BRANCH FISHERIES MANAGEMENT

SALDANHA BAY AQUACULTURE DEVELOPMENT ZONE (ADZ)
CONSULTATIVE FORUM (CF)

RECORD OF MEETING

Date	**06 February 2020**
Time	**17h00 – 19h00**
Venue	**Boardroom, Multipurpose Centre, 41 Trichardt Street, White City, Saldanha**
Chairperson	**Kelly Armstrong**

All documents referred to in this agenda can be accessed using the following link: https://drive.google.com/drive/folders/1t9dS9Jpab5fU0Hh5l6_Da-YRnINNFWJk?usp=sharing (you may have to copy and paste into your browser manually in order to access the folders)

No.	AGENDA ITEM	Action
1.	**Welcome and introductions** Chair welcomed all to the meeting. The attendees introduced themselves and the organization they represent.	
2.	**Finalization of agenda** No additional items were added to the agenda. Ferdie Endemann (Western Cape Department of Agriculture) and Michelle Pretorius (National Department of Agriculture, Forestry and Fisheries [DAFF]) presented items on behalf of Andrea Bernatzeder (DAFF), who was absent.	
3.	**Presentations**	
3.1	**Rope grown mussel certification** Bokamoso Lebepe (WWF) presented on the Marine Stewardship Council (MSC) certification for mussel farms and the Fish for Good programme. Presentation, pre-assessment of the Saldanha Bay rope grown mussel industry and action plan are available here: https://drive.google.com/open?id=1e_baRvXBse1G6VKvvckFy4q5Bpe9syZY Questions from the floor included the following: • The presentation noted that authorisation by the relevant Government department is still required; however, it was confirmed after the presentation that the ADZ is authorized. Mr Lebepe advised that the information from the initial screening for this project is now out of date, since it was conducted prior to the establishment of the ADZ. The next assessment (to be conducted within the next two years) will provide more current information. • A mussel farmer noted that the industry opted for full MSC certification (achieving "state of the art" status and certification without conditions) as opposed to achieving MSC certification with conditions that the industry has to comply with in order to obtain the full MSC certification. • The Saldanha Bay Water Quality Forum Trust (SBWQFT) representative asked if this presentation can be placed on their website. It was confirmed that the presentation is a public document and can be loaded onto their website.	
3.2	**Molapong's fish escape recovery plan** Dewald Fourie (Molapong) presented Molapong's draft fish escape recovery plan proposed to be implemented to mitigate future possible stock loss. Mr Fourie noted that Molapong's goal is to minimize stock loss. It was noted that the document is in draft format and recommendations for improvement are welcome. The following comments were raised:	ALL

	• Ms Frost (Save Langebaan Lagoon [SLL]) noted that the pilot fish farm has been operating for 3 years and queried what the main causes of net tears and stock loss have been. Mr Fourie stated that seal activity and suspected sabotage at the farm are believed to be the cause of the net tears and stock loss. Molapong records the size, shape and placement of the hole / tear when a tear is identified. • Ms Frost queried why more seals can be found "resting"' on the fish cages versus the mussel rafts in Small Bay. Mr Fourie notes that they are investigating measures in conjunction with the DEA to minimise the seal ingresses and so far there has been a marked reduction in seal numbers over the past 6 weeks. Mr Prins of Blue Ocean Mussels responded that they experience similarly large numbers of seals "resting" on their mussel rafts situated in Small Bay. Molapong noted that they are investigating methods to decrease the number of seals "resting" on the cages. • Ms Frost questioned the use of cable ties to repair the nets (as noted in the plan) as this would be introducing more plastic into the ocean and increase chances of entanglement. Mr Fourie explained that the cable ties are used in an emergency case to keep the net in place temporarily while the divers stitch the nets together as it is very difficult to repair the net without these in place due to the underwater conditions. In some cases, the cable ties have been left on as a secondary precaution. • Ms Frost queried how Molapong stops biofouling. Mr Fourie reported that Molapong are not using antifoulants. Instead, they rotate their fish nets and keep a net and cage maintenance schedule and register. Every eight weeks a net is replaced with a clean net. The used net is taken ashore and cleaned. The nets are changed by lifting the net containing the fish onto the top bracket of the cage and then placing the new net into position, secured on the top and bottom bracket, meaning that when the old net is empty the new net is in its culture position and no further adjustments need to be made. • Ms Frost queried how many fish are stocked in a fish cage at any one time. Mr Fourie responded that Molapong does not manage stock by number of fish, but rather by biomass. The stocking rate should not exceed 20 kg of fish per cubic meter, but Molapong aims to keep stocking density at 12- 15 tons but average on 10tons dependent on the market requirements. • Mr van Wyk (SBWQFT) asked whether it is realistic to expect the recapture of any escaped fish. Mr Fourie noted that it is important that an attempt is made to recapture the fish as the stock has value, in some cases it is possible if the fish shoal around the net or in the vicinity of the cages, while in other cases it is unrealistic if the fish disperse. • Mr Wright (SLL) questioned how much stock has been lost due to suspected sabotage and tears caused other factors. Mr Fourie reported that they have not had fish escapes that they are aware of. Molapong have experienced seal ingress and sabotage. When there is a stressful event the fish will only escape if crowded and are by that means forced out of an opening, thus why Molapong aims to keep our stocking densities low. Furthermore, as the farm manages their stock by density, therefore the number can only be obtained once a fish count is conducted. Counts can be by weight or by a hand count which can be influenced by the mortalities. • A member asked about the frequency of seals entering the fish cages. Mr Fourie stated that they have not recently experienced seals entering the fish cages as they have in the past (since the end of 2019). The structural maintenance of the fish cages is crucial to ensure that seals do not enter the cages as this is results in a loss of stock and has financial implications for the operation. In the previous meeting (06 November 2019) a CF member presented photographs and a video of a seal in a fish cage. Ms Frost again presented the photo of seals in the cage, reportedly taken in October 2019 (as such this is the same incident as discussed at the previous meeting). Ms Frost and Mr Wright were unable to provide the exact date of the photo. Mr Endemann requested that the photographer provide the date of when this incident took place. It was requested that incident reports (providing time and place) from the public and reports from the farm are submitted to the ADZ ECO to enable investigation into the matter. • Ms Frost queried the current depth of the water at the pilot site and the distance between the bottom of the net and the sea floor. The water depth at the pilot site is 14 – 16 m,	Ms Frost and Mr Wright

	the distance between the bottom of the net and the seabed is ±10 m. The depth of the lease area in the ADZ is 2-3 m deeper than the pilot study area this ensures better flushing. • Mr Endemann asked if the lessons learnt in the pilot stage will be taken forward into the ADZ farm. Mr Fourie noted that areas for improvement identified in the pilot stage have been actioned and improved methods have been put into practice and will be carried forward. The key issue which Molapong still face is deterring or preventing predation by seals and suspected sabotage however this is being investigated in collaboration with the DEA. • Mr Fourie confirmed that no shark activity was recorded around the cages. • Molapong would like to align their farming methods to global standards and obtain Aquaculture Stewardship Council (ASC) certification. This process of accreditation requires auditing and compliance with ASC standards. • 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. • Molapong confirmed that they currently and will continue to grow Rainbow trout, not salmon. Trout grow at sea and, once matured, seek freshwater for spawning. Rainbow trout are not able to reproduce in saltwater. In principle they can survive and feed in the bay (saltwater) for around 3 years. Ms Frost noted that the concern regarding the introduction of Salmon is that they are a more predatory fish that could feed on the more docile fish according, to Dr Clark's research. • It was requested that SLL members relay the feedback and information from Molapong to all SLL members.	
4.	**New Matters arising**	
4.1	**Generic mussel EMP presentation** Members requested at the previous CF meeting held on 06 November 2019 there an overview of farm specific EMPs is provided, notably what is included and how they differ from the ADZ EMPr. A mussel farm EMP was used to provide this overview. The presentation is available on the Google Drive: https://drive.google.com/open?id=1UXf4x8Jyoc_rUEkkLjtqbU3i1dq-RBnE Queries which followed the presentation included the following: • Mrs Pretorius confirmed that the presentation can be placed on the SBWQFT website. • Ms Frost questioned the specifics regarding the waste management requirements in the EMPs, e.g. is a waste management license required. Mrs Pretorius noted that waste management measures in the EMPs are requirements for the management of the waste, e.g. where it is being disposed. Mrs Pretorius also noted that the industry is looking to repurpose the waste into animal feed. Currently the waste is going to a landfill. • It was discussed that different farming methods and growing cycles result in different waste shake off. Some methods result in 90% of the fouling is mussel seed (from harvesting process) that can be used in restocking, whilst others experience only 70% based on location in the bay and management on the farm. The industry acknowledged that if 10% to 30% of the waste goes back into the ocean, it will impact on production due to decreased oxygen levels in the water surrounding their farm. The shorter the growth cycle the less shake off is experienced, as less biofouling has built up on the lines. The 30% of waste is experienced with an ~8-month cycle, however the industry is aiming for a ~2-month cycle. Research is currently being conducted regarding the waste impacts of the different methods of production.	

	• If there is a red tide event, the industry is not able to harvest and there is a higher drop off rate.	
4.2	**ADZ ECO report back** The ECO provided a summary of the communication received and logged on the communication register available in the Google Drive folder. Mr Endemann noted that when documents are released for comment it is important to provide constructive feedback that can be used to improve the document rather than providing criticism. The measures in Molapong's EMPr are the same as those in the ADZ EMPr and will be written into the permit conditions. This includes aspects related to net maintenance and tears. Incidents are being reported to the ECO whilst Molapong are not yet in the ADZ. A summary of the documents received and recorded on the document register available on the Google Drive was provided. The ECO provided a summary of the ECO Audit findings over the December 2019 – January 2020 period. The key findings included the following: • ADZ – Level: o Entanglement maintenance and operational guidelines are outstanding. Specialist was appointed to compile this. o A specialist to conduct sampling and analysis will be appointed with the new ECO service provider. • Farms: o Two farms were audited in December: ▪ Molapong was audited against the ADZ EMPr design and construction phase measures. The operator was overall compliant. Non-compliances included the proposed use of yellow buoys to demarcate infrastructure. ▪ A mussel farm in Outer Bay North was found compliant. o Six farms were audited in January 2020: ▪ One of the farms is an expanding farm and was generally compliant with the ADZ EMPr; non-compliances relating to waste disposal were identified. ▪ The remainder of the audited farms have not expanded and were established prior to the ADZ. These farms were audited on the operational measures of the ADZ EMPr to gauge compliance of their farming methods with the EMPr, even though the farms have not yet been formally instructed by DAFF to comply with the ADZ EMPr. Areas of non-compliance included waste management practices; notably lack of recycling and an instant where waste was disposed incorrectly. Some of the farms did not have incident registers.	
4.3	**Progress update on the ADZ** Feedback on progress to date. Presentation is available here: https://drive.google.com/open?id=1GlIT_HNROS5PRkYulubLHWamIFpTKKw0 Monitoring is important, as it informs DEA on whether the increase in production thresholds will be approved after two years of ADZ operation.	
4.4	**Monitoring feedback** Information on monitoring is also covered in the presentation in item 4.3. Mrs Pretorius also noted that when Molapong move into the ADZ there is a requirement that they need to do water quality monitoring and sediment sampling. DAFF is covering some of the sampling plan, however Molapong will also be required to conduct water quality monitoring and sediment sampling as part of their Environmental Authorisation.	
4.5	**Update on allocation of new water space by TNPA** Mr Endemann noted that no new lease space is being allocated. Currently, all the farms that have applied for lease spaces have received their leases; however, they are still awaiting their marine aquaculture rights.	

4.6	**Communicate notice to public** • DAFF, with the assistance of the Saldanha Bay Municipality, placed a notice on the Saldanha Bay Municipality website: https://sbm.gov.za/wp-content/uploads/Pages/Home/Whats_happening/DAFF-advert_-13-Nov-2019_Final-005.pdf • The ECO will inform the CF when the advert in the Weslander has been placed. • The SBWQFT also offered to place the advert on their website. • It was noted by an AMC member that a person reporting an incident should not feel the need to remain anonymous.	DAFF
4.7	**Update on visit by seal specialist to Molapong cages** Mrs Pretorius reported that the DEA mammal scientist and DAFF visited Molapong in November 2019 to investigate the seal ingress into the fish cages, and how Molapong should best deal with this matter. The observations included the following: • The mammal scientist confirmed that most of the seals who were found resting near the cages were pups, who migrate more than older seals who are more resident in nature. • Tagging was not recommended at this point by the mammal scientists. The specialist is going to expand research relating to monitoring of seals and include findings in the suggested mitigations. The DEA specialist is researching the interaction with the seals. DAFF will continue to report on this monitoring and research to the CF. Molapong need to report on the mammal interactions to the ADZ ECO. Molapong has installed electric fencing around one of the cages, which was effective in lowering seal activities. The control of seals continues to be investigated.	
5.	**Discussion**	
5.1	**Any matters arising from the CF** Molapong noted that they need to complete their move into the ADZ by end March 2020. Molapong's mooring plans for the ADZ differ from those used for the pilot study. The mooring plans for the ADZ have been approved by the AMC. Ms Frost queried the decommissioning plan that is required before they commence. *It has been confirmed since the meeting that there is a construction phase requirement for the farms to have a plan and financial provision for decommissioning when / if decommissioning is required.* <u>SBWQFT sediment analysis</u> Mr van Wyk noted that the SBWQFT picked up lead traces in the sediment. The origin of the lead will be investigated. If it is the mine in the area then they have agreed to remediation measures, possibly dredging. Mr van Wyk noted that the industry should ensure that the buildup of organic load does not end up causing similar impacts. Heavy metals are are a concern for shellfish farmers as this accumulates in the tissue and if above the thresholds for human consumption the farm is not able to sell its products. SBWQFT will provide feedback on the investigations into the source of the lead traces. <u>Invasive species</u> Mr Harper referenced Dr Clark's State of the Bay Report, which noted that a highly invasive species of shrimp was found in the bay in April 2019. Industry noted that they are experiencing more concerns around other alien species, believed to have come from ship ballast water. The aquaculture industry is not able to address or manage the invasive species that have come from external sources. Mr Endemann noted that concerns can be logged with the ADZ ECO. Mr Harper reported a species of fish eggs that are being imported into South Africa are contaminated. The fish species could not be provided. More specific information relating to the species and the location should be reported to the ECO. South Africa only allows fish eggs into the country that are from disease free certified suppliers. Molapong indicated that they do not import their eggs these come from their land based facility in a freshwater system and are certified disease free when stocked.	SBWQFT

	It was recommended that the aquaculture industry write to the Port Captain to request information on what types of machines are approved for hull cleaning in the bay. Possibly get Transnet to present their regulations for hull cleaning. CF request that the following is discussed at the AMC with the Transnet representatives, as it has an impact on the state of the bay in general: • Fuel transfer from one ship to another – there was no public participation regarding this; • Descaling of ships in the bay; and • Dredging of channels.	SBWQFT, Aquaculture industry and DAFF
6.	**Way forward** **Action Items:** 1. ADZ ECO to load the presentations from this meeting on to the Google Drive Folder. 2. Molapong's draft fish escape recovery plan is out for comment. Comments can be submitted to the ECO. 3. Ms Frost and Mr Wright should obtain the name of the person who took this footage and the date of the photo and video of the seal ingress into Molapong's cages. 4. DAFF to advertise the communication notice in the Weslander newspaper and notify when the CF of when this will be placed. 5. SBWQFT to provide feedback on the investigations of the sources of the lead traces found in the sediment. 6. DAFF to relay the concerns of the CF regarding hull cleaning in the bay by Transnet to the AMC. **7.** The SBWQFT and the aquaculture industry to approach the Port Captain and raise the concerns relating to the methods of hull cleaning in the Bay.	
7.	**Closure and date of next meeting** **6 May 2020**	