

Aloha,

For those of you that received my first version of this message I apologize for sending such a large file. I attached the PDF of the Draft EA that I am responding to in this letter. I thought that it would be useful for everyone to be able to read the document. But, it is a very large file.

So, I am re-sending my letter without the large attachment. If you would like to read the Draft EA you can find it at the following website:

[http://www.blackpearlsinc.com/3\\_4.shtml](http://www.blackpearlsinc.com/3_4.shtml)

I am very concerned about a proposed fish farm by Kona Blue Water Farms (a division of Black Pearls Inc.) that is requesting permits to put a series of fish pens covering 81 acres in Makako Bay, which is just off of the Kona airport and NELHA. This is also the southern boundary of the Hawaiian Islands Humpback Whale National Marine Sanctuary. I hope that you will take the time to read this letter and consider contacting both the Dept. of Land and Natural Resources and National Marine Fisheries Service, Protected Species Division or anyone else you may know who might have an impact on the decision making process. The current indications are that this project may be permitted without having any EIS required or further study of potential impacts.

Thank you for your time,

Jan

I am writing in response to the "Environmental Assessment for an Offshore Open Ocean Fish Farm Project off Unualoha Point, Kona, Hawaii" prepared by Kona Blue Water Farms, a division of Black Pearls, Inc.

As a background to my statement, I would like to mention that I studied the spinner dolphin population off the Kona Coast for my dissertation research between may 1989 and February 1993. I received my Ph.D. for this work at University of California Santa Cruz, in June 1994 (Östman 1994). I returned to the island in 1997, and I am currently continuing my work on the spinner dolphin population off the Kona Coast. Partial funding for this recent research project is a contract with National Marine Fisheries Service to study the human impacts on spinner dolphins and to determine if there has been any significant change in the spinner dolphin population size for the Kona Coast.

The proposed location for the project is in the middle of my main study area, spanning the coastline from Honokohau Harbor and North to Mano point, just north of Kona Village. This area is also part of the Hawaiian Islands Humpback Whale National Marine Sanctuary. During my research I followed 131 schools of spinner dolphins in this area. Most of the schools were followed for about 3 hours, either in the morning or in the afternoon, although several schools were followed all day, for up to 13 hours.

Kona Blue Water Farms is proposing to locate their fish farm in one of the most critical resting areas for spinner dolphins on the Big Island. Not only is it a critical resting area but it accommodates the largest average school sizes of any of the critical resting bays on this island. That is, a

higher percentage of the spinner dolphin population uses this bay than any other. The average school size of dolphins resting in Makako Bay is 103 animals (range: 17-300). This is over three times larger than the average school size (33) found in Kealakekua Bay which is one of the other critical resting areas for this population. It was the chosen resting area for 72 of the 131 schools (55%) followed in the main study area. On average, the spinner schools come into Makako Bay to rest during the middle of the day, from about 11 AM to 1 PM, however, they may be milling in the bay as early as 08:11 and as late as 13:50. Contrary to what the Kona Blue Water Farms states, the spinner dolphins do not migrate through this area. They are a resident population of animals that uses this bay as a resting area on a regular basis. They do not migrate.

In their draft EA, Kona Blue Water Farms claims that their fish pens will be located in an area of the bay that the dolphins do not use to rest. This is erroneous, because of the large school sizes that often rest in the bay they frequently break up into 2-5 subgroups of up to 60 dolphins each. These subgroups mill independently and spread out over most of the area of Makako Bay. The effect of this subdivision, is that these schools require a large area to rest. The location of the proposed 81-acre facility right on the edge of this critical resting habitat is likely to crowd these large resting schools and disrupt the dolphins' rest. The area utilized by the spinner dolphins while resting in Makako Bay, especially for the largest schools, is much bigger than indicated on the Draft EA.

The Draft EA determination states that "a finding of no significant impact (FONSI) is anticipated". I disagree with this statement. On the contrary, the proposed project is likely to have significant environmental impact by affecting an environmentally sensitive area, and by disturbing the spinner schools resting in the bay and/or affecting the behavior of these school in and around this critical resting area (point (24) in the Determination on page 9 of the Draft EA; issue 5 in the table on page x and item (11) on page xii of the Executive Summary).

I participated in a meeting held by Kona Blue Water Farms, on 5/17/02 where I expressed my concerns proposing that they locate the fish farm at another location, or a mile or more offshore. I also reviewed two drafts of the EA. However, my comments are misrepresented in the Draft EA, which makes it appear as if I concur with the proposed location of the fish farm, when nothing could be further from the truth. In addition, my suggestion to move the fish pens farther offshore was brushed off as impossible, since the current technology would not allow for these pens to be located in deeper waters. This assertion was rebuffed during the hearing for the proposed Ahi Nui farm off the Kohala Coast, when the marine engineering expert brought in by the Ahi Nui staff stated that current technology exists to locate this type of operation farther offshore in much deeper waters.

The proposed farm will be attended by a two to three person crew, in a 45-foot or smaller vessel for "an average of 6 hours per day" and will have a security network associated with it that may include "active sonar and other tracking devices". In other words, there will be a fair amount of

human activity and noise generated from this operation on a daily basis, in the near vicinity of the largest resting school of spinner dolphins on the Big Island. I feel that this is indeed the basis for real concern.

Because of the disruption of the spinner dolphins' resting area and because of the potentially negative impacts of the human activity and noise generation, this proposed facility should be reviewed by the National Marine Sanctuary, the Marine Mammal Commission and the National Marine Fisheries Services, Division of Protected Resources. It is clear that there is a strong potential for harassment of at least one marine mammal species protected under the MMPA. In addition, there may be impacts as governed by the Endangered Species Act, given that during the winter months, Humpback whales are frequently utilizing this area as well.

These concerns alone should be enough to warrant an Environmental Impact Study to be conducted and not just a Draft Environmental Assessment. There are several other pressing concerns that should also be more fully addressed. This includes the impact of high levels of organic and nutrient pollution (unused feed & fish feces) likely to come from this operation. Not only are these class AA/A pristine waters but there are a number of reef areas within a short distance of the proposed fish pens. Although there is a strong current in this region given the total volume of waste that will be produced in such close proximity to the shoreline (2000 feet) there is a strong possibility that these nutrient poor waters will be highly impacted by the influx of nitrates, nitrites and phosphates. This in turn could have a negative economic impact on the dive and marine ecotourism industries because some of the prime diving sites are located just in shore of the proposed fish pens. This area has dive sites that are located in sandy areas because garden eels and manta rays are found here.

To quote some of the reviewers of the EA for a similar project off the Kohala Coast prepared by Ahi Nui, (<http://www.kamakani.org/ahinui.html#anchor536094>) my overall impression of the Draft EA is that it is "a tool of justification for the project rather than a discovery and study of actual impacts".

I feel strongly that a comprehensive environmental impact study (EIS) is needed to more fully disclose any potential environmental issues that may not be readily apparent at this time. Kona Blue water Farms should also be required to look into the possibility of locating the pens a mile or more offshore, where it will have less of an impact both on the resting spinner dolphins and the near shore ecosystems.

Sincerely Yours,

Jan Östman-Lind, Ph.D.