

October 18, 2016

Susan Pultz, Chief Conservation Planning and Rulemaking Branch Protected Resources Division Pacific Islands Regional Office National Marine Fisheries Service 1845 Wasp Blvd., Bldg. 176 Honolulu, HI 96818

Attn: Hawaiian Spinner Dolphin Proposed Rule, 81 FR 57854

Dear Ms. Pultz:

On behalf of the Animal Welfare Institute (AWI) and its members, including those who live or vacation in Hawaii, I am submitting comments on the proposed rule, as published in *81 FR 57854*, to protect wild spinner dolphins, *Stenella longirostris*, in the main Hawaiian Islands, from "take" as defined by the Marine Mammal Protection Act (MMPA). The proposal within Alternative 3(A) (the Preferred Alternative) of the National Marine Fisheries Service's (NMFS) Draft Environmental Impact Statement and Regulatory Impact Review: *Enhancing Protections for Hawaiian Spinner Dolphins to Prevent Disturbance* (DEIS) is to prohibit swimming with and approaching a Hawaiian spinner dolphin within 50 yds anywhere within 2 nm of the Hawaiian Islands and in the waters between the islands of Lanai, Maui, and Kahoolawe.

AWI fully supports the promulgation of regulations to achieve the goal of prohibiting conduct that results in take, including harassment and disturbance, of Hawaiian spinner dolphins. We have been concerned about spinner dolphin harassment in the main Hawaiian Islands, with increasing numbers of vessels and swimmers approaching them in their essential daytime habitat, for some time. We commend NMFS for finally proposing a rule, after many years of research and public consultation. However, we do not believe the proposed action – establishing a mandatory 50-yd approach distance – will achieve the stated goal of protecting spinner dolphins from take, including harassment.

Indeed, given the comments submitted by various NGOs during previous comment periods for Advanced Notices of Proposed Rulemaking related to the Hawaiian spinner dolphin situation (see 67 FR 4379 from 2002 and 70 FR 73426 from 2006) and the Notice of Intent (see 71 FR 57923 from 2006) and the research conducted over the years (e.g., Johnston et al. 2014; Symons 2013; Tyne et al. 2015), including the work under the 2010-2013 SAPPHIRE Project sponsored by NMFS, this proposed rule does not appear to be based on best practice, common sense, or science.

### Science does not support a 50-yd approach distance

The Preferred Alternative's proposed 50-yd approach distance is not supported by science. For that matter, neither is Alternative 3(B)'s proposed 100-yd approach distance. Distance-related research results are mentioned multiple times in the text of the proposed rule (see, e.g., pp. 57856, 57859, and 57861). These results actually indicate that swimmer presence within 150 m (164 yds) reduces the likelihood of spinner dolphins being in a resting state (Symons 2013; Johnston et al. 2014). In contrast, Tyne (2015) noted that "none of the human activity covariates (presence of boats/kayaks/swimmers, distance between dolphins and boats/kayaks/swimmers) had a significant effect on the probability of dolphins resting, socialising or traveling" (p. 147) when a 100 m distance between humans and dolphins was considered, although he also noted that dolphins were exposed to human activity the vast majority of daytime hours, meaning control data were few, which rendered this result ambiguous. However, no cited papers suggest 50 m (or 50 yds) is a relevant distance for dolphin disturbance. The most conservative interpretation of the available research is that spinner dolphins suffer disturbance (i.e., have a lower likelihood of resting, which may have long term impacts on their health and overall fitness) when swimmers are within a far greater distance than 50 yds, so selecting this distance for the proposed rule appears arbitrary and would be singularly non-protective.

In addition, if anything the literature supports limiting the number, rather than the approach distance, of vessels, as number of vessels may be more of a critical factor in disturbance than distance. Heenehan et al. (2016) reported a significant correlation between increased numbers of boats and decreased periods of dolphin rest (i.e., increased vocalization rate); however, this relationship did not hold when the activity in a resting bay was *not* dolphin-centric (i.e., people were there primarily for other reasons, such as coral reef snorkeling). While we understand the challenges associated with implementing a licensing/permitting scheme for commercial operators in an effort to limit dolphin-centric activity in essential daytime habitat, and also recognize that such a scheme would not affect recreational boaters or swimmers from shore, we do note that there *is* science to support such an option but *not* an approach distance of 50 yds.

The closest mention of a scientific basis for a 50-yd approach distance in the proposed rule is on p. 57861, in reference to Johnson et al. (2013)'s work (which is not in the list of references in the DEIS and may be a typo, as Johnston et al. [2014] considered these distances). Johnson et al. (2013) [sic] reported that dolphins were more likely to be resting when vessels were present between 50 and 150 m. Even here, however, the proposed rule clarifies that the higher likelihood that dolphins were resting when vessels were between 50 and 150 m away may have simply been due to vessels being present at these distances most of the time during daytime hours (see also Tyne 2015), i.e., when dolphins are resting. In short, it may have been an artifact of the situation in dolphin resting bays, where vessels are present within these distances most of the time, rather than an indication that vessel presence as close as 50 m did not disturb resting dolphins. Indeed, another study found that vessels as far as 500 m away affected spinner dolphin behavior (Ross 2001, also not listed in the DEIS references and therefore not included in this letter's reference list).

Ideally, should NOAA finalize this rule as recommended below, researchers would continue to monitor dolphin resting behavior wherever swimmers and vessels are kept farther out, at 150 yds

or more, or when dolphins are within a closure area and can rest at levels that are arguably more representative of "true" resting behavior (a state described [Norris and Dohl 1980; Norris et al. 1994] but not necessarily well-studied prior to the current level of swimmer and vessel presence). This will allow a baseline of "true" resting behavior to be established and from there to determine if there is a scientific basis for a 50-yd approach distance regulation. For now, research results more strongly support an approach distance greater than or equal to 150 yds.

#### **Alternative 4 in the DEIS**

AWI contends that the only reasonable and adequately enforceable alternative considered during this rulemaking is Alternative 4. This alternative would establish mandatory time-area closures, as well as minimum approach distances. However, we would modify the alternative, in an effort to maximize compliance, minimize disruption to local economies, and still provide adequate protection to the spinner dolphins of the main Hawaiian Islands.

The minimum approach distance should be 150 yds and should apply to vessels at all times. This is a far more protective and also enforceable approach distance than 50 yds (as the closer distance is difficult to distinguish without sophisticated ranging equipment, whereas the greater distance is easier to "eyeball") and is based on science. In contrast, the approach distance should apply to swimmers only during the same times as the closures (which encompass the dolphins' peak resting hours) and the closures should be 9am-3pm (see below). Outside of this time period, swimmers (but not vessels) would have no distance restrictions – outside of resting periods (during which swimmers within 150 m make it less likely that the dolphins would be resting), active spinner dolphins can clearly avoid human swimmers at will, so if they are close to swimmers, it is highly likely to be by choice. If swimmers are placed in the water by vessels standing out at distances greater than or equal to 150 yds, then in fact dolphins would have to approach the swimmers, as swimmers would not be able to reach active dolphins otherwise. This will allow swim-with tours to continue (although with a lower chance of an encounter): within the closure areas only at times outside of the closure period (under this modification, the closure areas would remain the same as in the proposed rule) and outside the closure areas at any time, as long as vessels ferrying swimmers remain 150 yds from dolphins.

The closure time period of 9am-3pm arises empirically from two sources (the closure times considered but not proposed in the proposed rule – 6am-3pm – do not appear to be based on the results of any studies cited in the proposed rule or DEIS). One is modelling data, which indicate the peak resting time for dolphins is 10am-2pm (Tyne 2015; Tyne et al. 2015). Our suggested closure times add an hour on either side of that range to ensure maximum protection for dolphins descending into and coming out of the resting behavioral state. The other is the West Hawaii Voluntary Standards (WHVS 2009), which prohibit vessel operators in the West Hawaii tour operator community from entering certain closure areas (smaller than those in the proposed rule) from 9am-3pm. Therefore, at least some Hawaiian tour operators are already predisposed to agree to such closure times, albeit for an area smaller than proposed.

The failure of the agency to propose mandatory time-area closures, despite the research on this situation indicating they are 1) the action most likely to protect dolphins from harassment (e.g., Tyne et al. 2015; Notarbartolo-di-Sciara et al. 2009); 2) the action most likely to be enforceable

(in contrast to the 50-yd approach distance, which will be very difficult to enforce on a daily basis, given the difficulty that boaters and swimmers will have in determining this distance on the water and that enforcement officers will have in determining vessel and swimmer intent when they are within any specified distance of dolphins); and 3) an action to which some in the industry are already amenable (albeit for an area smaller than proposed) (WHVS 2009), is notable and frankly inexplicable. The agency is considering time-area closures, but not proposing them. It is also considering voluntary time-area closures, as well as mandatory ones, despite the widespread evidence that, wherever a strong profit motive exists for *anything*, voluntary guidelines are almost always ineffective. *AWI strongly recommends that NMFS consider and indeed adopt mandatory time-area closures, as proposed in Alternative 4 of the DEIS, with modifications as noted above.* 

Because time-area closures are bright-line regulations, independent of the presence or absence of dolphins and, aside from the exemptions, independent of vessel or swimmer intent, they are easy to enforce and the easiest to enforce of all possible regulations, restrictions, or mitigations. There would be less need for other regulations that would be more difficult to enforce, such as restricting to 30 minutes the time during which any boat observes or follows any particular group of dolphins or other common guidelines. However, we do recommend the retention of guidelines (e.g., WHVS 2009 or the Dolphin SMART code of conduct), as these promote "good" behavior around wildlife, set a good example for other jurisdictions regarding best practice, and generally promote outreach and educational opportunities.

Finally, the proposed regulation that swimmers cannot remain within 50 yds (or any other distance) of Hawaiian spinner dolphins should be deleted from the final rule. This is appropriate for vessels, which can pursue even active dolphins, whereas swimmers cannot. As noted above, if active, non-resting dolphins are close to swimmers (who have been placed in the water by vessels standing out at 150 yds or who have entered the water from the shore), it is highly likely by choice and requiring swimmers to move away is both unnecessary and frankly unfair, as swimmers may end up being cited for violations when they are simply unable to move to a greater distance from active dolphins.

# Exemptions to the approach distances and time-area closures

AWI considers the exemptions to the proposed regulations to be appropriate.

# Conclusion

AWI recognizes the difficulty facing NMFS when it comes to specific situations where cetaceans solicit close interactions with swimmers or where commercial and private vessel operators try to maximize their opportunities for close encounters with these highly-accessible dolphins for profit or recreation. Unlike many wildlife species, cetaceans, especially delphinids and the occasional monodontid, without any history of being fed sometimes seek out benign interactions with humans (of course, in some situations, swimmers might interpret certain behaviors as soliciting interaction when a more objective observer would not). It is precisely because of this unique cetacean characteristic that NMFS must tailor its regulations to account for it. If the agency attempts to create a blanket prohibition against all swimming with Hawaiian spinner dolphins, it

is likely to face extraordinary opposition from some members of the public, which would diminish management effectiveness. The goal, therefore, should be to prevent interactions that are initiated by humans, especially during resting periods, rather than those initiated by the dolphins. Dolphins have been approaching humans literally for millennia – promulgating a blanket prohibition on contact even when the animals themselves initiate and maintain it would be excessive and could well result in citations for harassment when in fact no harassment has occurred.

Again, we recognize that as an enforcement issue, the direction of initiation may be difficult to distinguish, but time-area closures as described above, to minimize interactions with resting dolphins, would be the most effective way to address this concern. In addition, maintaining a vessel approach distance of 150 yds, which is science-based and far easier to distinguish in the field, and thus enforce, than 50 yds, considerably limits the ability of swimmers entering the water from those vessels to initiate contact compared to the current situation, where vessels can carry swimmers (sometimes multiple times during a single excursion) into close range.

Thank you for the opportunity to comment on this important effort.

Sincerely,

Jaon Kom

Naomi A. Rose, Ph.D. Marine Mammal Scientist

#### References

- Heenehan, H.L., D.W. Johnston, S.M van Parijs, L. Bejder, and J.A. Tyne. 2016. Acoustic response of Hawaiian spinner dolphins to human disturbance. *Proceedings of Meetings on Acoustic*, doi: 10.1121/2.0000232
- Johnston, D.W., L. Bejder, J. Tyne, and J. Symons. 2014. Quantifying the effects of human interactions on spinner dolphins in resting bays in Hawaii, and assessing the effectiveness of time area closures as a proposed mitigation approach (NA09NMF4540254), March 2014. Final Report to NMFS.
- Norris, K.S. and T.P. Dohl. 1980. Behavior of the Hawaiian spinner dolphins, *Stenella longirostris*. *Fishery Bulletin* 77: 821-849.
- Norris, K.S., B. Würsig, R.S. Wells, and M. Würsig. 1994. *The Hawaiian Spinner Dolphin*. Berkeley, University of California Press.
- Notarbartolo-di-Sciara, G., M.H. Hanafy, M.M. Fouda, A. Afifi, and M. Costa. 2009. Spinner dolphin (*Stenella longirostris*) resting habitat in Samadi Reef (Egypt, Red Sea) protected through tourism management. *Journal of the Marine Biological Association of the United Kingdom* 89: 211-216.

- Symons, J. 2013. *The Influence of Human Activity on the Spinner Dolphin's (Stenella longirostris) Energy Budget.* Master's thesis, University of Aberdeen. 29pp.
- Tyne, J.A. 2015. A Scientific Foundation for Informed Management Decisions: Quantifying the Abundance, Important Habitat and Cumulative Exposure of the Hawaii Island Spinner Dolphin (Stenella longirostris) Stock to Human Activities. Master's thesis, Murdoch University. 180pp.
- Tyne, J.A., D.W. Johnston, R. Rankin, N.R. Loneragan, and L. Bejder. 2015. The importance of spinner dolphin (*Stenella longirostris*) resting habitat: implications for management. *Journal of Applied Ecology* 52: 621–630.
- WHVS (West Hawaii Voluntary Standards). 2009. Voluntary standards for recreational wildlife interactions in West Hawaii waters. West Hawaii community and Coral Reef Alliance, available at <a href="http://coral.org/files/pdf/resources/WHVS\_Wildlife\_Interactions.pdf">http://coral.org/files/pdf/resources/WHVS\_Wildlife\_Interactions.pdf</a>