

6 July 2020

Communication received reference: CR July 2020- 01

Dear David,

Please find our responses in the boxes below your questions

Regards

Errol Cerff

ADZ ECO

QUESTIONS (Part 2).

David Harper (SLL Member)

1. Is the DEA seal specialist still employed by DAFF? Thus far, the seal specialist has shown no results other than “tagging of seals is not necessary”. I would like to ask the seal specialist the following questions.

1.1. When the Board was asked why so many seals are to be found on the pontoons “the seals use the pontoons as a pit-stop on the way to somewhere”, they said. Should this not be elaborated upon? For example, where do they come from, where do they go, the foods they feed upon, how many on average are there, are there more seals at certain times than others, if a seal tears a hole in a fish cage below the waterline at night, what is the response time, and can day/night/underwater cameras not be included? If divers are able to regularly observe the behaviour of the fish in the cages during feeding time, then can cameras too?

The DEA seal specialists mentioned in the previous meeting minutes on the 6th February 2020 as still employed by the DEFF. There is ongoing research around seal migration along the whole coast of South Africa and as mentioned in the meeting minutes the ongoing research will be shared once more information is available.

1.1 There is ongoing research on the migration of the seals along the coast being undertaken by the Department, Saldanha is a point along the migratory route. Further information regarding the research findings will be shared with the CF when these become available and we will ensure that the scientists present the findings at a CF meeting so that any questions can be addressed by the DEFF scientists themselves, such as “*where do they come from, where do they go, the foods they feed upon, how many on average are there, are there more seals at certain times than others*”.

With reference to the question around “*if a seal tears a hole in the fish cage at night, what is the response time, and can day/night/underwater cameras not be included?*”

The net is inspected daily, weather permitting, by a diver for net integrity, the presence of any holes, biofouling organism’s accumulation and tautness. Any defects from the set standard in the

management plan shall result in immediate response to rectify the problem. Underwater cameras are not a feasible monitoring option due to large biofouling experienced in the bay. Specific actions for net maintenance are covered in the Escapee Plan second version distributed on the 28th May 2020. The final Escapee plan is yet to be released.

In response to the question “*If divers are able to regularly observe the behaviour of the fish in the cages during feeding time, then can cameras too?*”

The following was recorded in the CF meeting held on the 6th February 2020 which may assist with a response:

A question was raised regarding how much feed reaches the bottom of the net / sea floor during the feeding process. Molapong explained that there are poor feeding rates at times, and therefore less feed is used. With each feeding, a diver is in the water to gauge the reaction of the fish to assess the feeding rate. Feed is released based on the feedback from the diver to prevent excessive amounts of feed entering the water as this has cost implications for the operation as the feed is one of the highest expenses of the operational budget.

Therefore there is no need to have cameras in the water as a diver is present during the feeding and as mentioned in the previous response it is not practical to have permanent underwater cameras installed.

1.2. Is there a *possible link* between the Rainbow Trout caught in San Park’s fish nets, Molapong, the disappearance of several indigenous wild fish species, and the increase in the number of seals in the Bay? Is this a potential risk and should there not be a special study for this?

At the CF meeting of the 6th November 2018 the DAFF addressed the report of the trout caught in the Lagoon. There had been verbal indication of three trout caught but only one sample was received and verified. DAFF assured the CF that these stocks cannot reproduce, and that only females are kept in the cages at all times. It was emphasized the importance of detailed reporting of such incidents in future. DAFF provide the CF with the relevant contact details for reporting incidents of this nature.

The State of the Bay reports on fish surveys in the bay and the ADZ Sampling Plan stipulates that other ecosystem indicators that are presently monitored as part of the State of the Bay programme must also be considered in the context of expansion of aquaculture in the bay. These include:

- fish abundance;
- bird breeding success;
- alien species occurrence.

Together with the ongoing State of the Bay benthic fauna studies in Langebaan Lagoon, these provide useful indicators of the state of the far-field ecosystem relative to aquaculture.

2. Why are home owners (HOA’s) especially those living on the Waterfront (including Churchaven and Stofelsberg) not *directly* invited to CF meetings, and instead invited via a property consortium. This roundabout approach can only complicate matters. For instance, Langebaan Lagoon *South* is an important catchment area with a highly sensitive eco-environment and can be used as a monitoring point. If something goes wrong in the Lagoon then this will be where to look. Therefore, as with the recent orange gunk discovered in Big Bay (a member from the boatyard), HOA

residents should be kept *well informed* and vice versa and be ready to assist as an early warning system.

The CF membership was developed initially with the assistance of the mailing of registered stakeholders from the EIA process was used and all members notified of the formation of the CF and invited to register as stakeholders. An advert was placed in the newspaper on the 26th July 2018 advertising the inaugural meeting of the CF held on the 6th November 2018 and at that meeting the chair requested that the delegates forward the names of any organisations who were not represented, to the chair so that they could be invited.

It was not the intent that any organisation or stakeholder be excluded and the CF has been in existence since November 2018 and various organisations have joined down the line. While we have tried to be as inclusive as possible the project has had a lot of media coverage on various platforms and registration is always open to all stakeholders.

Please forward the email addresses and contact numbers of members you wish to be invited to join the CF and so that contact can be made by the secretariat inviting the stakeholders to the next meeting of the CF.

4. The highly endangered false lympid known as *Siphonaria compressa* can only be found in South Africa in Langebaan Lagoon and Knysna Lagoon and no-where else in the world. This specie is on the IUCN Red list of endangered species. Has this species been included in the monitoring process?

Please refer to the response in 1.2 above regarding alien species monitoring.

Looking forward to your response,

David

Monitoring of the Saldanha ADZ

- **Update on Monitoring Programme**
CF: 6th November 2019



Monitoring Programme



Baseline sampling

BASELINE BENTHIC SAMPLING

By: Cap Marine

- Baseline sediment samples collected – Jan to April 2019, 27 stations in total (9 control stations) in Big Bay, Outer Bay North and South.
- Stratified random sampling stations
- Each sample included:
 - Macrofauna sample
 - Goetechnical (grain size, porosity)
 - Geochemical (TOC, N)
 - Geochemical (heavy metals) x 12 (finfish areas)
- pH and redox were also measured although this was not a requirement during baseline. Some samples were above the thresholds (no aquaculture). This sites will be resampled.



Update Monitoring Programme

BASELINE ASSESSMENT: Macrofauna

By: Nina Stefani & CSIR

Scope of work completed in June 2019:

- Nina Stefani: Macrobenthic analysis fixed sediment samples to sort first into broad taxonomic groups and identify into the lowest taxonomic resolution possible and enumerate (count). The data provided should indicate feeding mode per species where known. The samples were pooled over three core samples totalling a sampling area of 0.38m², which is significantly higher than the required 0.2m² indicated in the sampling plan. (27 stations but only 24 samples could be collected for macro-benthos, some stations on rock).
- CSIR: Geotechnical assessment (grain size and porosity) of marine sediment samples. Sediment particle size distribution by dry sieving and porosity is calculated from weight loss of wet sediment on drying at 60°C. (25 samples of the 27 stations, two were rock)
- CSIR: Geochemical analysis of marine sediment samples for TOC (Total Organic Carbon) and nitrogen by elemental analysis (not weight loss on ignition). (25 Samples)
- CSIR: Geochemical analysis of samples for copper, aluminium and zinc using the ICP optical spectrometer after strong acid extraction and microwave digestion (total fraction). (12 samples).
- Data will be analysed with future monitoring.

Update Monitoring Programme

CONTINUES MONITORING

Phytoplankton/Chlorophyl

- Chlorophyl is being monitored continuously by a fluorometer near the mouth of the lagoon.
- Current phytoplankton monitor (food safety programme) assessing size-fractionated chlorophyll for calibration and indication of community shift .
- Oxygen Sensors have been procured. They will be deployed at new lease area for Molapong once they have relocated.

Seal monitoring & research

- Seal populations are monitored around the coast by Oceans and Coasts annually.
- Research appears to indicate decreasing populations in Northern Cape and increasing in the Southern Cape. Potential migration due to changes in distribution of main feed source.
- Seal numbers being monitored on pilot cage project. Number have increased significantly and decreased again in last two months.
- Seal scientist from Oceans & Coasts have been notified and will look at additional information that can be monitored at the fish farm as well as test mitigation measures in a scientifically robust manner.

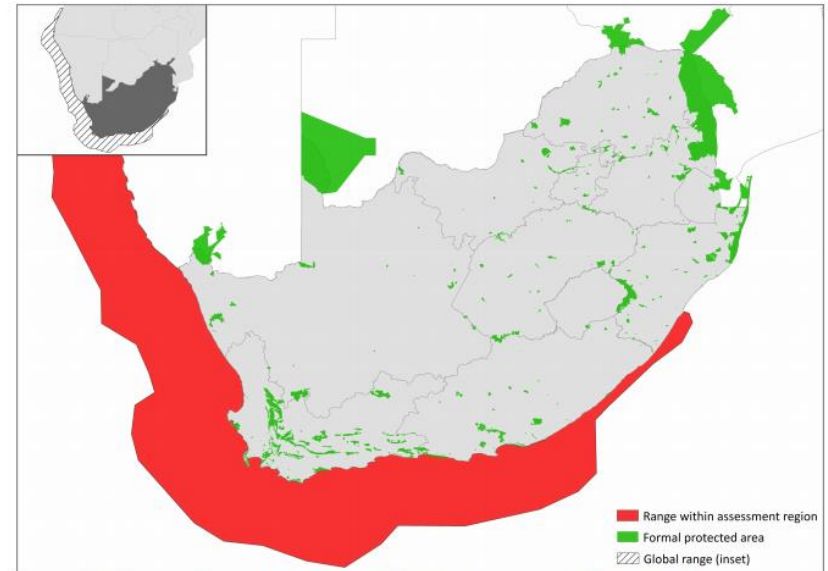


Figure 1. Distribution records for Cape Fur Seal (*Arctocephalus pusillus pusillus*) within the assessment region

Shoreline monitoring and clean up

INNER BAY

- Imbaza mussels, Sea Harvest and some home owners ensure beach clean up once a week in Inner Bay (Most of rubbish collected is litter)
- West Coast Oyster Growers checks for any floats and long-lines twice a week.
- Blue Oceans Mussels checks the causeway.

BIG BAY

- Expanded Public Works Programme does clean up. However, industry is called to remove larger floats when they do wash up along that stretch or in any other area.

NORTH BAY

- Atlantic Royal check north bay beaches for any floats and wash ups on almost daily basis.

