke University and Murdoch University between September 2010 and December 2012. The SAPPHIRE project's objective was to provide baseline data on the local abundance, distribution, and behavior of spinner dolphins at four bays on Hawai'i Island to assess spinner dolphin daytime habitat use and resting behavior, residency and fidelity patterns in nearshore habitats spinner dolphin exposure to human activities, and spinner dolphin demographic response to human activities.

Results from this study provided robust population estimates for the Hawai'i Island stock (see Background), as well as additional information about spinner dolphin habitat use and the pressure that this resident stock faces from dolphin-directed human activities. Many of the results from the SAPPHIRE project have been published in scientific literature and scientific reports and were used to inform this rulemaking process (Thorne *et al.* 2012, Johnston *et al.* 2013, Heenehan *et al.* 2014, Heenehan *et al.* 2016, Heenehan *et al.* 2017, Tyne *et al.* 2014, Tyne 2015, Tyne *et al.* 2015, Tyne *et al.* 2016, Tyne *et al.* 2017, Tyne *et al.* 2018). Many of these studies are described in detail in the proposed rule and the Background section above.

We relied on the public comments on the ANPR and the NOI, and on the best available scientific information to develop a range of regulatory and non-regulatory alternatives in the DEIS, including the No Action alternative of not adopting regulations. We analyzed the environmental effects of these alternatives and considered options for mitigating effects. After a preliminary analysis of alternatives, we developed and analyzed the effects of the swim-with and 50 yard (45.7 m) approach regulation, which also includes no interception (*i.e.,* ''leapfrogging'' or placing a person or vessel in the path of dolphins for the purpose of interception).

Proposed Rulemaking

On August 24, 2016, we proposed a regulation under the MMPA to prohibit swimming with and approaching a Hawaiian spinner dolphin within 50 yards (45.7 m) (for persons, vessels, and objects), including approach by interception. The proposed regulatory measures were intended to prevent take of Hawaiian spinner dolphins, including harassment and disturbance, from occurring in marine areas where viewing pressures are most prevalent. Prohibitions would apply in waters within 2 nm (3.7 km) of the MHI and in the waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe. The proposed rule also included exemptions for certain activities. We published the proposed rule in the **Federal Register** and requested public comment on the proposed regulation, the draft EIS, and supporting documents. The public comment period ended on October 23, 2016; however, in response to multiple requests from the public, the comment period was later extended until December 1, 2016 (81 FR 80629, November 16, 2016). We held six public hearings occurring in September 2016 across the State of Hawai'i. During the public hearings, 145 people provided recorded, oral testimony on the proposed rule.

Comments and Responses to Comments on the Proposed Rule

Throughout the public comment period, NMFS received 22,031 written submissions via letter, email, and the Federal eRulemaking Portal, in addition to the 145 oral testimonies received during the public hearings described above. Of these comments, 2,294 were unique, with anywhere from two to 17,000 near-duplicates of each. Additionally, NMFS received a letter supporting swim-with and approach regulations submitted by Kama'āina United to Protect the 'Āina (KUPA)—Friends of Ho'okena Beach Park (Kauhakō Bay), which contained over 285 names and signatures. Comments were submitted by individuals; research, conservation, and education groups; trade and industry associations; tour and retreat operators and participants; and Federal, state, and local government entities. We posted all written comments received during the comment period on the Federal eRulemaking Portal (*https://www.regulations.gov/document?D=NOAA-2005-0226-0002*). We have considered all public comments and provide responses to all significant issues raised by commenters that are associated with the proposed rulemaking. Comments and issues have been aggregated into the comment summaries below in an order that similar assertions, suggested alternatives or actions, data, and clarifications are addressed together. We have not responded to comments or concerns outside the scope of this rulemaking, which is to prevent take of Hawaiian spinner dolphins caused by viewing and interaction pressures. Many of the written and oral comments from individual members of the public were short or general statements that (1) expressed support for the proposed regulation and/or spinner dolphin conservation in general, (2) expressed disagreement with the proposed regulation, or (3) expressed disagreement with all regulations prohibiting human interaction with dolphins in general. We did not respond to comments expressing general support or opposition. In addition, we did not respond to anecdotes that many people shared regarding their personal experiences swimming with the dolphins, nor to anecdotes that were shared about witnessing human users harassing spinner dolphins in coastal bays, unless they were accompanied by specific information or comment on the proposed rule. The following comment summaries and agency responses are organized by the issue categories we identified in the proposed rule for public comment, with three issue categories added at the end because they did not fit squarely in one of the categories in the proposed rule.

Effects of the Increasing Number of Human Interactions With Hawaiian Spinner Dolphins

Comment 1: Many commenters raised questions about the scientific information used to support the spinner dolphin protections in this rule. Scientific information on the impacts of close approach was called biased, inconclusive, incomplete, or wrong. Some commenters noted their personal observations were not consistent with the published studies, asserting that they have not seen spinner dolphins changing their behavior in response to vessels and swimmers, nor have they seen spinner dolphin populations decreasing. Additionally, some commenters suggested that scientific studies are not complete since most peer reviewed studies include shore-based or vessel-based observations as opposed to underwater observations.

Response: We relied on the best available science to develop a regulation to improve protections for spinner dolphins in Hawai'i. The majority of information used to develop the proposed rule, DEIS, and FEIS came from peer reviewed scientific publications. To a lesser extent, we used unpublished data, personal accounts, and other anecdotal information. We gave greater weight to empirical studies published in scientific journals than to personal observation and interpretation because such scientific studies use established scientific methods, test hypotheses, employ statistical analyses, and have been peer reviewed. These steps in the scientific process reduce the potential for bias in results. Reviewing best-available information from multiple independent scientists limits concerns about potential bias related to any one researcher, and provides a complete, robust set of information from which a decision can be made. Reported behavioral changes observed in scientific studies may not be obvious to an observer who is not systematically observing the behavioral patterns that support spinner dolphins throughout the day.

Many independent scientists studying Hawaiian spinner dolphins have reported changes in spinner dolphin behavior or reduced time spent engaging in resting behavior when in the presence of human activity (Norris *et al.* 1994; Lammers 2004; Danil *et al.* 2005; Courbis 2007; Courbis and Timmel 2009; Timmel *et al.* 2008; Forest 2001; Heenehan *et al.* 2017; Ostman-Lind *et al.* 2004; Ostman-Lind 2009; Thorne *et al.* 2012; and Wiener 2016). These studies show a clear trend that certain types of human activity, especially dolphin-directed activity, can disturb spinner dolphins by disrupting behavioral patterns, to a degree that is considered Level B harassment under the MMPA.

Additionally, we relied on studies that investigated the biological and population-wide impacts of human disturbance to other dolphin and marine mammal populations around the world. As indicated in the sections above, high levels of exposure to human activities have had deleterious impacts on other analogous dolphins and marine mammal species, including habitat abandonment, reduced female reproductive success, impeded activity and energy budgeting, and increased vigilance (Bejder 2005; Bejder *et al.* 2006a, 2006b; Lusseau and Bejder 2007; Williams *et al.* 2006; Lusseau 2003; Johnston 2014). Several spinner dolphin researchers have also argued that spinner dolphins are at a higher risk of experiencing negative biological impacts because they are much more vulnerable to human disturbance than other marine mammal populations, as previously stated (Danil *et al.* 2005; Bejder 2005; Tyne *et al.* 2017; Tyne *et al.* 2018).

A few commenters referenced a study by Tyne (2015) in Hawai'i Island resting bays that claimed he did not observe a significant effect from human activity on the probability of spinner dolphins resting, socializing, or traveling, and that spinner dolphins have become habituated and/or tolerant to human activity. Tyne concluded, however, that the absence of a measurable impact was likely because the high levels of exposure to human activity (82.7 percent within 100 m) and the brief time periods between exposures (median duration of 10 minutes) within these bays did not allow an adequate level of control data (*i.e.,* data collected when no human activity was present). The author claims that this level of exposure to human activity is higher than any other studied dolphin population in the world, and several other studies on Hawaiian spinner dolphins have observed a disruption in resting behavioral patterns from human activities (Forest 2001; Danil *et al.* 2005; Courbis 2007; Courbis 2008; Timmel *et al.* 2008). In a subsequent publication, Tyne and his co-authors suggested that spinner dolphins did not have enough time in between exposures to human activity to regress into pre-disturbed resting behavior, and the observed

resting behavior was one of a more vigilant nature and may not represent a natural resting state (Tyne *et al.* 2018). The authors concluded that vigilance decrement (*i.e.,* physical and cognitive fatigue from inadequate rest from a vigilant state) experienced by spinner dolphins may impair cognitive and decision-making abilities. Resting and abating vigilance decrement is particularly crucial for spinner dolphin survival because spinner dolphins require complex cooperative strategies and coordination between individuals to forage and avoid predation. Although spinner dolphins may appear to ''tolerate'' close human activity, the authors argue that spinner dolphins may decide that it is less costly to remain in areas where they are frequently disturbed and may experience constant vigilance, as opposed to an alternate undisturbed site that would make them more vulnerable to predation. Even though spinner dolphins may appear to be habituated or tolerant to human activity, their continued residence in these areas is likely due to the lack of suitable, undisturbed habitats, and, therefore, the dolphins are subject to endure high levels of disturbance (Tyne *et al.* 2018).

Several spinner dolphin studies utilize multiple data collection techniques to observe dolphin behavior in the presence of human users and vessels, including shore-based observations, vessel-based observations, and in-water passive acoustic monitoring. Additionally, Wiener (2016) conducted in-water surveys of human and dolphin behaviors using Go-Pro cameras at 14 known spinner dolphin resting sites and found that humans exhibited aggressive behaviors (defined as active pursuit of interaction by chasing, diving, or deliberate approach) while interacting with dolphins 27 percent of their in-water time. Combined, the above studies provide multiple lines of evidence regarding certain vessel and swimmer activities that can potentially disturb and disrupt behavioral patterns of spinner dolphins, which is considered take by Level B harassment under the MMPA. Additionally, while underwater observations can yield insights into dolphin mating behaviors, they are not required to record evidence of disturbance, as disturbance can be seen in acoustic activity of dolphins, as well as behaviors visible from shore and from vessels. An overview of the scientific literature used in our decision making is available in the FEIS, section 1.4 ''Scientific evidence of impacts of small cetaceans caused by human interactions.''

We do not base this rule on population decline. The MMPA prohibits harassment of any marine mammal and additional measures are necessary to minimize harassment and prevent take from occurring. It is not possible to gain a thorough understanding of spinner dolphin abundance from observations in one or two bays. Factors such as habitat displacement, the movement of prey species in offshore waters, or season can account for increases or decreases in the number of spinner dolphins observed using a particular bay. Analysis of long-term trends has not been conducted with the available data because the methods used for spinner dolphin abundance surveys throughout the last several decades were not consistent, and are, therefore, difficult to compare. Although the most recent survey suggested a potential decline in the Hawai'i Island stock from earlier studies, the research conducted in the 1980s did not include year-round surveys and used different methods and a different survey area than more recent 2010–2011 surveys (Norris *et al.* 1994; Tyne *et al.* 2014; SAR 2019). However, more recent survey studies, such as surveys conducted in the SAPPHIRE project, provide baseline data that can be compared to future survey studies to analyze a long-term population abundance trend. That said, other investigations have examined the relationship between cumulative vessel exposure and female dolphin reproductive success. For example, Bejder (2005 and 2006a) observed bottlenose dolphins and cautioned that dolphin tourism has potential for long-term consequences on female dolphin productivity, and that impacts may be amplified for small, closed, or isolated, resident cetacean populations. While Bejder does not focus his studies on spinner dolphins, it is important to note here that Hawaiian spinner dolphins fit the description of small, closed, or isolated, resident cetacean populations.

It is important to note that evidence of a decline in population abundance or adverse physiological or reproductive impacts are not a requirement when classifying which human actions are considered harassment under the MMPA. The statute characterizes Level B harassment as certain human acts (*i.e.,* pursuit, torment, or annoyance) that have the potential to disturb a marine mammal by disrupting behavioral patterns. Studies that provide clear evidence of this phenomenon with Hawaiian spinner dolphins have been thoroughly referenced in the Background section. The threshold for Level B harassment does not require evidence of adverse biological or population-wide impacts. However, we do assert that human activities that cause disruption of behavioral patterns could be adversely impacting Hawaiian spinner dolphins, similar to what is referenced in the aforementioned studies on other analogous small cetacean populations. Therefore, we have decided to implement additional protections for Hawaiian spinner dolphins to minimize take that we know is currently occurring, even though we recognize that there is not clear evidence of population decline or adverse biological impacts. This precautionary approach is the best way to protect and conserve Hawaiian spinner dolphin populations and is necessary in order for NMFS to comply with our statutory requirement under the MMPA.

Proposed Prohibited and Exempted Activities

Comment 2: One commenter stated he is against commercial swim-with-dolphin programs and proposed a 5-year moratorium on all commercial aspects of swimming with dolphins. Several commenters suggested that commercial swim-with-dolphin operators need to be regulated/restricted but are not in favor of limiting non-motorized vessels or individuals' rights to swim with the dolphins. Commenters suggested that approach distance regulations should only be applied to commercial tour operators, rather than individual swimmers. One commenter noted that large boatloads of people cause most of the trouble for spinner dolphins. Additionally, one commenter suggested that the 50 yard (45.7 m) approach distance only apply within designated essential daytime habitats.

Response: First, we note that all of our alternatives, except the no action alternative, would prohibit swimming with dolphins. One reason for this is that, while commercial operations may occur at a larger scale and may appear to be more egregious, scientific studies have shown that any vessel or person approaching near dolphins has the potential to disturb and change their behavior (Forest 2001, Courbis and Timmel 2008, Ostman-Lind *et al.* 2004, Courbis 2004). This can result in take which is prohibited under the MMPA. The regulation is written to apply to any person or vessel that approaches a Hawaiian spinner dolphin within 50 yards (45.7 m).

As noted in the proposed rule, DEIS, and FEIS, Hawaiian spinner dolphin take (including harassment and

disturbance) is not a problem that is specific to one ocean user group or one area of the Hawaiian Islands. Taking Hawaiian spinner dolphins occurs as a result of close approach by a variety of ocean users, including commercial tour operators, non-commercial motorized and non-motorized vessels, and swimmers in many areas of Hawai'i's nearshore waters (see section 3.1.8 of the FEIS describing the Affected Environment and targeted areas across the MHI). There are multiple studies that have attempted to analyze how the presence of swimmers, independent of vessels, can disturb the natural behavior of spinner dolphins, including changes in resting patterns, avoidance behavior, changes in direction, aerial behavior patterns (Danil *et al.* 2005; Courbis 2004; Courbis 2007; Timmel *et al.* 2008; Johnston *et al.* 2013). While tour operations may be the primary cause of disturbance in some areas (*e.g.,* Makako Bay), in other areas, shore-based swimmers or recreational users are the primary concern (*e.g.,* Kauhakō Bay). Therefore, we apply these prohibitions designed to limit take to all user groups.

Although specific essential daytime habitats are often targeted for close approach activities, spinner dolphins may travel among these areas and be found in many nearshore locations throughout the day. We are concerned that applying approach limits only within certain heavily-used areas will displace human interactions with dolphins to other areas. In addition, in some areas, dolphins do not predominantly use discrete bays for their resting habitat as they do in other locations. For example, the 10-fathom isobath off O'ahu's west coast was nicknamed the ''spinner expressway'' because dolphins are often found moving back and forth between sites throughout the day. Only protecting discrete areas would leave the dolphins vulnerable to take in areas outside of designated essential daytime habitats.

Comment 3: Some commenters claimed harassment of spinner dolphins is not a problem because swimmers and tour operators police themselves.

Response: Several studies suggest that Hawaiian spinner dolphins are regularly being disturbed by human activities, especially in known resting areas (Norris *et al.* 1994; Lammers 2004; Danil *et al.* 2005; Courbis 2007; Courbis and Timmel 2009; Timmel *et al.* 2008; Forest 2001; Heenehan *et al.* 2017; Ostman-Lind *et al.* 2004; Ostman-Lind 2009; Thorne *et al.* 2012; and Wiener 2016). Further, the swim-with-dolphin tour industry has grown tremendously over the last decade (Wiener, 2016), thus exacerbating such disturbance. Individual and tour self-policing may help limit harassment, but it has not been sufficient to avoid negative effects to the dolphins and, given the potential for long-term impacts, such as habitat displacement, adverse impacts to reproductive fitness, and population declines, there is a need for enhancing protections beyond self-policing.

Comment 4: One commenter argued that the Federal government does not have authority to regulate coastal waters. The commenter argues that this is a local issue, and should be governed by local government authorities.

Response: NMFS disagrees. These regulations apply in specified areas of U.S. navigable waters surrounding the State of Hawaii. Under sections 102(a) and 103 of the MMPA, NMFS may enforce regulations prohibiting take of marine mammals by any person, vessel, or conveyance in waters, lands, ports, harbors and other places under the jurisdiction of the United States. Additionally, as described in a November 16, 2016 letter NMFS received from the State of Hawai'i DLNR following publication of the 2016 proposed rule, the State supports implementation of regulations to prohibit swimming with or approaching a Hawaiian spinner dolphin within 50 yards.

Comment 5: Some commenters expressed concern that exceptions #1 and #2 in the proposed rule (which provide exceptions for people who inadvertently come within 50 yards (45.7 m) of a dolphin or are approached by a dolphin, and for vessels that are underway and approached by a dolphin, provided the person or vessel makes no effort to engage the dolphin and continues normal navigation) will ''hollow-out'' the rule and specifically make enforcement difficult as it will allow those approaching dolphins within 50 yards (45.7 m) to claim that the animal approached them. Additionally, commenters asked how NMFS will distinguish between an interaction that was inadvertent and one that was purposeful. One commenter suggested that subsection (d) of the proposed rule ''affirmative defense'' be eliminated in its entirety because it places too much burden on a vessel operator and makes the exceptions difficult to successfully invoke.

Response: In developing this rule, NMFS understood that spinner dolphins, as fast-moving marine mammals, may approach swimmers and boaters who, through no fault of their own, are placed in apparent violation of the 50-yard approach regulation. NMFS intends this rule to deter humans from approaching and disturbing spinner dolphins; it is not intended to punish individuals who come into inadvertent contact with spinners and then take all necessary and appropriate action to withdraw. While we appreciate that some individuals might abuse this defense, we believe that the NOAA enforcement proceeding is the appropriate forum for resolving these questions on a case by case basis.

Comment 6: We received comments requesting specific exemptions from this proposed rule for fishing vessels. In particular, Hawai'i Fishermen's Alliance for Conservation and Tradition (HFACT) requested that NMFS consider the following exception, ''Any fishing vessel that is anchored or adrift and is approached by a spinner dolphin, provided the vessel makes no effort to engage or pursue the animal.'' In addition, the Hawai'i Longline Association (HLA) noted that the longline fisheries do not threaten spinner dolphins with ''chronic disturbance'' and that, to the extent that the fisheries could interact with spinner dolphins, these interactions are already regulated under the MMPA. To minimize confusion for these commercial fishing vessel operators, HLA requested an exemption for ''vessels that are duly licensed to fish in the Hawai'i-based commercial longline fisheries.''

Response: In response to this comment, the final rule clarifies that this prohibition does not apply to a commercial fishing vessel that incidentally takes a spinner dolphin during the course of commercial fishing operations, provided such vessel operates in compliance with a valid marine mammal authorization in accordance with MMPA Section 118(c). See exception (8) in the final regulations. Regarding HFACT's requested exception, a vessel that is adrift is, in accordance with COLREGS Rule 3, a vessel underway powered by the prevailing current, a scenario which is included in exception (2). However, HFACT has identified that a vessel at anchor may not be able to avoid coming within 50 yards (45.7 m) of spinner dolphins if approached by these animals, and we agree that this scenario should be included in the exceptions to prohibitions. As a result, we have added an exception to the final rule, which exempts any vessel that is anchored or aground and is approached by a Hawaiian spinner dolphin, provided the vessel makes no effort to engage or pursue the animal (50 CFR 216.20 (c)(5)). We believe that the addition of this exception will not affect the overall purpose of this rule and will provide allowances for vessels that are not

engaged in dolphin-directed activities, but find themselves within 50 yards (45.7 m) of approaching animals. Additional information is included in the *Changes from Proposed Rule* section later in this rule.

Comment 7: Several commenters suggested that, as part of this regulation, NMFS should require all vessels to participate in the Dolphin SMART program and should include Dolphin SMART guidelines in the regulation. One particular commenter stated that they operate a tour company that follows Dolphin SMART guidelines and has successfully maintained a stable business.

Response: This regulation adopts a 50 yard (45.7 m) approach buffer around spinner dolphins, which is the same approach distance recommended by the Dolphin SMART program, our regional Responsible Marine Wildlife Viewing Guidelines (publicly available at *https://www.fisheries.noaa.gov/pacific-islands/marine-life-viewing-guidelines/viewing-marine-wildlife-hawaii*), and our national guidelines for dolphins and porpoises (publicly available at *https://www.fisheries.noaa.gov/topic/marine-life-viewing-guidelines#guidelines-&-distances*). While we appreciate the commenters' support of the Dolphin SMART program, this program is a voluntary recognition and education program designed specifically for tour operators and is not appropriate for all vessels, including fishing vessels and personal recreational vessels. For instance, guidelines such as those requiring vessels to engage in responsible advertising and to provide outreach materials on responsible viewing to customers may not be applicable to private vessels. Therefore, we support maintaining the Dolphin SMART program as part of a separate spinner dolphin conservation effort, rather than making all of the guidelines part of this regulation.

Whether 50 Yards Is the Most Appropriate Distance for Swim-With and Approach Restrictions To Reduce Take of Spinner Dolphins

Comment 8: Several commenters expressed concern that the proposed rule will be difficult to enforce and will be easily arguable since the burden will be on enforcement officials to show that a human user was within 50 yards (45.7 m) and that a violation occurred. Commenters also noted that it can be difficult to judge distance, making it difficult for people in the water and for enforcement officials to determine if people in the water are within 50 yards (45.7 m).

Response: Because the rule has an objective approach distance, we believe that this rule can be effectively enforced. This approach prohibition clarifies protections in the MMPA by establishing a clear, objective distance requirement, thus facilitating enforcement activities while preventing take of spinner dolphins. NMFS has implemented 50 yards (45.7 m) as the recommended viewing distance for dolphins and small whales at both the regional and national level for decades, so this standard will not be a novel standard for members of the public. Enforcement officials are experienced at judging the distances and have experience through enforcement of other approach regulations, such as the 100 yard (91.4 m) approach rule for humpback whales in Hawai'i (81 FR 62010, September 8, 2016). In addition to visual observations, enforcement officials will use other evidence, such as photographic evidence, video evidence, and/or eye-witness accounts, when determining if a violation of the rule occurred.

Whether 100 Yards (91.4 m) or Another Distance is the Most Appropriate Distance for Swim-With and Approach Restrictions To Reduce Take of Spinner Dolphins

Comment 9: We received comments in favor of decreasing or increasing the proposed approach distance to lessen the impact on the viewing industry and to increase protections for Hawaiian spinner dolphins, respectively. Specifically, three commenters suggested that a 50 yard (45.7 m) approach distance is too strict, and would not allow for any dolphin viewing activities to take place at that distance. One commenter suggested a 25 yard (22.9 m) approach distance be used instead, and others suggested 20 yards (18.3 m) or even 10 yards (9.1 m). Over 17,900 commenters suggested that a 100 yard (91.4 m) approach distance is more appropriate than 50 yards (45.7 m). These commenters, many submitting comments through a form letter, argued that a 100 yard (91.4 m) approach distance would be easier to comply with because it is consistent with the humpback whale approach rule in Hawaiian waters (81 FR 62018, September 8, 2016). Commenters argued that this consistency would lead to greater compliance and easier enforcement. Additionally, commenters argued that a 100 yard (91.4 m) buffer zone would provide spinner dolphins in Hawai'i increased protection from exposure to human disturbance. Over 2,600 commenters suggested that 150 yards (137.1 m) is a more appropriate buffer distance because it conforms to scientific evidence that dolphins can detect a disturbance within 150 yards (137.1 m). Several commenters suggested different approach distances based on the type of human user or the location. Finally, one commenter claimed that dolphin tour boats on the Wai'anae coast of O'ahu are chumming the waters to attract dolphins, honu (green sea turtles), and fishes, which also attracts sharks. Therefore, they felt that 50 yards (45.7 m) is not enough and that a radius of 1 mile is required so as to protect humans from what they perceived as an increased frequency in shark attacks.

Response: As stated in the rationale of the proposed rule and in the DEIS, we selected the 50 yard (45.7 m) approach regulation because this distance is the least restrictive measure that still reduces the threat of take from occurring (including harassment and disturbance) to Hawaiian spinner dolphins from close approaches by vessels and swimmers. NMFS believes the 50 yard (45.7 m) distance will still allow for meaningful dolphin watching opportunities. The 50 yard (45.7 m) viewing distance has been recommended in NOAA's Watchable Wildlife Viewing guidelines for many years and is also used by the Dolphin SMART program. We disagree that this distance is overly restrictive, as many tour operators in Hawai'i and elsewhere around the country have been certified in the Dolphin SMART program and have been able to run successful dolphin watching operations while complying with the 50 yard (45.7 m) approach distance.

We evaluated the effects of a 50 yard and 100 yard (91.4 m) approach distance and discussed scientific literature regarding other distances. As indicated in the proposed rule, the FEIS, and the background section of this rule, scientific literature indicates that changes in spinner dolphin behavior are detectable when vessels or swimmers are found at distances ranging out as far as 500 m (Ross 2001, Forest 2001, Danil *et al.* 2005, Courbis and Timmel 2008, Timmel *et al.* 2008, Symons 2013, Johnston *et al.* 2014) and that effects generally increased as distance from the dolphins decreased (Ross 2001). We also recognized that there are scientific studies indicating that swimmer presence within 150 m (164 yards) reduces the likelihood of spinner dolphins being in a resting state, although vessel presence within this distance did not appear to cause disturbance. This research illustrates the complexity of the issue and why selecting one distance that will provide

protection from disturbance can be difficult. However, as described in the proposed rule, we also recognized that not all approaches within 100 or 150 yards (91.4 or 137.1 m) are likely to result in take of spinner dolphins, and that swimmers may have difficulty judging and achieving greater distances around these animals because they are fast moving and relatively small. In comparison to viewing distances for large whales, the 100 yard distance (or greater) would likely decrease viewers' ability to actually see spinner dolphins without using visual aids, such as binoculars. Although consistency with the humpback approach regulation (which prohibits approaching within 100 yards (91.4 m) of humpback whales) may be easier to remember, and thus simplify compliance, our selection of 50 yards (45.7 m) was guided by the most appropriate distance to prevent take of spinner dolphins from occurring, while placing the least restrictive burden on the viewing public. We have therefore determined that a 50 yard (45.7 m) approach distance is appropriate, as this distance will allow people to observe spinner dolphins, while providing increased protection and safety for these animals.

Finally, NMFS regulations do prohibit the feeding of wild dolphins (50 CFR 216.3), so any chumming activity is properly reported to NMFS Office of Law Enforcement. These regulations prohibit feeding and, while not specifically designed to prevent shark attacks on humans, should serve as a deterrent for any person considering chumming to attract dolphins.

Research Recommendations and Priorities for Better Understanding How Human Disturbance Affects Hawaiian Spinner Dolphins

Comment 10: Several commenters suggested that we should take different actions instead of an approach rule, such as working directly with experts in dolphin communication, instituting a 2-year moratorium on intentional dolphin interactions at essential daytime resting habitat, or monitoring the change in spinner dolphin behavior/population health.

Response: We agree that additional research is necessary to better understand spinner dolphin ecology. However, we believe that research is a necessary complement to, and not a substitute for, regulatory measures to reduce the impact of take on spinner dolphins. While we appreciate that there may be other actions that could be taken to address take of spinner dolphins in their resting habitat, we note that voluntary measures have been tried in the past and, while helpful, they have not been sufficient. We intend to implement this rule at this time and monitor its impact.

Comment 11: Several commenters suggested that monitoring the effectiveness of the regulation would be an important step to assess compliance with the rule. One commenter suggested that we conduct a review of the rule's effectiveness after 2 years, requesting feedback from local stakeholders. Other commenters requested that we utilize ''citizen scientists'' as part of spinner dolphin monitoring.

Response: We agree that monitoring the effectiveness of the final rule would be an important step to assess compliance with the rule. Citizen science, in the form of volunteer data collectors, may be one aspect of a multi-pronged approach to gathering the data necessary to determine such an impact. This multi-pronged approach could include data collection by volunteer observers, spinner dolphin researchers (through passive acoustic monitoring equipment), and NOAA OLE and the State of Hawai'i's Department of Conservation and Resource Enforcement (DOCARE) officials.

Comment 12: One commenter states that we did not consider a study that shows there are no harmful effects when dolphins remain vigilant for extended periods of time. The research article cited is Branstetter *et al.* (2012), and entitled, ''Dolphins Can Maintain Vigilant Behavior through Echolocation for 15 Days without Interruption or Cognitive Impairment.''

Response: The research to which the commenter refers was conducted on captive bottlenose dolphins and looked at the impacts to their cognitive abilities, in the form of their ability to detect objects via echolocation, after 5 days and 15 days of constant engagement by researchers. The researchers found that there was no detectable loss of the dolphins' cognitive ability after maintaining a vigilant state for these extended time periods. Their results seemed to demonstrate that bottlenose dolphins can continuously monitor their environment and maintain long-term vigilant behavior through echolocation. The comment suggests that this research provides evidence that Hawaiian spinner dolphins do not suffer harm from disturbance by human interactions due to their ability to sleep with one half of their brain while the other half remains vigilant. However, there are several points that would argue against this assertion. First, captive bottlenose dolphins have already been habituated to human disturbance by their very state of captivity, and may have even been subjected to other research projects over the course of their captive lives. Captive dolphins also do not need to forage for food, detect predators, or socialize with others in the pods in order to survive. Captive bottlenose dolphins cannot, therefore, be readily compared to wild dolphins. Second, bottlenose dolphins are a much more robust animal than are spinner dolphins, and they have a much more fluid life history strategy. They are adaptable to being held in captivity, whereas spinner dolphins have never been successfully held in captivity. Bottlenose dolphins are larger than spinner dolphins, both in size and weight, and forage opportunistically throughout the day on a large variety of prey species. Spinner dolphins forage only on the mesopelagic species that are hunted at night and are therefore only able to rest and nurture their young during the day, making them more susceptible to the impacts of human disturbance on their essential daytime behaviors. Finally, this study looked only at cognitive impacts to the dolphins, and did not consider physical impacts to their well-being and fitness from maintaining a constant state of vigilance.

Comment 13: Many commenters suggested that NMFS should focus rulemaking efforts on other factors that they perceive as having a greater impact on the health of Hawaiian spinner dolphins than close approach from humans. These commenters identified overfishing of prey species, pollution (*e.g.,* storm water runoff, trash, and trace chemicals from sunken, decommissioned military ships), captive dolphin swim-with programs and hotel exhibits (an activity that they suggested NMFS should ban), and acoustic impacts from military operations (*e.g.,* Exercise Rim of the Pacific (RIMPAC) and military use of sonar equipment). Further, one commenter suggested that new regulations should not be implemented until NMFS understands how each of the above-mentioned factors impacts spinner population health.

Response: Commenters are correct in noting that many factors can negatively affect the health of Hawaiian spinner dolphins. There are a variety of external factors or actions that have affected, may be affecting, or may have future effects on Hawaiian spinner dolphins. Many of these external factors are beyond the scope of this rulemaking, which is addressing close approach by humans as a specific threat to Hawaiian spinner dolphin health. Additional information about the effects of these external factors on Hawaiian spinner

dolphin health is included in section 4.5.1.1 of the FEIS (''Cumulative Effects of External Factors'') and some are discussed below.

Regarding commenter concerns about overfishing of spinner dolphin prey species, we work closely with the Western Pacific Regional Fishery Management Council to reduce impacts of Federal fisheries to marine mammals through regulations and management actions, and work with the state and other fishery councils where our concerns overlap with nearshore fisheries.

Regarding exposure to marine debris or trace chemicals from decommissioned ships, a variety of existing Federal laws and regulations regulate or prohibit the discharge of oil, garbage, waste, plastics, and hazardous substances into ocean waters, including the Clean Water Act as amended by the Oil Pollution Act of 1990; MARPOL 1973/1978; and the Marine Protection, Research, and Sanctuaries Act. These laws have strict civil and criminal penalties for violations.

Regarding concerns about human interaction with dolphins in captivity, this rule only applies to wild Hawaiian spinner dolphins, not dolphins in captivity. NMFS issues permits under the MMPA for the taking or the importation of marine mammals for the purposes of public display (16 U.S.C. 1374 Sec. 104(c)), the transfer of ''releasable'' rehabilitated marine mammals, and maintains the National Inventory of Marine Mammals, which tracks acquisitions, dispositions, and transfers/transports of marine mammals.

Regarding the use of sonar in the marine environment and its impact on spinner dolphins, section 101(a)(5) of the MMPA allows for incidental take for certain limited activities. Such authorizations for incidental take are subject to a public process that provides for notice and comment for each proposed activity, and accordingly, are beyond the scope of this rulemaking.

Regardless of the other factors potentially affecting Hawaiian spinner dolphins, peer-reviewed scientific studies cited in the proposed rule and again in this final rule have shown that close approach by humans may result in negative impacts on Hawaiian spinner dolphin health, and multiple studies have shown an increase in the intensity of human interactions with dolphins in recent years. While we recognize that close approach by humans is not the only threat to dolphin health, this rule seeks to mitigate this real and increasing threat by reducing the impact of human viewing and interaction on resident stocks.

Comment 14: One commenter stated that the information published in the DEIS does not comply with the Office of Management and Budget (OMB) requirements under the Information Quality Act (a.k.a. Data Quality Act) by not adequately presenting a balance of best and worst case scenarios, a lack of bias and exhibited transparency, and by not adequately fulfilling the public notice requirements. Additionally, the commenter provided additional scientific articles that they believe need to be included in the rule's environmental impact analysis.

Response: Under NOAA's Information Quality Guidelines, which fulfill OMB requirements under the Information Quality Act (IQA), the proposed rule does not qualify as Influential Scientific Information (scientific information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions) or Highly Influential Scientific Assessment (influential scientific information that the agency or the Administrator of the Office of Information and Regulatory Affairs in the Office of Management and Budget determines to be a scientific assessment that: (i) Could have a potential impact of more than $500 million in any year, or (ii) is novel, controversial, or precedent-setting or has significant interagency interest).

With regard to the science supporting the rule, we relied on published reports and studies, most of which have been peer reviewed prior to publication under independent processes, dependent upon the terms of the publication. We have reviewed the articles referenced by the commenter for their applicability to this final rule and address them here.

The article cited as Christiansen and Lusseau (2015) describes studies that were conducted to determine if disturbance corresponded to changes in female reproductive success. The researchers developed a mechanistic model for minke whales (*Balaenoptera acutorostrata*) to measure the effects of behavioral disturbances caused by whale watching activities on fetal growth. The model illustrates the pathway through which behaviorally mediated effects of anthropogenic disturbance might influence female reproductive success. The results indicated that, although the behavioral disruptions caused by whale watching interactions were substantial, the cumulative exposure of individuals to whale watching boats was low, resulting in an effect on fetal growth no different from natural variability. For the minke whales studied in this research, the whale watching took place at their feeding grounds, and even the highest exposure to whale watching vessels amounted to a total of only 427.5 minutes during the feeding season. The authors concluded that female minke whales would have to spend a large proportion of their day with whale watching boats during each day of the feeding season for them to start having a biologically important effect on fetal growth. The results of this research are not directly applicable to the issue being addressed by this final rule because Hawaiian spinner dolphins are exposed to much higher levels of disturbance in their essential daytime habitats. In fact, the authors of the study conclude that if these minke whales were exposed to boats throughout the day (*i.e.,* similar to levels experienced by spinner dolphins in Hawai'i), they would experience a net energy loss sufficient enough to have significant effects on fetal growth. The cumulative exposure of spinner dolphins to human disturbance is occurring on a daily or near-daily basis throughout the year, and also occurs during times and at places that they would normally be resting and nurturing their young, not during feeding times. These essential daytime behaviors are needed to replenish and restore their energy and provide the nourishment needed for calves to reach maturity.

The research cited as Hartel and Torres (2015) studied exclusion zones designed to protect bottlenose dolphin habitats. The research found that, over time, the bottlenose dolphins did not use the designated exclusion zones, and that they were therefore ineffective in providing habitat protection. While this research may seem to be applicable, we note that there are significant differences in the behaviors and life history strategies of bottlenose and spinner dolphins. Spinner dolphins have a very rigid, predictable behavior pattern of hunting at night and resting and nurturing their young during the day. They generally return from their offshore feeding grounds to the same protected bays and shallow, sandy bottomed habitats and are found there with regularity. This is one of the main reasons why the swim-with-dolphin industry has been so successful in Hawai'i, as the tour vessels are consistently able to locate the dolphins at the same sites on a daily basis. Researchers believe Hawaiian spinner dolphins choose these areas because of their proximity to their offshore feeding grounds and the protection they afford from predators, providing a safe place to rest and nurture their young. In contrast,

bottlenose dolphins are much more fluid in their behaviors, feeding and resting throughout the day and foraging over much wider areas. They do not exhibit the same site fidelity to a particular area that spinner dolphins do.

The research cited as New *et al.* (2013) explored the response by bottlenose dolphins to a scenario in which vessel traffic increased from 70 to 470 vessels a year in response to the construction of a proposed offshore renewables' facility. Despite the more than six-fold increase in vessel traffic, the dolphins' behavioral time budget, spatial distribution, motivations, and social structure remained unchanged. They found that the dolphins are able to compensate for their immediate behavioral response to disturbances by commercial vessels. The research showed that if the increased commercial vessel traffic is the only escalation in anthropogenic activity, then the dolphins' response to disturbance is not biologically significant because the dolphins' health is unaffected, leaving the vital rates and population dynamics unchanged. The authors note that behavioral change should not automatically be correlated with biological significance when assessing the conservation and management needs of species of interest. Again, this study centered on the responses of bottlenose dolphins to increased vessel traffic. For the same reasons stated above, the differences between bottlenose and spinner dolphins needs to be taken into consideration when looking at the results of this study. Unlike bottlenose dolphins, spinner dolphins have very rigid and stable behavioral patterns of daily rest and socialization and nighttime foraging, and are therefore much more susceptible to disturbance at their essential daytime behaviors.

Comment 15: Two commenters expressed the need for NMFS to address climate change in the environmental analysis.

Response: We provided a complete analysis of climate change impacts associated with this rulemaking in section 4.5.5 of the FEIS (''Impacts of Climate Change''). In this section, we detailed the cumulative effects that climate change may have on Hawaiian spinner dolphin health, including impacts on abundance and distribution of prey species, impacts of sea level rise, and impacts associated with rising ocean temperatures (see section 4.5.5.1 of the FEIS). Additionally, we considered and evaluated impacts that the proposed alternatives could have on climate change (see section 4.5.5.2 of the FEIS).

Comment 16: We received comments that questioned the credibility of some of the research used to support the proposed rule and the analyses of alternatives in the DEIS. Specifically, commenters noted that the SAPPHIRE Project received partial funding from Dolphin Quest, which profits from swim-with captive dolphin programs. Commenters suggested that this presents a conflict of interest, as findings that support prohibitions for approaching wild dolphins could increase support for Dolphin Quest's business.

Response: To clarify, the research effort to which the commenters refer (which resulted in several publications, see Background above) received a portion (less than 25 percent) of their funding from Dolphin Quest. Our decisions associated with this rulemaking do not rest solely on the studies from the SAPPHIRE project. Rather we relied on the many scientific publications, including multiple studies in Hawai'i, that indicate that intense human pressure can have negative effects on local wild spinner dolphin populations. A comprehensive list of journal articles and information sources are referenced in the Final EIS.

Researchers in many fields rely on funding from various sources to conduct their work, including government grants, NGOs, and private sources, and on that basis alone we do not assume that the acceptance of funds from specific entities would compromise the research being conducted. The academic papers in question were peer-reviewed, which is a process by which research is checked by a group of experts in the same field to ensure that the scholarly work meets necessary standards before it is published in an academic journal. Tyne's papers were peer reviewed and published in the academic journals Royal Society Open Science, Biological Conservation, and the Journal of Applied Ecology. The abundance information was reviewed closely by PIFSC researchers and currently provides the most rigorous estimate for our local spinner dolphin populations. Tyne *et al.'*s work indicating the significance of resting habitat in supporting spinner dolphin resting behavior confirmed ideas presented by earlier works by Ken Norris in the 1990s. Additionally, Tyne *et al.'*s work questioning the quality of rest that this population receives echoes concerns expressed by other researchers, including Courbis and Timmel (2009), Heenehan *et al.* (2015 and 2016), Forrest (2001), and Danil *et al.* (2005). As a result, we determined that these studies by Tyne *et al.* are credible and unbiased, and included them in our analysis of the best available science.

Information on Responsible Viewing of Marine Mammals

Comment 17: Several commenters expressed concern that limiting interaction with spinner dolphins may displace the impacts of human interaction onto other wild marine mammals, or onto captive bottlenose dolphins. Additionally, commenters specifically suggested that to avoid this displaced impact, NMFS should expand the scope of this rule to protect all marine mammals in Hawai'i, including dolphins in captivity.

Response: All marine mammals are protected from take by the MMPA, defined as ''to harass, hunt, capture, or kill or attempt to harass, hunt, capture, or kill any marine mammal'' (16 U.S.C. 1362). While this regulation implements necessary and appropriate measures to reduce take in the form of harassment of spinner dolphins, other wild marine mammals are still protected from take (including harassment) under the MMPA. Spinner dolphins are unique in that they spend time resting in areas close to shore, and therefore are easily accessible to human users of the nearshore environment. Their predictable daytime behavior has made it possible for the swim-with-wild-dolphin industry to develop. It is difficult to determine to what degree operators may switch to ''swim-with'' activities with other marine mammals.

With regard to other marine mammals in Hawaiian waters, we note that we have approach distance regulations for some other species of marine mammals, such as humpback whales in Hawai'i (50 CFR 216.19). However, each rule is based on the ecology of the specific animal, as well as the best available scientific information on the nature of the threats.

This rule implements additional protections to prevent harassment of spinner dolphins in the wild. Extending these protections to captive dolphins is beyond the scope of this rulemaking. Please see the response to comment 13 for additional information on dolphins in captivity.

Additional Information on Spinner Dolphin Behaviors

Comment 18: Many commenters suggest that Hawaiian spinner dolphins choose to interact with human users and vessels. Additionally, commenters suggest that if dolphins did not want to interact with human users and vessels, the dolphins have the ability to swim away. As a result, some commenters assert that people can't swim with

dolphins; rather, it is the dolphins who swim with people, because the dolphins could swim away at any time.

Response: We recognize that dolphins can appear curious and may approach humans in the water. Indeed, there was an exception in the proposed rule, which remains in the final rule, that allows humans to be within 50 yards (45.7 m) of a dolphin if the dolphin approaches them, provided that they do not purposefully place themselves in the path of oncoming dolphins, that they make no effort to engage or pursue the animal, and that they take immediate steps to move away from the animal. Requiring the swimmer to withdraw reduces the likelihood that exposure to human activities will result in harassment. There is ample evidence that humans often approach dolphins in their daytime resting areas, and this may have negative biological impacts on spinner dolphins. As discussed in the Background, Hawaiian spinner dolphins experience high frequency and intensity of disturbance at essential daytime habitats. Some dolphins may stay in these habitats even when people are present, swimming in relatively close proximity to people, because these areas provide habitat essential for resting, recovering from nighttime feeding, and protection from predators. Leaving these sites carries increased risk of predation and may move dolphins further away from offshore feeding areas.

While dolphins can indeed swim away from and faster than humans, having to do so interrupts their rest, keeps them in a state of vigilance, and forces the dolphins to expend energy to increase their swimming speed and/or change direction. This increase in their energetic expenditures for purposes of avoidance could lead to decreased energy needed for other important behaviors, such as foraging and nurturing their young. Over the long term, this could affect the fitness of individual dolphins, and their ability to forage as a group. Further, their ability to swim away is limited by the fact that avoiding humans or leaving their preferred resting habitat altogether can lead to a greater risk of predation, and may involve greater energetic demands because they may need to travel farther distances to reach their feeding grounds. Finally, peer reviewed studies on Hawai'i Island suggest that dolphins are unlikely to rest outside of their daytime essential habitat in resting bays (Tyne *et al.* 2015; Lammers 2004; Norris *et al.* 1994).

Comment 19: Many commenters argued that NMFS fails to understand the consciousness of dolphins and that NMFS perceives a problem with humans swimming with dolphins where none exists. Additionally, one commenter suggested that humans swimming with dolphins is important to both species, while another commenter argued that those who attend spiritual retreats to swim with dolphins attest that the experience is life-changing.

Response: As mentioned in the Background section, we believe that safe, responsible viewing of spinner dolphins can provide benefits to species awareness and conservation. However, there is a substantial and growing body of scientific evidence documenting the negative effects of dolphin-directed activities on spinner dolphins, especially activities that involve close approaches by humans, regardless of the intent of the humans. There is no scientific evidence to suggest that Hawaiian spinner dolphins receive a long-term health benefit from prolonged, close interactions with humans. Peer-reviewed scientific literature documents dolphin-directed human activity as causing disturbance to individual spinner dolphins, as well as changes to spinner dolphin group behavioral patterns. Individual dolphin responses to these activities vary and, in some cases, may not be apparent to an observer (*e.g.,* elevated heart rates or increased vigilance). However, discernible responses include aerial displays, tail-slapping, or other visible behavior changes when closely approached by vessels and swimmers (Forest 2001, Courbis and Timmel 2008); avoidance behaviors, including increased swimming speed, directional changes, moving around and away from swimmers and vessels, or leaving the area in response to human pursuit (Ostman-Lind *et al.* 2004, Courbis 2004, Courbis and Timmel 2008); and aggressive behaviors directed at people, including charging or threat displays (Norris *et al.* 1985, Norris *et al.* 1994). Effects have also been documented in the form of changes to spinner dolphins' behavior patterns in essential daytime habitats, including the amount of time spent within resting habitat, distribution within the habitat, and changes to patterns associated with aerial behaviors (Courbis 2004, 2007; Timmel *et al.* 2008; Östman-Lind 2007; Danil *et al.* 2005; Forest 2001).

Swimming with Hawaiian spinner dolphins has become a popular activity in Hawai'i, because Hawaiian spinner dolphins are charismatic animals, are easily accessible to humans while in their resting habitat. However, as stated in our response to Comment 13, spinner dolphins that interact with swimmers incur an energetic cost, and the time for restorative or fitness-enhancing behaviors, particularly rest, is lost due to these disruptions. Additionally, several spinner dolphin studies provide evidence of chronic disturbance to natural behavioral patterns that could potentially cause biologically significant impacts, see Background for discussion on chronic disturbance. People are often unaware that changes in dolphin behavior take away from daytime fitness-promoting behaviors with other dolphins.

The purpose of this regulation is to prevent encounters that result in disturbance to and harassment of Hawaiian spinner dolphins. This rule implements regulations for the conservation purposes of MMPA, including necessary and appropriate regulations that protect spinner dolphins from harassment. As described in the preamble, human encounters with Hawaiian spinner dolphins may have long-term adverse effects that may not be immediately apparent to the observer. We considered other distances for swim-with and approach regulations, including 100 and 150 yards (91.4 or 137.1 m), as well as no swim-with and approach measures. We do not believe that the status quo provides adequate safeguards for these marine mammals. One of the considerations in choosing a 50 yard (45.7 m) approach rule, as opposed to 100 or 150 yards (91.4 or 137.1 m), was that it was the minimum appropriate distance to prevent disturbance to them, while still allowing people to view the dolphins. At this time, we believe that a 50 yard (45.7 m) approach buffer provides the least restrictive means for accomplishing the important conservation purposes of the approach regulation, while still accounting for the interests of the observing public.

Other Human Activities Affected by the Proposed Rule That Were Not Discussed

Comment 20: Many commenters expressed concern that this rule would have a large impact on the local economy. Some commenters representing the tour industry specifically indicated that they anticipate this rule to have a large impact on their businesses. Additionally, 17 commenters argued that the data used in our economic impact analysis, presented as part of the DEIS, was insufficient, out-of-date, and needed to include additional data in order to analyze the potential economic impact of this rule's implementation. One commenter specifically suggested a need for more data on the tour industry on West O'ahu.

Response: In response to concerns raised that the economic data used for

the analysis in the DEIS is outdated, we have updated the economic analysis and conducted a Regulatory Impact Review/Regulatory Impact Assessment in accordance with Executive Order 12866 and the Regulatory Flexibility Act, and incorporate this assessment and the Final Regulatory Flexibility Analysis into the final EIS as Chapter 5 for the final rule. While we have supplemented the 2008 economic analysis and 2016 RIR/IFRA, the new economic information does not materially alter earlier findings in the proposed rule about the need for regulation and the impact of the regulation on small entities. There has been an approximately 6-fold increase in the number of tours and spiritual retreats offering swim-with-wild-dolphin experiences, as well as a corresponding increase in the gross revenues generated by these businesses, in the 10-year span between the original economic data report and the updated report. This increased economic activity also represents an increase in human pressures on spinner dolphins. The expected economic impact of the final rule on dolphin-directed business activity is similar to that of the proposed rule. It is possible that some tour operators will experience some loss of revenues due to differences in the amounts charged for a swim-with-dolphin experience versus a general marine tour/wildlife viewing experience. Indeed a commenter stated that they had experienced declines in their dolphin tour business after shifting to a 50 yard (45.7 m) viewing distance. However, tour operators in Hawai'i that voluntarily follow Dolphin SMART safe viewing guidelines that use a 50 yard (45.7 m) viewing distance from spinner dolphins have stayed in business and remained competitive for nearly a decade, and the final rule will implement even handed requirements for all operators, mitigating lower revenues resulting from competition with swim-with-dolphin operators.

Restrictions resulting from the COVID pandemic have significantly impacted the tourism industry in Hawaii, and COVID restrictions and the overall decline in tourism have significantly curtailed wild dolphin tours. Nevertheless, tourism has rebounded over the last year, with 791,053 visitors in June 2021 (*https://www.hawaiitourismauthority.org/media/7582/june-2021-visitor-statistics-press-release.pdf*). As conditions continue to improve, NMFS anticipates that dolphin-directed activities will resume at or near pre-pandemic levels.

Comment 21: One commenter indicated that they receive ''life force'' from dolphins and whales, and that this regulation would violate the commenter's constitutional rights.

Response: As discussed in the response to Comment 19, the purpose of this regulation is to prevent encounters that result in disturbance to and harassment of Hawaiian spinner dolphins. This rule implements regulations for the conservation purposes of MMPA, including necessary and appropriate regulations that protect spinner dolphins from harassment. As described in the preamble, human encounters with Hawaiian spinner dolphins may have long-term adverse effects that may not be immediately apparent to the observer. We considered other distances for swim-with and approach regulations, including 100 and 150 yards (91.4 or 137.1 m), as well as no swim-with and approach measures. We do not believe that the status quo provides adequate safeguards for these marine mammals. One of the considerations in choosing a 50 yard (45.7 m) approach rule, as opposed to 100 or 150 yards (91.4 or 137.1 m), was that it was the minimum appropriate distance to prevent disturbance to them, while still allowing people to view the dolphins. At this time, we believe that a 50 yard (45.7 m) approach buffer provides the least restrictive means for accomplishing the important conservation purposes of the approach regulation, while still accounting for the interests of the observing public.

Comment 22: One commenter noted that spotted dolphins (*Stenella attenuata*) often interact with fishing vessels for long periods of time and have intensive feeding requirements similar to those of spinner dolphins, but the need for spotted dolphins to have uninterrupted sleep is not a concern to NMFS. Additionally, this commenter notes that bottlenose dolphins have long been harassed by fishermen off the Kona coast for stealing live bait from marlin and tuna fishermen and market fish from bottom fishermen, yet NMFS has not established protections for bottlenose dolphins.

Response: As described in several comment responses above, as well as the **SUPPLEMENTARY INFORMATION** section of the Final Rule, wild marine mammal harassment is prohibited by the MMPA. This includes Level A harassment (any act of pursuit, torment, or annoyance which has the *potential to injure* a marine mammal) and Level B harassment (any act that has the *potential to disturb* a marine mammal in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering). As a result, harassment of any wild dolphin species, including spotted dolphins and bottlenose dolphins, is illegal under the MMPA. While NMFS is concerned about spotted and bottlenose dolphins, this rule focused on spinner dolphins because their unique habitat preferences and resting behaviors make them particularly vulnerable to disturbance. More detail about spinner dolphin vulnerability to disturbance is available in the response to Comment 24, as well as in section 3.1.4 of the FEIS ''Ecology and Behavior.''

The Temporal and Geographic Scope (i.e., Two nmi From Shore) of the Approach Regulation

Comment 23: Multiple commenters suggested that we should implement a rule that extends 10 nmi from shore to encompass the entire range of the MHI-associated resident stocks. Some commenters suggested that people may seek encounters with the dolphins outside of two nmi, leaving the dolphins unprotected outside of this boundary.

Response: Extending the effective area of the regulation out to 10 nmi from shore was considered in the DEIS and FEIS (see section 2.1.3 in the DEIS and FEIS). As stated in the rationale for the rule and in the EIS, these regulatory measures are intended to prevent take of Hawaiian spinner dolphins from occurring in marine areas where viewing pressures are most prevalent. We have no information to suggest that these stocks of Hawaiian spinner dolphins face any kind of regular exposure to wildlife viewing activities that cause take outside of two nmi from shore. Unlike nearshore areas where spinner dolphins predictably use essential daytime habitats, the locations where spinner dolphins might be found beyond two nmi is not predictable and we do not anticipate that encounters with dolphins outside of two nmi will become common after the rule is finalized. MMPA take prohibitions will continue to apply in the U.S. exclusive economic zone (EEZ) and high seas where these regulations do not apply. To encompass the range of dolphin-directed activities that are likely to result in take, we focused on where people are most likely to encounter Hawaiian spinner dolphin groups, *i.e.,* where dolphins are known to occur during the day when they are engaged in nearshore resting and socializing activities. We reviewed information from scientific literature about Hawaiian spinner dolphin daytime habitat preferences and information from over 400 sightings of spinner dolphins collected around the MHI since 1992

from various members of the Pacific Islands Photo Identification Network (PIPIN) to determine that the 2 nmi boundary sufficiently covered the dolphins' daytime habitat use. Because almost all viewing and interaction pressures occur during the day within two nmi from shore and in the designated waters bounded by Lāna'i, Maui, and Kaho'olawe, expanding the scope to include the resident stock's entire range would provide negligible additional protection from take by approach within 50 yards (45.7 m).

Comment 24: The State of Hawai'i DLNR commented that it supports the proposed rule, but believes it should be expanded to apply to the entire U.S. EEZ within 200 nmi from shore, to simplify compliance for users and streamline enforcement efforts.

Response: As described above in our response to Comment 23, we considered the geographic scope of the rulemaking in our EIS, including applying it to the entire EEZ, and determined that a 2nm boundary provided the protections from daytime disturbance needed for spinner dolphins. These proposed regulatory measures are intended to prevent take of Hawaiian spinner dolphins from occurring in areas where viewing pressures are most prevalent. We therefore felt it was unnecessary to extend the reach of the regulation to areas where take is less likely to occur. Further, keeping the boundary to two nmi allows enforcement efforts to be concentrated within the two nmi boundary rather than spread across a much larger area, thereby increasing the effectiveness of these efforts.

Comment 25: A commenter suggested that the regulation should be applicable to all dolphin species and all U.S. citizens or nationals anywhere in the world (and also advocated for a 100 yard approach rule).

Response: The purpose of this rule is to address the increase in human pressures on spinner dolphins in coastal waters around the state of Hawaii. A no-approach regulation with national application is beyond the scope of this rule. Additionally, swim-with tours have not been identified as a major threat for other dolphin species in the areas surrounding MHI at this time. While this rule does not apply to other dolphin species, other species may benefit as public ocean users become aware of the potential impacts of close approach and would keep their distance from all wildlife.

As described in the responses to Comment 23 and Comment 24, we do not find, at this time, that the enhanced protections in this rule are necessary seaward of two nmi off the Hawaiian islands, or in other regions of the United States. The MMPA's general moratorium on the taking of marine mammals, which applies in waters under U.S. jurisdiction as well as to persons and vessels subject to U.S. jurisdiction on the high-seas, continues to protect dolphins that may be found outside the boundaries of this rule. With regard to the specific comment that the regulation should include a 100 yard approach rule, see our response to Comment 9.

Comment 26: Many commenters suggested that the geographic action area for the proposed rule should be limited to one or two islands, rather than all waters within two nmi of each of the MHI and in the designated waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe. Specifically, commenters noted that the problem of spinner dolphin harassment from close approach by humans is greater on Hawai'i Island and O'ahu than it is on islands like Maui and Kaua'i. As such, the geographic action area for the proposed rule establishing protections for spinner dolphins should be limited to areas with the largest number of tour operators and human users. Additionally, several commenters argued that, because many of the supporting studies cited by NMFS in the proposed rule and DEIS conducted their research along the Kona coast of Hawai'i Island, the geographic action area of the proposed rule should only include waters surrounding Hawai'i Island. These commenters argue that the DEIS gives too much weight to these studies, which cover a small geographic area (relative to the state as a whole), and therefore the rule does not adequately account for the behavioral or social differences between island-specific populations of spinner dolphins. One commenter suggested that the geographic action area of the proposed rule be limited to the range of one or more of the three island-associated stocks of spinner dolphins in the MHI. The commenter did not suggest a specific stock for protection.

Response: The commenters are correct that the islands of O'ahu and Hawai'i have a greater number of dolphin-directed tour companies, spiritual retreats, and individuals swimming to the dolphins from shore due to factors such as easily accessible essential daytime habitats. However, Hawaiian spinner dolphins utilize sandy, protected bays and nearshore areas for resting and socializing across the state. While the largest number of human users are concentrated on one or two islands, close approach by humans occurs statewide (Sepez, 2006; see section 1.6 of the FEIS, ''Description and Scope of the Proposed Action'') and affects all of the island-associated spinner stocks. Limiting this rule to only one or two islands or to the geographic extent of an island-associated stock could result in displacement of dolphin-directed human activity to other areas of the state where Hawaiian spinner dolphins are present, thus undermining the protections established in this regulation.

Regarding the concern by some commenters that spinner dolphin data informing this rule was only collected on Hawai'i Island, this rule was developed through a literature review of available data for Hawaiian spinner dolphins throughout the state. Many recent research efforts focused on bays on Hawai'i Island, as these bays are often used as daytime resting habitat for spinner dolphins and are a place where researchers can reliably study spinner dolphin behavior. These locations include Hōnaunau Bay, Kealakekua Bay, Makako Bay, and Kauhakō Bay, which were the sites for more recent studies on the impacts of human interaction on dolphin population health, such as the SAPPHIRE studies. While these studies focused on a limited geography, the findings regarding spinner dolphin behavior changes in the presence of human users are representative of wider scenarios where humans are in prolonged contact with resting Hawaiian spinner dolphins. Additionally, while the SAPPHIRE studies researched Hawaiian spinner dolphins on Hawai'i Island, research has been conducted on O'ahu, Maui, Lāna'i, Kaho'olawe, Moloka'i, and Kaua'i, resulting in peer-reviewed journal articles that were consulted when developing this rule and FEIS (*e.g.,* Norris and Dohl 1980; Benoit-Bird and Au 2003; Danil *et al.* 2005; Hill *et al.* 2005; Lammers *et al.* 2000, 2001, 2003, 2004, 2006; Mobley *et al.* 2000, and Wiener 2016). In short, we consulted studies conducted across the state, and, because close approach of Hawaiian spinner dolphins by humans is occurring statewide, we determined that the geographic extent of the rule should be statewide as well.

Comment 27: Multiple commenters submitted ideas for alternative management considerations with different combinations of geographic ranges, approach distances, and enforcement times. For example, one commenter, citing O'ahu-based studies done by Lammers and Danil, suggested a 100 yard approach regulation on O'ahu from 11AM to 6PM. The commenter stated that 100 yards (91.4 m) is easier to judge and more

enforceable than 50 yards (45.7 m), and suggested that the regulation be O'ahu-specific given habitat and behavioral differences between O'ahu spinner dolphins and Hawai'i Island spinner dolphins, specifically that they often rest during the midday and early afternoon periods.

Response: We addressed aspects of this alternative suggestion in multiple comment responses. As stated in the response to Comment 9, we determined that a 100 yard (91.4 m) approach distance would decrease a dolphin viewer's ability to see the animals without visual aids, and is inconsistent with our current wildlife viewing guidelines. We determined that an approach distance of 50 yards (45.7 m) would provide increased protection for the animals by reducing harassment, while still allowing people to observe spinner dolphins. Regarding an O'ahu-specific regulation, we would like to direct the commenter to our response to Comment 26, in which we address comments to limit the regulation to certain areas. Limiting the swim-with and approach regulation to O'ahu only would not provide protections to spinner dolphins in other areas of the MHI where disturbance at daytime essential habitats is also occurring, undermining the protections established in this regulation.

Whether Time-Area Closures are Necessary To Address the Intensity of Hawaiian Spinner Dolphin-Directed Activities in Some Areas

Comment 28: We received comments that were opposed to the implementation of time-area closures. These commenters felt that closures were either unnecessary to achieve the desired protections because the proposed approach regulation would provide adequate protection, or overly restrictive to the public because they could restrict shore access rights or use of waters in Hawai'i. The State of Hawai'i DLNR provided comments to the proposed rule stating that they did not support time-area closures because they felt that an approach rule best addresses the threat posed by dolphin-directed activities across the extent of their range.

Response: Although time-area closures provide members of the public with precise boundaries around which they may readily tailor their conduct, we recognize that such closures can also carry undesired costs, such as imposing a burden on the public when spinner dolphins are not present. Accordingly, and as we explained in the proposed rule, we are not including time-area closures in this final rule. However, based on consideration of public comments and revised input from the State of Hawaii, NMFS has reconsidered its prior position and is publishing a separate proposed rule to implement time-area closures.

Comment 29: Researchers suggested looking at the time-area closures in Samadai Reef, Egypt as an example of what has been proven to be effective in protecting other dolphin species.

Response: When determining whether to propose implementing time-area closures, we considered the Samadai Reef example, in which spinner dolphins that had abandoned the site returned to it after management measures were put in place to prevent human entry into the core resting area (see DEIS section 1.5.2). As noted in the response to comment 28, NMFS has reconsidered its prior position on time-area closures and is publishing a separate proposed rule to implement time-area closures.

Comment 30: Several commenters said an approach rule is too difficult to enforce and time-area closures is a more appropriate alternative. The National Park Service also commented that, while they support the proposed rule, the data from Östman-Lind (2009) and other studies (Johnston *et al.* 2013) suggest that a larger buffer distance or a selection of mandatory time-area closures (with the exceptions mentioned in the DEIS) would be more beneficial to the Hawaiian spinner dolphin population, and would likely improve enforcement of the proposed rule

Response: Given our experience with enforcing the 100 yard (91.4 m) humpback whale approach rule in Hawai'i, we believe that this spinner dolphin approach rule can be successfully enforced. We also recognize that time-area closures provide members of the public with precise boundaries around which they may tailor their conduct and makes enforcement of such closures straightforward. We considered this comment and others that are supportive of time-area closures. In addition to the swim-with and approach regulation established in this final rule, we are proposing time-area closures in a separate rulemaking. With regard to larger ''buffer'' distances, see our response to Comment 9.

The Bays and Times of Day Identified for Time-Area Closures

Comment 31: One commenter suggested that the proposed boundaries of the time-area closures be changed to cover half of the bays so that one half of each bay could be reserved for humans to interact with the dolphins, while the other half could be reserved as essential resting habitat. The commenter argues that this would allow the dolphins to choose either to swim with humans or to rest.

Response: We have considered these comments and are publishing a separate proposed rule to implement time-area closures.

Comment 32: Many commenters supported time-area closures, but suggested alternative closures times such as from 9:30 a.m. to 4 p.m., from 10 a.m. to 2 p.m., or from 11 a.m. and 6 p.m. to reduce the impacts to other ocean users. Some commenters claim that if time-area closures are chosen, the time should be expanded to when the dolphins leave, as the dolphins often stay in the bays past 3 p.m.

Response: We have considered these comments and are publishing a separate proposed rule to implement time-area closures.

Comment 33: Several members of the Ho'okena community advocated closing Kauhakō Bay to swimming with dolphins with the aim of restoring their akule fishery. Anecdotal observations by community members indicate they have seen no akule in Kauhakō Bay since 1997 which coincides with the time when swimming with dolphins became popular in their bay. In addition, a petition with over 285 names and signatures was submitted by members of the Ho'okena community, KUPA, and Friends of Ho'okena Beach Park voicing their support for stronger rules to prohibit people from approaching resting Hawaiian spinner dolphins.

Response: We recognize that Kauhakō Bay faces intense pressure from people approaching spinner dolphins and we are working with members of the Ho'okena community to increase outreach and education to the public. Although restoration of the akule fishery is outside the scope of this rule, we plan to continue working with the community and DOCARE to address the community's concerns regarding the disturbance of dolphins at this location. The swim-with and approach regulation will reduce the intensity of dolphin-directed activities within essential daytime habitats to some degree. We are proposing time-area closures as part of a separate rulemaking, and such regulation, combined with the swim-with and approach regulation, can be expected to reduce the intensity of dolphin-directed activities within the essential daytime habitat at this location. We will continue to work with the community to address their concerns as needed.

Comment 34: Several commenters noted that La Perouse Bay banned the

use of kayaks in the bay in 2006. These commenters observed that the dolphins, which used to frequent the area, no longer use that essential daytime habitat to the same extent following the ban on kayaks. The commenters suggest that the number of dolphins using La Perouse Bay has decreased because kayakers are no longer using the bay, leading the commenters to suggest that the dolphins enjoy the presence of kayaks.

Response: In 2004, the State of Hawai'i declared the 'Āhihi-Kīna'u Natural Area Reserve and neighboring La Perouse Bay off limits to commercial kayaking and other commercial operations. We understand that the State has not banned non-commercial operations, such as using a personally-owned kayak, within the bay.

Although NMFS is unable to determine whether the number of dolphins using La Perouse Bay has decreased since 2006, as the commenters suggest, we do not agree that we can attribute changes in abundance of dolphins in certain bays to any one factor, such as the number of kayaks. Dolphins choose their resting habitat for a number of factors, which is described further in the response to Comment 1. Any number of these factors can cause a change in habitat preference. Additionally, NMFS has no reason to believe dolphins are ''attracted to'' kayaks, as the commenter suggests, on the contrary kayaks may contribute to harassment of dolphins.

Suggestions on Other Areas That Should Be Considered for Time-Area Closures

Comment 35: NMFS received comments suggesting that if closures are implemented, time-area closures should also be considered in Hulopo'e and Mānele bays on Lāna'i, Honolua Bay on Maui, and Mākua Bay on O'ahu because these areas are also targeted by tour operators and swimmers and, specific to Mākua Bay, because they claim that it is a spinner dolphin nursery.

Response: In a separate rulemaking we are proposing time-area closures based on Alternatives provided in the DEIS, FEIS, and the 2016 proposed rule. The sites we are proposing for time-area closures are descried in the DEIS as areas reported as having a high level of chronic human disturbance at daytime essential resting habitat. Should we consider implementing additional time-area closures other than the 5 selected sites described in the DEIS, we will look closely at the areas identified by the commenter, likely using a step-down process similar to that used in the DEIS Appendix A.

Alternate Management Strategies

Comment 36: Several commenters asked why we couldn't make the Coral Reef Alliance (CORAL) West Hawai'i Voluntary Standards (WHVS) into enforceable regulations. The WHVS were created by the CORAL, with stakeholder input and consensus by a wide variety of Hawai'i Island businesses and community members, to apply to all wildlife viewing and interactions in West Hawai'i. This includes viewing and interaction guidelines for marine mammals, including Hawaiian spinner dolphins (WHVS 2009). Measures under section 4.6 of the document include educational information about prohibitions already outlined in the MMPA, detailed boating etiquette and safety measures around marine mammals and swimmers, and human activities to avoid when viewing and interacting with marine mammals. In addition, section 4.7 focuses on voluntary standards specific to spinner dolphins.

Response: In the FEIS, we considered promulgating regulations based on the WHVS as an alternative to enhance protections for Hawaiian spinner dolphins, but eliminated that alternative from further consideration because these standards did not meet the primary criteria necessary to effectively address our purpose and need, which is to reduce the threat of take to Hawaiian spinner dolphins, including harassment and disturbance caused by dolphin-directed activities that are concentrated in coastal waters, and to address chronic interaction and viewing impacts on resident stocks of Hawaiian spinner dolphins (see section 1.1 of the FEIS). As outlined in section 2.9.5 of the FEIS, the WHVS standards are mainly adapted for marine recreational providers (tour operators). Therefore, some measures, such as restricting the number of boats surrounding a pod of dolphins to no more than three at a time, do not convert well to all user groups and may not be easily understood by other resource users. Further, the complexity of certain standards (*e.g.,* no boat staying longer than 30 minutes with a pod, but boats being allowed to return to a pod for an additional 30 minute time period after a minimum of 1 hour away from the pod, as long as doing so does not exceed the three boat maximum) makes them difficult to follow and enforce. We also note that, because the measures addressed in the WHVS were narrowly focused on commercial activities and areas on the west coast of Hawai'i Island, not all measures would easily transfer to other areas. Finally, the WHVS do not apply to individuals who choose to swim, kayak, or otherwise approach the dolphins on their own apart from a commercial tour operation, leaving the dolphins vulnerable to disturbance by a large sector of the population in Hawai'i. The combination of these factors led to the decision to eliminate this alternative from further analysis.

Comment 37: A number of commenters suggested that it is essential to have a strong educational component in order for new regulations to be effective. Additionally, many commenters suggested that regulations would not be necessary if swimmers and vessels were educated about the impacts of close approach of spinner dolphins by humans, advocating for self-regulation rather than this proposed rule.

Response: We agree that conducting outreach and education with the public and tour industry is essential to promote compliance with any new regulation and reduce the impacts on spinner dolphins caused by disturbance by humans. A robust education and outreach effort with partners, including state and Federal government partners, non-profit organizations, and researchers, will support the implementation of this regulation. Based on the lack of consistent compliance with voluntary measures to protect Hawaiian spinner dolphins to date (*e.g.,* wildlife viewing guidelines, NMFS guidelines, and the CORAL West Hawai'i Voluntary Standards) as well as the number of people wanting to be in proximity to the dolphins, we anticipate that relying solely upon education and self-regulation would have limited success in reducing the overall intensity of dolphin-directed activities in most areas.

Comment 38: Multiple commenters suggested that, in lieu of the proposed rule, NMFS or the State of Hawai'i should institute a permit program. In these comments, this permit program could take numerous forms. For example, thirteen commenters suggested using a permit system to limit the total number of human users in order to limit the impact of close approach by humans on dolphins. One commenter suggested establishing a permit system for operators that would require the operators to participate in a training program on proper dolphin viewing practices before they are allowed to operate swim-with dolphin tours. Another suggestion was to establish a permit system that educates swim-with dolphin tour participants on proper dolphin viewing practices before they can participate in a guided tour. Commenters also suggested other

permitting strategies, such as limiting human activity to non-motorized vessels only, limiting the number of tour operators allowed to conduct swim-with dolphin tours, and limiting the number of people allowed per vessel. Finally, some of these commenters suggested that funding generated through the permit system could be used to support research/education efforts.

Response: We considered the alternative of licensing and permitting of commercial tour operators and eliminated it from further analysis because it would require a large infrastructure to administer, monitor, and enforce. A licensing and permitting system could also introduce equity issues between those receiving a permit and those not receiving a permit. We also noted that such a system would not resolve the threats from stakeholders other than tour operators (such as personal vessels and swimmers from the shore). A uniform system that applies more or less equally to everyone and reduces the cumulative effect of the disturbances occurring on the spinner dolphins is preferable to a permit system.

Comment 39: Several commenters suggested alternative solutions, such as enforcing a limit on the number of vessels and swimmers allowed in a bay at one time, with one additional commenter suggesting that a limit be enforced on the number of people allowed per tour boat.

Response: Although particularly high numbers of swimmers and vessels can be problematic, limiting the number of human users allowed in a dolphin resting bay at any given time can still result in take if the human users closely approach the dolphins. Therefore, we concluded that such limitations would not adequately meet the conservation purpose of this rule, which is to prevent take.

Comment 40: Several commenters suggested that the proposed rule was not developed with community input or recommendations, and that NMFS should engage community members and tour operators to hear local concerns and to develop a new regulation. Several commenters suggested that this could take the form of a committee of local community members that would advise NMFS on formulating a new regulation.

Response: We recognize the importance of community and stakeholder input when creating a regulation, and we took steps to solicit and incorporate community input and recommendations into the rulemaking process. The process for enhancing protections for Hawaiian spinner dolphins from human disturbance began in 2005, when we published an ANPR (70 FR 73426, December 12, 2005), which was followed by a Notice of Intent to prepare an EIS for this proposed rule (71 FR 57923, October 2, 2006). In this notice, we identified five preliminary alternatives for public consideration and comment, and invited information from the public on the scope of the issues that should be addressed in a Draft EIS, the issues of concern regarding practical considerations involved in applying the proposed regulation, and identifying environmental and socioeconomic concerns to be addressed in the analysis. In 2006, we also held five public scoping meetings on the islands of Kaua'i, O'ahu, Maui, and Hawai'i, and collected 4,641 public comments in response to the ANPR and the NOI. Comments submitted during this process included many that focused on cultural issues (*e.g.,* accommodating local culture and livelihoods, as well as the visitor industry) and traditional Hawaiian knowledge (*e.g.,* recommending that researchers listen to Native Hawaiians' knowledge instead of relying on outside research). In addition to these public scoping meetings, we attended a forum organized by State Senator Colleen Hanabusa's office specifically for the kūpuna (elders) of the Wai'anae community to voice their opinions. Full details regarding how we collected, analyzed, and responded to comments on the ANPR and the notice are available in section 1.5.3 of the FEIS.

In addition to the scoping process to develop the proposed rule, we held six public hearings on the proposed rule in September 2016, in which 145 attendees provided their oral testimony on the proposed rule. These attendees included community members, native Hawaiian community leaders, tour operators, researchers, and government officials. In addition to the 145 testimonies, we received over 22,000 additional comments during the public comment period. Following the public hearing some modifications were made to the rule. See section titled *Changes from Proposed Rule* in the final rule background, which highlights the differences between the proposed rule and the final rule.

Comment 41: One commenter specifically mentioned the Wai'anae Baseline Environmental Study and the West O'ahu Ocean Protocols as existing examples of community efforts to address the issue of spinner dolphin harassment, and stated that these two documents are not referred to in the DEIS.

Response: The West O'ahu Ocean Operation Protocols and the subsequent Wai'anae Baseline Environmental Study were developed with a goal of reducing conflict among multiple ocean users, not reducing spinner dolphin disturbance as a result of close human approach. These two products stemmed from Act 6, passed by the Hawai'i State Legislature in 2006, which directed DLNR to establish waters in West O'ahu as an Ocean Recreation Management Area in order to ''limit the locations, times, and types of permitted ocean recreation activities'' (DOBOR 2009). This state legislation was passed to minimize conflict among multiple ocean users, such as between tourism industry vessels and fishing vessels.

Although we did reference the Wai'anae Baseline Environmental Study in the DEIS and FEIS when discussing conflicts between akule fishing and the tourism industry when those uses overlap (DEIS section 3.4.4.1), our focus in this rule was to establish protections for spinner dolphins from close approach under the MMPA, not to manage interactions between two different industries.

Comment 42: Commenters suggested our consideration of a designated swim-with area in the bays where it would be permissible to swim with the dolphins. One commenter suggested, rather than implementing a swim-with and approach regulation, that we consider closing two bays to dolphin swimming for 10 years, then studying this to compare the difference between dolphin health in the closed bays versus the open bays. Several commenters suggested roping off half of two bays to study whether the dolphins would choose to interact with people or not, believing that the dolphins are not harmed by interacting with people, but rather seek them out and enjoy it.

Response: As noted in the final rule and FEIS, the MMPA provides limited exceptions to the prohibitions on take (*e.g.,* scientific research permits) and requires that people and organizations conduct wildlife viewing in a manner that does not cause take. Because close interactions with marine mammals are likely to result in take, including harassment and disturbance, we cannot support, condone, approve, or authorize attempting to swim with, pet, touch, or elicit a reaction from dolphins. We recognize there are numerous ways to test hypotheses and efficacy of different management strategies. However, we have chosen the approach rule as the best way to immediately relieve the pressure on the dolphins. We are also proposing time-area closures in a separate rulemaking to provide

protections for spinner dolphins in essential daytime habitats.

Hawaiian Cultural Concerns

Comment 43: One commenter expressed concern that Native Hawaiians practicing a traditional burial of a marine mammal could be fined under this regulation.

Response: This regulation has no effect on traditional burials of marine mammals. The NOAA Marine Mammal Health and Stranding Response Program oversees and coordinates all responses to stranded marine mammals in the United States, including traditional burial of a marine mammal and other cultural practices. In Hawai'i, NMFS engages Hawaiian cultural practitioners in marine mammal stranding responses whenever possible and in compliance with the MMPA. These cultural practitioners can help us be culturally respectful of the individual animal and the community where the stranding occurs. In order to be in compliance with the MMPA, all responders must be authorized as a regional stranding network participant (in accordance with section 112(c) and section 403, or section 109(h) of the MMPA), which gives authority to state and local government employees to humanely take marine mammals in the course of their official duties.

Comment 44: Some commenters expressed concern that the cultural impact analysis in the DEIS completed for this proposed rule is inadequate. One commenter stated that input from Ho'okena residents was heard and considered by NMFS, but because the proposed rule is statewide, the cultural impact analysis needs to be expanded to include other areas in the list of proposed restricted areas. Some of these commenters recommended that, in lieu of this proposed regulation, NMFS work with local residents and elders to craft a new alternative.

Response: We conducted a comprehensive scoping process through which we received feedback from concerned citizens, including members of the native Hawaiian community, tour operators, researchers, members of the public involved in dolphin-directed activities, and other stakeholders from around the state, not just on Hawai'i Island. Further detail about the public input we solicited on this regulation is available in the response to Comment 40.

In addition to this public input process, we initiated a separate scoping process to determine if historic properties could be affected by any of the alternatives under consideration, as required by the National Historic Preservation Act (NHPA). With assistance from Hawai'i's State Historic Preservation Division, we identified and contacted Native Hawaiian organizations, communities, and individuals, and then held four scoping meetings in 2012 with those who expressed interest in participating. Following these meetings, we contracted a consultant to conduct interviews with three lineal descendants from each of the five bays identified as potential time-area closure locations (Kealakekua Bay, Kauhakō Bay (Ho'okena), Hōnaunau Bay, Makako Bay, and La Perouse Bay), to help us identify historic properties or practices that could be affected by the time-area closures that were under consideration to protect Hawaiian spinner dolphins. We incorporated the findings from the initial scoping process in 2006, as well as the 2012 NHPA scoping process into the development of the various alternatives in the DEIS, and we have not received any information through the public comment period to suggest that this rule would hinder cultural practices identified through the interviews with lineal descendants (*e.g.,* fishing, canoe activities, ancestral caretaking and worship, and care of burial sites; see section 3.4.5 in the FEIS for descriptions of activities in various bays around the state). We have determined that this final rule to implement swim-with and approach regulations for Hawaiian spinner dolphins has no potential to cause effects to historic properties under section 106 of the NHPA.

Enforcement

Comment 45: We received comments requesting that this rule be enforced upon all water users, including swimmers and all private and commercial vessels. Conversely, we received comments requesting that the regulation be tailored so that there would be ''no burden'' for non-dolphin tour operators and responsible dolphin-viewing vessels, since those vessels are not harassing the dolphins.

Response: We agree that this rule should be enforced for all water users, both private and commercial (including non-dolphin tour operators). As described in Comment 1 and 2, multiple scientific studies provide evidence regarding the various and differing vessel and swimmer impacts on the behavior of spinner dolphins and how those impacts can create long term health impacts. Because spinner dolphins can be affected by numerous activities on the water, this rule applies to all water users, unless a narrow exception applies. We believe that the 50 yard (45.7 m) limit provides an appropriate opportunity for responsible wildlife viewing, without unnecessarily burdening the public. Exceptions are provided in the final rule (50 CFR 216.20 (c)).

Comment 46: Several commenters expressed concern that this rule will not be enforced, noting that DLNR has limited resources devoted to enforcement. Several commenters suggested actions for NMFS to provide resources for enforcement, including providing funding to DOCARE, staffing observers in bays with lots of human activity, collecting funding from tour vessels for enforcement in the form of a licensing fee, and using fines levied on violators of this proposed rule to support enforcement.

Response: Enforcement of the MMPA is accomplished via all available means, including through land and sea patrols conducted by the NMFS OLE, the United States Coast Guard, and DOCARE, all of whom work with us on outreach and enforcement. NMFS OLE conducts periodic patrols, which include areas with high amounts of human activity, and accepts evidence of harassment submitted by citizens observing violations. Historically, NMFS has also provided funds to DOCARE through a Joint Enforcement Agreement to conduct enforcement activities. NMFS OLE, with support from DOCARE, is actively pursuing violations of the MMPA and will continue to do so. Regarding the suggestion to use fines levied on violators of the proposed rule to support enforcement, MMPA civil fines are currently directed into a national Asset Forfeiture Fund, which is then used to help fund enforcement activities subject to NOAA policy. Finally, with regard to the comment recommending collection of funding from tour vessel operators in the form of a licensing fee, we refer the commenter to our response to Comment 38 regarding permitting fees.

Comment 47: Several commenters suggested that NMFS should focus on enforcing the MMPA, rather than creating a new regulation, since Hawaiian spinner dolphins are already protected from take by the MMPA. One commenter, noted that spinner dolphins are not threatened or endangered under the ESA, and this regulation will set a precedent for establishing protections for non-ESA listed species.

Response: The MMPA protects all marine mammals, whether or not listed under the ESA, in U.S. waters and on the high seas from take, which includes Level B harassment. This regulation further enhances protections for spinner dolphins under the MMPA (see the

responses to Comment 8 and Comment 14). The commenter is correct that the spinner dolphin is not currently listed as threatened or endangered under the ESA; however, the MMPA protects all marine mammals, regardless of whether they are ESA listed, and this action is taken under authority of the MMPA to strengthen protections for spinner dolphins from increased human pressures that have resulted in observed disruption of behavioral patterns.

Final Rulemaking

The swim-with and approach prohibitions described in this rule are designed to protect spinner dolphins from take, including harassment and disturbance, caused by dolphin-directed activities, such as close viewing and interaction. Although we stress that unauthorized take of spinner dolphins or any marine mammals already is and continues to be prohibited by the MMPA in any location, we believe that specific regulations aimed at identified human activities that result in take of Hawaiian spinner dolphins are warranted because of the chronic disturbance that is currently taking place in nearshore waters. This regulation is limited to nearshore areas, within 2 nmi (3.7 km) from shore of the MHI and including designated waters bounded by Lāna'i, Maui, and Kaho'olawe (see Figures 2 and 3 in section 216.20(e) and *Geographic Action Area* section below), where threats from dolphin-directed activities are concentrated and where spinner dolphins engage in essential daytime behaviors, including resting, socializing, nurturing, and traveling. These measures are intended to prevent take during important resting periods and allow Hawaiian spinner dolphins to engage in normal fitness-enhancing behaviors, thereby preventing long-term negative impacts to individuals and to the population. We are finalizing this regulation pursuant to our rulemaking authority under MMPA sections 112 (a) (16 U.S.C. 1382(a)) and 102 (16 U.S.C. 1372).

Scope and Applicability

Application to All Hawaiian Spinner Dolphins

The rule's swim-with and approach prohibitions apply to all Hawaiian spinner dolphins found in the action area (see *Geographic Action Area* section below).

Geographic Action Area

The action area for the swim-with and approach prohibitions in this rule is limited to waters within 2 nmi (3.7 km) of each of the MHI and in designated waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe (see Figures 2 and 3 in section 216.20(e)). The latter designated waters include all water areas enclosed by three line segments that connect points at the 2-nm boundary bounded by the islands as follows: The rhumb line between (A1) 20°32′51″ N/156°43′50″ W (Kaho'olawe) and (A2) 20°42′4″ N/156°55′34″ W (Lāna'i); the rhumb line between (B1) 20°51′1″ N/156°54′0″ W (Lāna'i) and (B2) 20°59′48″ N/156°42′28″ W (Maui); and the rhumb line between (C1) 20°33′55″ N/156°26′43″ W (Maui) and (C2) 20°32′15″ N/156°29′51″ W (Kaho'olawe). Throughout this rule, all coordinates are referenced to the World Geodetic System of 1984 (WGS84).

This is inclusive of the majority of the nearshore habitats where MHI resident stocks of spinner dolphins engage in essential daytime behaviors and where dolphin-directed human activities that may result in take are known to occur (see Rationale section below).

Applications to All Forms of Swimming and Approach

The regulation applies to all forms of swim-with and approach activities in water and air. Forms of approaching spinner dolphins include, but are not limited to, operating a manned or unmanned motorized, non-motorized, self-propelled, human-powered, or submersible vessel; operating an unmanned aircraft system (UAS) or drone; and swimming at the water surface or underwater (*i.e.,* SCUBA, snorkeling, or free diving).

Requirements of the Rule

Swim-With and Approach Regulation

The rule prohibits people from approaching or remaining within 50 yards (45.7 m) of a spinner dolphin; swimming or attempting to swim within 50 yards (45.7 m) of a spinner dolphin; causing a vessel, person, or object to approach or remain within 50 yards (45.7 m) of a spinner dolphin; and intercepting, or placing a vessel, person, or other object in the path of a spinner dolphin so that the dolphin approaches within 50 yards (45.7 m) of the vessel, person, or object.

Exceptions

Specific categories are exempt from the swim-with and approach regulation, and are outlined below:

(1) Any person who inadvertently comes within 50 yards (45.7 m) of a Hawaiian spinner dolphin or is approached by a spinner dolphin, provided the person makes no effort to engage or pursue the animal and takes immediate steps to move away from the animal;

(2) Any vessel that is underway and is approached by a Hawaiian spinner dolphin, provided the vessel continues normal navigation and makes no effort to engage or pursue the animal. For purposes of this exception, a vessel is underway if it is not at anchor, made fast to the shore, or aground;

(3) Any vessel transiting to or from a port, harbor, or in a restricted channel when a 50 yard (45.7 m) distance will not allow the vessel to maintain safe navigation;

(4) Vessel operations necessary to avoid an imminent and serious threat to a person or vessel;

(5) Any vessel that is anchored or aground and is approached by a Hawaiian spinner dolphin, provided the vessel makes no effort to engage or pursue the animal;

(6) Activities authorized through a permit or authorization issued by the National Marine Fisheries Service to take Hawaiian spinner dolphins; and

(7) Federal, state, or local government vessels, aircraft, personnel, and assets when necessary in the course of performing official duties.

(8) Commercial fishing vessels that incidentally take spinner dolphins during the course of commercial fishing operations, provided such vessels operate in compliance with a valid marine mammal authorization in accordance with MMPA Section 118(c).

The exception for vessels transiting to or from ports, harbors, or restricted channels is necessary to allow continuation of safe navigation when approaching spinner dolphins closer than 50 yards (45.7 m) is unavoidable. For these cases, the vessel should continue normal navigation to reduce the likelihood that close interactions result in disturbances for an appreciable period of time. The exception for vessel operations necessary to avoid an imminent and serious threat to a person or vessel is needed for the safety of human life and property, and to allow for compliance with applicable navigation rules. The exception for anchored and aground vessels was added in response to public comments received on the proposed rule and is intended to recognize that anchored vessels may not be able to avoid coming within 50 yards (45.7 m) of Hawaiian spinner dolphins if approached by the animals. The exception for vessels, aircraft (manned or unmanned) or persons engaged in an activity authorized through a permit or other authorization issued by NMFS to take spinner dolphins is necessary to ensure

the continued availability of scientific research and biological data necessary to inform management and conservation decisions related to the dolphins. We anticipate that compliance with relevant permit terms and conditions will help minimize the potential impacts to dolphins. The exception for government vessels, aircraft, personnel, and assets operating in the course of official duties is intended to avoid disruption of essential government missions, including enforcement and national security activities. The exception for commercial fishing vessels is limited to incidental take by those vessels in compliance with the associated valid marine mammal authorization in accordance with MMPA Section 118(c).

Rationale

Hawaiian spinner dolphins resident to the MHI are made up of small, genetically isolated stocks that exhibit a specialized behavioral ecology that makes them easy to access in coastal environments during their daytime resting hours. This leaves these resident stocks vulnerable to human-caused disturbance and its effects, such as habitat abandonment or declines in reproductive success (Norris *et al.* 1994, Andrews *et al.* 2010, Tyne *et al.* 2014). In the MHI, dolphin-directed activities have increased in recent years, and the public's expectation of close interactions has placed increased pressure on resident stocks of Hawaiian spinner dolphins and the habitats that support these stocks (see Background above). Despite outreach, guidelines, and current prohibitions, observations indicate that MHI resident Hawaiian spinner dolphins' natural behaviors are disrupted by activities that include approach by both swimmers and vessels (Ostman-Lind *et al.* 2004, Danil *et al.* 2005, Courbis 2004, Courbis and Timmel 2008), and overarching spinner dolphin group behavioral patterns may be changing in essential daytime habitats as a result of these pressures (Norris *et al.* 1994, Forest 2001, Courbis 2004, Courbis and Timmel 2008).

The public, through public comment submissions, brought several recent studies to our attention that they believed should be incorporated into environmental review process. Upon review of these studies (Branstetter *et al.,* 2012; Christiansen and Lusseau, 2015; Hartel and Torres, 2015; and New *et al.,* 2013), we determined that these were not applicable to the issue being addressed by this regulation. A detailed review of these studies, including why we determined they were not applicable to this regulation, is available in the responses to Comments 12 and 14.

This regulation is designed to address dolphin-directed activities that result in various forms of take of Hawaiian spinner dolphins. As described in the proposed rule, we selected 2 nmi (3.7 km) from shore around the MHI, as well as designated waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe, for the boundaries for the swim-with and approach regulation. We are maintaining this as the boundary for the final regulation because this range encompasses the areas where current and best available information indicates that most dolphin-directed activities are likely to be concentrated. For further detail regarding this decision, please see the responses to Comments 23–26.

Regarding the approach distance, this final regulation maintains the 50 yard (45.7 m) approach distance proposed in the DEIS, proposed rulemaking, and analyzed in the FEIS. We received public comments in support of both increasing the distance and decreasing the distance. However, we selected 50 yards (45.7 m) as the approach distance for this regulation because it would reduce the threat of take occurring to spinner dolphins resulting from close approach by swimmers and vessels, while placing the least restrictive burden on the viewing public. Additionally, we already recommend this distance (50 yards (45.7 m)) in our wildlife viewing guidelines and request that people do not swim-with wild dolphins to reduce the risk of behavioral disruption from close encounters. These guidelines are recognized by tour operators and are used by some (*e.g.,* Dolphin SMART operators) to help ensure that spinner dolphins are viewed responsibly. This decision is more fully described in the responses to Comments 8 and 9.

For further information regarding the effects of close approach on spinner dolphins, please see the proposed rule.

References Cited

A complete list of all references cited in this rulemaking can be found on our website at: *https://www.fisheries.noaa.gov/action/enhancing-protections-hawaiian-spinner-dolphins,* or at *www.regulations.gov,* and is available upon request from the NMFS office in Honolulu, Hawai'i (see **ADDRESSES**).

Classification

National Environmental Policy Act (NEPA) and Regulatory Impact Review (RIR)

NMFS has prepared an FEIS and an RIR pursuant to NEPA (42 U.S.C. 4321 *et seq.*) and Executive Order (E.O.) 12866, to support this regulation. The FEIS/RIR contains a full analysis of a No Action Alternative, five action alternatives, and the Preferred Alternative. NMFS prepared a Record of Decision (ROD) detailing the agency's decision concerning this regulation. The FEIS/RIR, ROD, and supporting documents are available for review and comment and can be found on the NMFS Pacific Islands Region website at *https://www.fisheries.noaa.gov/action/enhancing-protections-hawaiian-spinner-dolphins.*

Regulatory Flexibility Act

A final regulatory flexibility analysis (FRFA) was prepared for this action and is included below. The FRFA incorporates the initial regulatory flexibility analysis (IRFA) prepared for the proposed rule stage, an analysis of updated information collected after the comment period for the proposed rule closed (Impact Assessment 2018), and includes a summary of the significant issues raised by the public and the Small Business Administration (SBA) in response to the IRFA, along with NMFS' responses to those comments.

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*) as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, whenever an agency publishes a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a Regulatory Flexibility Analysis describing the effects of the rule on small entities, *i.e.,* small businesses, small organizations, and small government jurisdictions.

Pursuant to the RFA, NMFS prepared the following Final Regulatory Flexibility Analysis (FRFA). A description of the action, why it is being considered, and the legal basis for this action are contained in the preamble to this final rule. This final rule does not duplicate, overlap, or conflict with other Federal rules. The analysis contains a description of and, where feasible, an estimate of the number of, small entities to which the rule will apply. The Small Business Administration (SBA) establishes criteria for defining a ''small entity'' for purposes of the RFA. There are no record-keeping or reporting requirements associated with this action.

The Chief Counsel for Advocacy of the Small Business Administration did not file any comments on the proposed rule. NMFS did not receive comments on the IRFA, although some comments on the economic aspects of the proposed rule, including those that affect small entities, could be relevant. Please see

Comments 20, 38, 39, and 40 and NMFS's responses to those comments.

There are several types of industries directly affected by this rulemaking: Swim-with-wild-dolphins tour operators; dolphin watch tour operators; non-motorized vessel ocean wildlife viewing tour operators; and generalized commercial boat tour operators. This analysis uses size standards prescribed by the SBA. Specifically, for scenic and sightseeing water transportation operators (North American Industry Classification System Code 487210), the SBA size standard for a small business is average annual receipts of $8.0 million or less. Much of the background information for potentially affected entities is based on a 2018 report (2018 report) that summarized information collected in 2017 with regard to participants within these industries that potentially interact with Hawaiian spinner dolphins to varying degrees in the MHI (Impact Assessment 2018). The 2018 report is similar to the socioeconomic report finalized in 2007 (which contained information collected in 2006 and provided much of the information for the IRFA in support of the proposed rule), but with updated information. The 2018 report provides information that suggests that most, if not all, businesses operating in the swim-with-wild-dolphins tour and the dolphin watch tour industries operating in 2017 could be considered small entities, and most of the generalized commercial boat tour operators were assumed to be small entities (Impact Assessment 2018).

Swim-with-wild-dolphins tour operators are those that bring clientele into close proximity with spinner dolphins. This includes health and/or spiritual retreat operations as well as dolphin-oriented swim tours. Health and spiritually-linked businesses provide opportunities for persons wishing to interact with spinner dolphins for perceived physical, mental, and/or spiritual well-being enhancement. The number of businesses in this category increased between 2007 and 2017, especially on the Island of Hawai'i. Spiritually-linked tour operations may charter vessels through other established dolphin-swim companies to transport customers as part of an overall per-person package consisting of lodging, swimming with dolphins, and other activities. According to the 2018 report, an estimated six to eight locally owned spiritual retreat businesses and at least 33 non-local (*i.e.,* mainland United States, Europe, Japan, South Africa, and Australia) spiritual retreat businesses operating on Hawai'i Island reportedly provided direct Hawaiian spinner dolphin interaction in 2017. No numbers were provided for spiritual retreat businesses operating on O'ahu, Maui, and Kaua'i.

Dolphin-oriented swim tours operate by transporting passengers by boat or having them swim from shore to areas in which dolphins are known to be present during daytime hours. Customers may also be provided with facemasks, fins, flotation devices, and snorkels to enhance viewing. The 2018 report suggests that at least 41 swim-with-dolphins tour companies operated on Hawai'i and seven operated on O'ahu. The report also indicated that commercial boat tours on Maui did not appear to advertise underwater encounters with spinner dolphins, nor did those on Kauai, although unplanned encounters may occur. All are believed to be small entities.

Dolphin-watch tour operators involve taking clients out specifically to view wild dolphins. These companies tend to operate smaller boats than the more generalized commercial boat tours described below, and are more likely to view dolphins at a closer range. Revenue information for this specific business category is not available. The 2018 report did not provide estimated number of businesses that primarily focused on dolphin viewing, but NMFS had previously estimated the number of dolphin watch tour businesses to be as follows: Hawai'i (3), Maui (21), O'ahu (3), and Kaua'i (11) in 2015 (NOAA Fisheries, PIRO).

More generalized commercial boat tours offer a range of ocean activities, which may include sightseeing, snorkeling, diving, viewing various forms of sea life from a vantage point in and/or above the water, or just generally spending time on the ocean. The majority of the general tour boats derive revenue from whale watching and sightseeing operations, while a number of the dive/snorkel vessels offer snorkeling or diving trips. The 2018 report provided economic or operational information from 28 generalized commercial boat tour businesses (Hawai'i Island: 5, O'ahu: 2, Maui: 16, and Kaua'i: 15), although there are likely more businesses that fall in this category. NMFS believes that most, but not all, would be considered small entities.

Non-motorized vessel ocean wildlife viewing tour operators, specifically kayak tour businesses around the MHI, provide a general wildlife viewing experience, with a very few, if any, operators advertising direct or intentional interactions with dolphins. The 2018 report indicated that these operations were designed to provide clients with a variety of recreational and sightseeing experiences that typically did not include dolphin interactions. The 2018 report did not provide estimated number of businesses in this category, but NMFS had previously estimated that in 2015, the numbers of companies that either operate kayak tours or rent out kayaks to be as follows: Hawai'i (6), Maui (9), O'ahu (6), and Kaua'i (13) (NOAA Fisheries, PIRO). Based on the information from the 2018 report and/or obtained by NMFS in 2015, the estimated numbers of small entities directly affected by the final rulemaking, by industry, on the MHI are as follows: At least 60 or 70 swim-with-wild-dolphins tour operators (including health and/or spiritual retreats enabling opportunities to swim with wild dolphins), and at least 38 generalized commercial boat tour operators (one or more of which are likely to be considered large entities).

Because information on these entities were collected in 2017, their numbers might differ currently and in the near term, as these are businesses whose customer base are often comprised of tourists and visitors to the State of Hawaii or interisland travelers. Beginning in March 2020, the Hawaii tourism industry has been undergoing a significant drop in travel and tourism-related business activities due to the COVID pandemic. In April 2020, 4,564 visitors arrived in Hawaii, a 99.5% decrease from the number of visitors that arrived in April 2019 (*https://www.hawaiitourismauthority.org/media/4635/april-2020-visitor-statistics-press-release-final.pdf*). While tourism has increased in the state over the last year with 791,053 visitor arriving in Hawaii in June 2021, this number represents a 16.5 percent decline compared to June 2019 (*https://www.hawaiitourismauthority.org/media/7582/june-2021-visitor-statistics-press-release.pdf*). As a result, the tourism industry has faced immediate financial challenges and businesses that rely on tourists, such as boat-based wildlife viewing tours, snorkel tours, and spiritual retreats have been financially impacted from the COVID pandemic. Although it is not known when tourism will return to pre-COVID levels, we anticipate that that dolphin directed activities would resume to pre-pandemic levels in the future.

This final rule would restrict all activities associated with close approach to Hawaiian spinner dolphins, including swimming with dolphins and close approach by vessel. These approach prohibitions would be applicable within 2 nmi (3.7 km) of each

of the MHI and in designated waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe. This rule implements the least restrictive measure that still achieves reduction in harassment of dolphins.

The ban on swimming and approaching within 50 yards (45.7 m) of Hawaiian spinner dolphins, has the potential to eliminate all activities, including commercial activities that may result in take of spinner dolphins (*e.g.,* swim-with-wild-dolphins) at a close distance. Therefore, implementing this final action would require operators that currently offer the opportunity to swim with spinner dolphins to cease this specific activity, although they may choose to continue to provide other services among their menu of options. For example, a spiritual retreat that offers a menu of other activities along with swim-with-wild-dolphins activities may continue to offer the other activities. In addition, swim-with-wild-dolphins tour operators may choose to transition to operate as a dolphin-watching or generalized tour vessel operation. For these businesses, eliminating opportunities to swim with wild spinner dolphins within 50 yards (45.7 m) is likely to result in a reduction in revenue in the short term and potentially in the long term. The decrease in revenue could come from the reduction in the number of customers, specifically those who seek the experience of swimming with spinner dolphins, and/or reduced trip or package prices with a reduced menu of options available for each trip. The loss in overall revenue to individual businesses and the industry as a whole that rely on close approach with spinner dolphins by any means for revenue is uncertain. The same is true with regard to the number of businesses that would be still be able to remain in operation after the implementation of the final rule. The 2018 report indicated that many of the business owners or operators facilitating underwater dolphin encounters expected that they would see lower profits, devaluation of business assets, employee layoffs, or they might decide move the business to a different location outside of Hawaii, or some operators expected they would go out of business. One operator reported laying off all his employees after voluntarily complying with the proposed rule. NMFS, however, has no corroborating information for this report. Some others stated that they would try to create a different kind of retreat.

Commercial wildlife boat tour operators, including generalized commercial boat tour operators, dolphin watch tour operators, and non-motorized vessel tour operators, would no longer be able to take customers to view Hawaiian spinner dolphins from closer than 50 yards (45.7 m). Restricting operators from approaching within 50 yards (45.7 m) of spinner dolphins may reduce demand for vessel-based tours among customers who specifically hope to view dolphins from a vessel at a closer range, although there will be no options other than not taking a tour at all, as no boats in Hawai'i would be able to offer tours closer than 50 yards (45.7 m). Some tour operators may be able to offer alternative recreational opportunities or amenities as part of a tour to help offset any loss in demand for tours. For generalized tour boat operators with a clientele base that does not have a specific goal of viewing spinner dolphins, the direct economic impact of the final action is likely to be minimal.

Participants of dolphin directed activities may also support other industries indirectly, including lodging, food industry, and car rentals. Many dolphin-swim participants may travel to Hawaii and participate in a wide variety of other ocean based activities, including vessel based wildlife viewing. Weiner (2016) found that 78 percent of participants of swim-with dolphin tours would still participate in a dolphin tour, even if they could not go in the water with dolphins. The industries that provide goods and services to visitors could potentially see some loss in revenue if new regulations were implemented that prohibited swimming with dolphins. However, many of these businesses serve a much larger number of local, U.S., and international visitors to the state seeking a wide range of experiences, of which direct encounters with dolphins are a small component.

NMFS concludes that there would be disproportionate impacts to the swim-with-wild-dolphin tour operators from implementation of this final action relative to all other general wildlife viewing tour operators. Similarly, because of the focus of activities, it is also likely that the dolphin watch tour industry will face greater impacts than the generalized wildlife tour companies. As a result, dolphin-watch tour entities may face disproportionate impacts relative to the generalized commercial boat tour companies, which are likely to incur few direct economic impacts from the final action. We note that dolphin watch tour entities are all believed to be small entities, and most of the generalized commercial boat tour companies are as well, although a few might be considered large entities with revenues exceeding $8.0 million.

NMFS considered other alternatives in addition to the swim-with and 50 yard (45.7 m) approach regulations (Alternative 3(A)). These include Alternative 1: No action; Alternative 2: Swim-with regulations; Alternative 3(B): Swim-with and 100 yard (91.4 m) approach regulations; Alternative 4: Mandatory time-area closures, swim-with, and 50 yard (45.7 m) approach regulations; and Alternative 5: Voluntary time-area closures and swim-with and 50 yard (45.7 m) approach regulations. As is the case for this final action, Alternatives 2, 3(B), 4, and 5 would all be applicable within 2 nmi of each MHI and in designated waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe. Among the non-selected action alternatives, all would likely result in a higher direct economic impact to individual small entities and the dolphin-viewing industry as a whole, relative to the final action, except for Alternative 2. NMFS has determined that the final action meets the goals and objective of reducing human-caused disturbances that Hawaiian spinner dolphins are facing in their natural habitat, and will help protect against declines in the fitness of the population over time.

No additional reporting, record keeping, and other compliance requirements are anticipated for small businesses. NMFS has identified no Federal rules that may duplicate, overlap, or conflict with the action alternatives.

Executive Order 12866, Regulatory Planning and Review

This rule was determined to be not significant for purposes of E.O. 12866.

Paperwork Reduction Act

The purpose of the Paperwork Reduction Act is to minimize the paperwork burden for individuals, small businesses, educational and nonprofit institutions, and other persons resulting from the collection of information by or for the Federal government. The rule includes no new collection of information, so further analysis is not required.

National Historic Preservation Act (NHPA)

The goal of the NHPA (16 U.S.C. 470 *et seq.)* is to have Federal agencies act as responsible stewards of our nation's resources when their actions affect historic properties. Section 106 of the NHPA requires Federal agencies to take into account the effects of undertakings they carry out, assist, fund, or permit on historic properties. Federal agencies meet this requirement by completing the

section 106 process set forth in the implementing regulation, ''Protection of Historic Properties,'' 36 CFR part 800. The goal of the section 106 process is to identify and consider historic properties (or sites eligible for listing) that might be affected by an undertaking, and to attempt to resolve any adverse effects through consultation. Under the NHPA, an ''effect'' means an alteration to the characteristics of a historic property qualifying it for inclusion or eligibility for the National Register.

NMFS conducted a scoping process to determine if historic properties may be affected by the proposed regulation. Native Hawaiian organizations, communities, and individuals were contacted upon recommendation from Hawai'i's State Historic Preservation Division and four community scoping meetings were held in 2012 with those who expressed interest in the proposed undertaking. NMFS has not received any information to suggest that this undertaking would adversely affect historic properties or hinder cultural practices within historic properties such as those identified through the interviews with lineal descendants (*e.g.,* fishing, canoe activities, ancestral caretaking and worship, and care of burial sites).

We have determined a swim-with and approach regulation for Hawaiian spinner dolphins does not have the potential to cause effects on or alterations to the characteristics of historic properties. In consideration of the foregoing the NMFS has determined that the undertaking is a no potential to effect determination (36 CFR 800.3) under Section 106 of the NHPA.

Coastal Zone Management Act

Section 307(c)(1) of the Federal Coastal Zone Management Act of 1972 requires that all Federal activities that affect any land or water use or natural resource of the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable. We determined that this regulation is consistent to the maximum extent practicable with the enforceable policies of the approved Coastal Zone Management Program of Hawai'i. This determination and the DEIS were submitted for review by the Hawai'i Coastal Zone Management (CZM) Program. The Hawai'i CZM Program concurred with our determination in a letter dated September 27, 2016.

List of Subjects in 50 CFR Part 216

Administrative practice and procedure, Marine mammals.

Dated: September 20, 2021.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 216 is amended as follows:

PART 216—REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

■ 1. The authority citation for 50 CFR part 216 continues to read as follows:

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

■ 2. Add § 216.20 to subpart B to read as follows:

§ 216.20 Special restrictions for Hawaiian spinner dolphins.

(a) *Applicability.* The following special restrictions designed to protect Hawaiian Spinner Dolphins apply:

(1) In all waters within 2 nautical miles (nmi) of the main Hawaiian Islands, and

(2) In all waters bounded by the islands of Lāna'i, Maui, and Kaho'olawe enclosed by 3 line segments that connect points on the 2-nmi boundary between the islands as follows: The straight line between 20°32′51″ N/156°43′50″ W (Kaho'olawe) and 20°42′4″ N/156°55′34″ W (Lāna'i), the straight line between 20°51′1″ N/156°54′0″ W (Lāna'i) and 20°59′48″ N/156°42′28″ W (Maui), and the straight line between 20°33′55″ N/156°26′43″ W (Maui) and 20°32′15″ N/156°29′51″ W (Kaho'olawe) (all coordinates referenced to The World Geodetic System of 1984 (WGS 84)).

TABLE 1 TO PARAGRAPH (a)(2)—COORDINATES FOR THE EXTENT OF THE DESIGNATED WATERS BOUNDED BY LĀNA'I, MAUI, AND KAHO'OLAWE *

[All coordinates referenced to The World Geodetic System of 1984 (WGS 84).]

Line segment between islands	Figure 3 label	Latitude	Longitude
Kaho'olawe and Lāna'i	A1	20°32′51″ N	156°43′50″ W
	A2	20°42′4″ N	156°55′34″ W
Lāna'i and Maui	B1	20°51′1″ N	156°54′0″ W
	B2	20°59′48″ N	156°42′28″ W
Maui and Kaho'olawe	C1	20°33′55″ N	156°26′43″ W
	C2	20°32′15″ N	156°29′51″ W

* (see Figure 3 of this section).

(b) *Prohibitions.* Except as noted in paragraph (c) of this section, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed any of the following:

(1) Approach or remain within 50 yards (45.7 m) of a Hawaiian spinner dolphin by any means;

(2) Swim within 50 yards (45.7 m) of a Hawaiian spinner dolphin;

(3) Cause a vessel, person, or other object to approach or remain within 50 yards (45.7 m) of a Hawaiian spinner dolphin; or

(4) Intercept or place a vessel, person, or other object in the path of a Hawaiian spinner dolphin so that the dolphin approaches within 50 yards (45.7 m) of the vessel, person, or object.

(c) *Exceptions.* The prohibitions of paragraph (b) of this section do not apply to:

(1) Any person who inadvertently comes within 50 yards (45.7 m) of a Hawaiian spinner dolphin or is approached by a spinner dolphin, provided the person makes no effort to engage or pursue the animal and takes immediate steps to move away from the animal;

(2) Any vessel that is underway and is approached by a Hawaiian spinner dolphin, provided the vessel continues normal navigation and makes no effort to engage or pursue the animal. For purposes of this exception, a vessel is defined as a watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water (1 U.S.C. 3); a vessel is underway if it is not made fast to the shore, at anchor, or aground;

(3) Any vessel transiting to or from a port, harbor, or in a restricted channel when a 50-yard (45.7 m) distance will not allow the vessel to maintain safe navigation;

(4) Vessel operations necessary to avoid an imminent and serious threat to a person or vessel;

(5) Any vessel that is anchored or aground and is approached by a Hawaiian spinner dolphin, provided the vessel makes no effort to engage or pursue the animal;

(6) Activities authorized through a permit or authorization issued by the National Marine Fisheries Service to take Hawaiian spinner dolphins;

(7) Federal, State, or local government vessels, aircraft, personnel, and assets when necessary in the course of performing official duties;

(8) Commercial fishing vessels that incidentally take spinner dolphins during the course of commercial fishing operations, provided such vessels operate in compliance with a valid marine mammal authorization in accordance with MMPA section 118(c).

(d) *Affirmative defense.* In connection with any action alleging a violation of this section, any person claiming the benefit of any exemption, exception, or permit listed in paragraph (c) of this section has the burden of proving that the exemption or exception is applicable, or that the permit was granted and was valid and in force at the time of the alleged violation.

(e) *Maps of areas for Hawaiian spinner dolphin special restrictions.* The following are overview maps and a table with corresponding coordinate data for the areas for Hawaiian spinner dolphin special restriction.

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Figure 1 to § 216.20. Overview of Area of Spinner Dolphin Protections

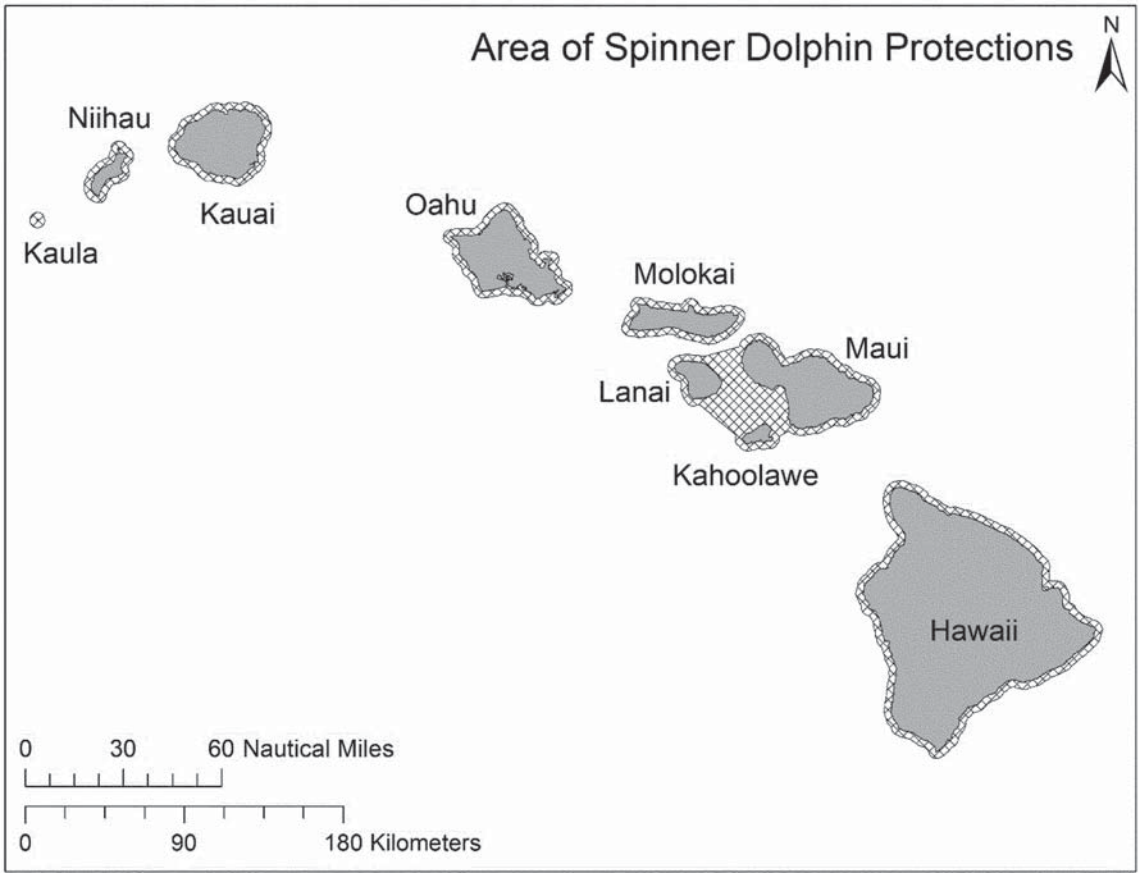
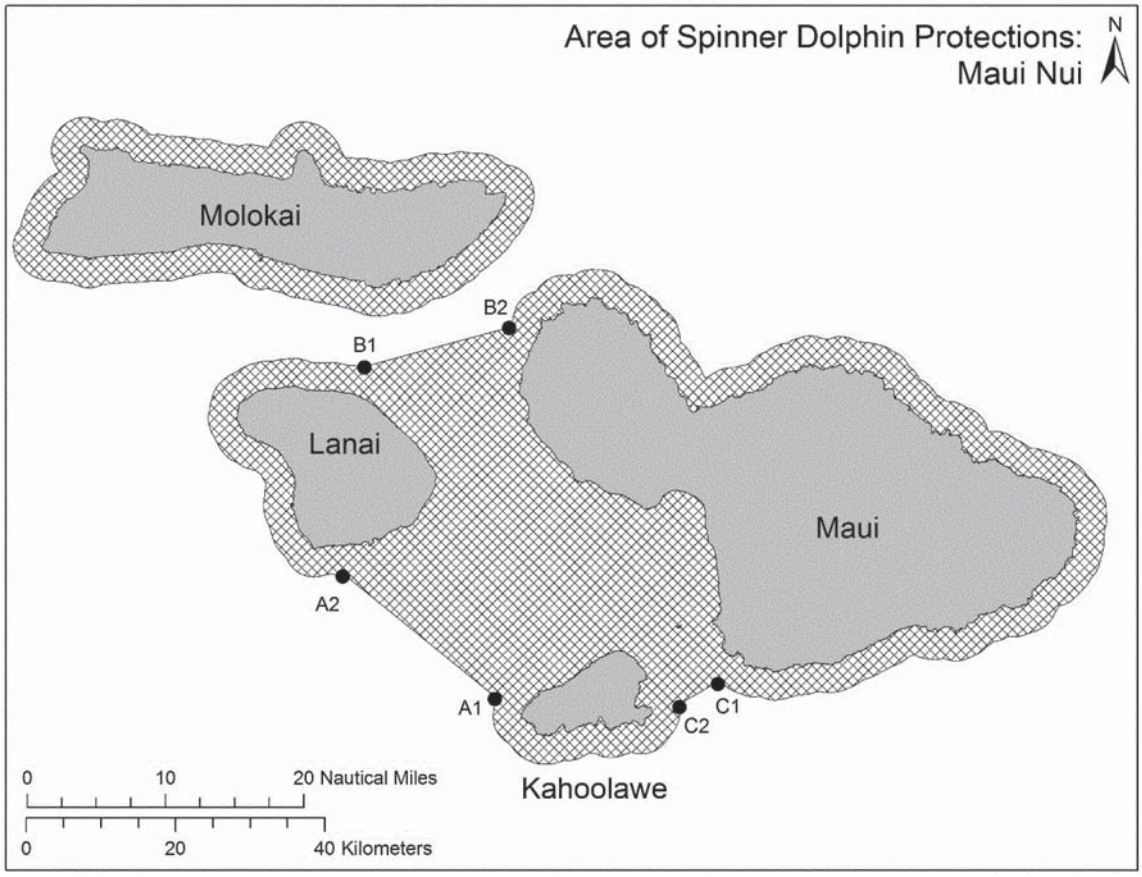


Figure 2 to § 216.20. Overview of Designated Waters bounded by Lāna'i, Maui, and Kaho'olawe for Spinner Dolphin Protections. See Table 1 for coordinates.



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