

3 July 2018

Mary Cogliano, Ph.D. Branch of Permits, MS: IA Division of Management Authority U.S. Fish and Wildlife Service 5275 Leesburg Pike Falls Church, Virginia 22041-3803

Re: Permit Application No. 37808A

(Sea to Shore Alliance)

## Dear Dr. Cogliano:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act (the MMPA). Sea to Shore Alliance (Sea to Shore) is seeking to renew its permit to conduct research on West Indian manatees in the southeastern United States during a five-year period—Sea to Shore's previous permit authorized similar activities.

Sea to Shore proposes to conduct research on West Indian manatees in the southeastern United States year-round. The purpose of the research is to investigate (1) population structure and life history parameters, (2) distribution and abundance, (3) behavior, (4) movement patterns and habitat use, (5) disease and health, and (6) responses to anthropogenic activities. Researchers would harass, observe/track, photograph/videotape, collect morphometrics, record acoustically, sample, and/or instrument numerous manatees of both sexes and various age classes (see the take table for specifics). Sea to Shore requests up to one manatee mortality<sup>1</sup> per year. Researchers would use various measures to minimize impacts on manatees and also would be required to abide by the U.S. Fish and Wildlife Service's (FWS) standard permit conditions. Sea to Shore's Institutional Animal Care and Use Committee has reviewed and approved the research protocols.

## General issues

Sea to Shore originally submitted its application to FWS in 2016, which was provided to the Commission for review in October 2016. At that time, both FWS and the Commission noted deficiencies in the information contained in the application and provided specific questions that needed to be addressed. FWS provided the Commission a revised application for review in October 2017. The Commission reviewed the revised application, noted that some of the issues raised with respect to the original application remained, and requested additional information to resolve those

<sup>&</sup>lt;sup>1</sup> Either unintentional or intentional mortality (i.e., euthanasia for humaneness purposes).

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and other questions on the revised application. FWS recently sent the application to the *Federal Register* to be published for public review and comment.

In June 2018, FWS finally provided the Commission with answers to some, but not all, of the questions. The Commission notes that it is very difficult to ascertain exactly which activities are considered part of Sea to Shore's 'final' application, as numerous clarifying email exchanges were provided to the Commission as part of the nearly 300-page 'complete' application. A final revised application including take tables was not provided. Outstanding issues that still need to be resolved include—

- inconsistently including activities to be conducted on captive manatees—in one portion of the documentation, Sea to Shore indicated it would not conduct the proposed activities on captive manatees but would obtain samples from other permitted-facilities. In another, it stated that the proposed activities would be conducted only on temporarily-captive manatees (i.e., animals that have been rehabilitated and would be released back to the wild), although the extent of those activities also are unclear<sup>2</sup>;
- failing to include swabs under the sample collection portion of the take table;
- failing to provide sufficient information in the principal investigator's (PI) and coinvestigator's (CI) CVs<sup>3</sup> to demonstrate the necessary expertise/experience to support authorizing them to conduct various activities; and
- failing to describe whether UAS duties listed for the various personnel<sup>4</sup> will include monitoring the animals for observed changes in behavior or serving as a spotter rather than actually piloting the UASs.

Although the Commission initially raised these issues more than a year and a half ago, in some cases FWS chose not to seek additional information from Sea to Shore to address them. In other cases, the Commission's questions were forwarded to Sea to Shore, but not sufficiently addressed. More generally, the Commission notes that the information provided by Sea to Shore to explain how its proposed research activities meet the *bona fide* scientific research requirement under section 104(c)(3)(A) of the MMPA and in support of an enhancement permit under the Endangered Species Act is scant.

Given that (1) this application was submitted more than two years ago<sup>5</sup>, (2) the failure of the applicant to provide some of the missing information is due to FWS's decision not to forward all of the Commission's questions for responses, (3) some of the delay in processing this application appears to have been caused by FWS's failure to forward Sea to Shore's responses to the

<sup>&</sup>lt;sup>2</sup> See sections 2, 4, 5, and 12 of the application. Behavioral and physiological studies are noted in one section, while sample collection is noted in another. It also is unclear whether these animals would be tagged.

<sup>&</sup>lt;sup>3</sup> Some of the PI/CIs have provided sufficient information, generally only those conducting one or two activities, while the remainder have not. Many of the PI/CIs likely have the necessary experience but that cannot be determined based on the information provided.

<sup>&</sup>lt;sup>4</sup> None of the CVs provided for the PI/CIs include UAS piloting experience. The Commission understands that Dr. Powell was going to obtain his FAA certification, however, it is unclear whether he has done so. Further, Ms. Ross did not include any experience associated with UAS in her CV. Both personnel would be authorized to conduct UAS surveys.

<sup>&</sup>lt;sup>5</sup> FWS's original review of the application did not occur for approximately 7 months.

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Commission for many months<sup>6</sup>, and (4) much of the delay seems to have been no fault of Sea to Shore, the Commission believes that it would be appropriate for FWS to move this process along. Nevertheless, given the remaining deficiencies in the application, the Commission believes that any permit issued needs to be conditioned to address the information gaps and uncertainties. Therefore, if FWS decides to issue a permit based on the information in hand, the Commission recommends that FWS (1) specify exactly which activities would occur on captive animals and whether those captive animals are temporarily (i.e., animals in rehabilitation) or permanently captive in the permit's take table and specify whose authorization the activities would occur under if not Sea to Shore's in the final permit, (2) include swabs in the sample collection portion of the permit's take table, (3) prohibit Dr. Powell and Ms. Ross from operating UASs until they have provided FWS with documentation indicating that they have the necessary FAA certification and experience in flying the UASs or unless they are authorized to serve only as manatee observers or spotters rather than UAS pilots<sup>7</sup> in the final permit, and (4) require the CIs to provide either a CV or biosketch demonstrating relevant experience to conduct all activities to be authorized and prohibit their participation in any such activities until FWS has reviewed such information and determined that they have sufficient experience and expertise. In the future, if a PI/CI's experience or CV is insufficient and/or inconsistent with the duties specified to be conducted in the PI/CI table, FWS should return all documentation to the applicant to be revised prior to processing the application further.

## Additional issues

Sea to Shore indicated that it would not target females with calves during its live-capture activities. However, if Sea to Shore incidentally captured a female and her calf, it would conduct routine sampling<sup>8</sup> regardless of the age or size of the calf. Sea to Shore did not provide justification regarding why it needed to collect such samples from neonates, very young calves, or calves in general. It also is unclear why Sea to Shore would not release the female and her calf immediately rather than cause undue stress to the animals, especially since the animals were not to be targeted<sup>9</sup>. As such, the Commission recommends that FWS prohibit Sea to Shore from conducting sampling (including tail notching) on any calf and require that Sea to Shore immediately release the calf and the female in the final permit. The Commission further recommends that FWS specify which age classes of manatees are authorized to be taken for each of the activities in the permit's take table.

Sea to Shore proposes to deploy hydrophones from a dock or vessel to record manatee vocalizations and other sounds. Vessels would move at a slow speed or idle or by trolling motor when the hydrophones are deployed. Sea to Shore noted that acoustic recorders have been used by Mote to record vocalizations from captive manatees. However, Sea to Shore noted that excessive background noise was present, presumably from the pool's filtration system. The Commission notes that similar background noise likely would be present if the hydrophone is deployed from a moving vessel or if vessels are present in the area when the hydrophone is deployed from a dock. Thus,

<sup>&</sup>lt;sup>6</sup> It appears that Sea to Shore provided responses to questions and updated documentation, but FWS did not provide those to the Commission for 3 months in one instance and 7 months in another.

<sup>&</sup>lt;sup>7</sup> Their duties must be specified in the final permit.

<sup>&</sup>lt;sup>8</sup> Which presumably includes blood, urine, feces, swabs, and skin scrapings. It is unclear whether this includes tail notching as well. Sea to Shore would not tag (e.g., PIT or any tags attached to the peduncle) calves less than 185 cm in length.

<sup>&</sup>lt;sup>9</sup> Sea to Shore also plans to avoid closely approaching and separating females with calves.

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vocalizations of the manatees likely would be masked. These factors should be considered when determining how best to deploy hydrophones.

## The Commission's role

The Commission and its Committee of Scientific Advisors spend considerable time and effort reviewing permit applications and take their review responsibilities under sections 101(a)(1), 202(a)(2) and 203(c) of the MMPA seriously. The Commission expects FWS to take our role in permit application reviews equally seriously. The Commission poses questions or seeks additional information during its reviews because either (1) the applicant has not provided all of the information required under FWS's application instructions or (2) the information provided is not sufficiently complete or clear to support the findings required under the MMPA and FWS's implementing regulations or to recommend appropriate permit conditions for inclusion in furtherance of MMPA section 104(b)(2). As such, the Commission expects FWS to be responsive to our requests for clarifications and additional information, provide applicants with the Commission's questions and comments, and seek the requested information in a timely manner – all before further action is taken on the application.

FWS's application instructions were updated in 2017 in an effort to help ensure that applicants, from the outset, provide all of the information necessary for FWS, the Commission, and the public to review an application in light of all applicable statutory and regulatory requirements. Many of the problems associated with this and other recent applications, and the need for the Commission to seek additional information, could be avoided if FWS did a better job of vetting applications to ensure that they contain all of the required information before sending them to the Commission or making them available for public review. It is FWS's responsibility to ensure that applicants abide by those instructions and provide the necessary information. Therefore, the Commission reiterates the recommendation made in its 18 December 2017 letter to FWS that, prior to publication, FWS staff review applications in light of the applicable instructions to ensure that all required information is present, is consistent with FWS policies, makes sense, and is in a format that facilitates review by the Commission and the public. The Commission does not intend to recommend issuance of any permit in the future when it believes the application is inadequate, even if some of the information gaps could be addressed through imposition of permit conditions. Rather, the Commission intends to recommend that FWS return any deficient application and require the applicant to provide all necessary information before processing the application further.

The Commission believes that the activities for which it has recommended issuance of a permit, if subject to the recommended permit conditions, are consistent with the purposes and policies of the MMPA. Kindly contact me if you have any questions concerning the Commission's recommendations.

Sincerely,

Peter O. Thomas, Ph.D.,

Peter o Thomas

Executive Director