Mara Seaweed Ltd

Seaweed Cultivation Policy Considerations



Details

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Scotland's Seaweed Cultivation Policy Considerations

The Scottish Government supports the sustainable growth of the seaweed cultivation sector as a means to diversify the aquaculture sector. Mara Seaweed Ltd has studied Scotland's Seaweed Cultivation Policy Statement and has considered the policies within. Below is their understanding of those policies.

Policy 1 - In principle, the SG is supportive of small-medium farm seaweed cultivation, subject to regulatory consideration; the General Policies set out in Chapter 4 of Scotland's' National Marine Plan; and any other relevant policies within that Plan. Applications for such seaweed farms should demonstrate that mitigation measures have been considered to prevent adverse environmental impacts, and set out how these will be delivered.

Mara Response – Mara intend to build their farm site up in phased stages. Mara's desire is to have a substantial seaweed farm at the site. To do this, the aim is to deploy up to 20 lines of the 1st phase in Nov/Dec 2022 (now more likely to be late summer 23) to begin seaweed cultivation for a first harvest in April/May 2023 (now likely to be April/May 2024) The 1st phase may not all be deployed in one year.

A 2nd phase is envisaged for the years 2024 or 2025. This will see Mara potentially double the size of the farm to 40 lines. As the seaweed farm begins to provide harvests for Mara's new processing facility in Glenrothes, Mara will evaluate the timing of the 2nd phase of development. If required a review of the impacts of the 1st Phase of the farm can be undertaken before deployment of the 2nd phase.

A 3rd phase in the years 2027 or 2028 will depend on how the market and business grows and these dates are a guide only. If the scale of the farm by the 3rd phase is a concern to the Statutory Consultees, then Mara may separate the 3rd phase into a further license application so full scrutiny can be given to the expansion of the farm.

Full consideration to environmental implications of the farm are set out in the accompanying document "Mara St Andrews Bay Environmental Responsibilities v1.3".

Policy 2 – Only species native to the area where seaweed cultivation will take place should be cultivated, to minimise the risk from non-native species.

Mara Response – Seeded stock of preferred species, most probably *alaria esculenta* (Atlantic Wakame) and *saccharina latissima* (Sugar Kelp) will be sourced from local Fife shore sites which Mara already have Crown Estate Scotland Leases on for seaweed collection. Please follow the link - https://www.crownestatescotland.com/resources/map and zoom in on the east Fife coast. The area shown in light green and notated as Aquaculture, Seaweed, Harvesting are Mara's Crown Estate Scotland Leases. It is from these rocky shores that small amount of fertile seaweed materials will be taken for stock in the seeding process. Full details can be seen in the accompanying document "Mara - Biosecurity Plan".



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Policy 3 – Where seaweed is grown for human consumption, cultivators should site farms away from sewage outfalls and other potential sources of pollution.

Mara Response – the chosen farm site is 5 nautical miles from the coast of east Fife in St Andrews Bay. As such any coastal domestic or Industrial effluent discharges will be greatly diluted by normal coastal water movement.

Policy 4 – Equipment used in seaweed cultivation should be fit for purpose to withstand damage from adverse weather conditions.

Mara Response – a detailed research study was undertaken using Acoustic Doppler Current Profiler (ADCP) technology as well as using 10 years of available weather and sea state data. Sea conditions have been mapped through waveform analysis. Subsequent computer generated farm designs well exceed in robustness the maximumly adverse sea conditions and drag forces they will encounter. We are confident in this as the model demonstrated that maximum stress will be placed on the farm at a wave height of 4-5 metres, and diminishes beyond this (as the load carrying lines are subsurface). The data and reports along with farm designs accompany this Application's additional materials.

Policy 5 - Other marine users and activities should be considered in the siting of farms.

Mara Response – a robust Pre-Application Consultation (PAC) process was undertaken by Mara where many marine users from the Fife area, particularly from the fishing sector, were engaged. Please refer to the accompanying document "Mara - StAB - PAC Report v1.3".

Policy 6 – Small-medium size farming is unlikely to be spatially limited, and may be located anywhere in Scotland, subject to agreement and appropriate local conditions.

Mara Response – Mara have discussed the placement of their proposed farm with the full suite of Statutory Consultees throughout the PAC process. Spatial issues were not seen as an issue with this application due to the offshore nature of the site.

Policy 7 – The SG is supportive of IMTA.

Mara Response – as a business, Mara concentrate of the processing on native seaweeds into high value human food products. At this time, the focus for Mara will be the scaling up of the raw materials for this product line through cultivations of seaweeds at the St Andrews Bay farm. The marine structure Mara will be using is designed to offer optimum seaweed growing conditions. Different marine structures would likely be required to best create optimum growing conditions for other trophic species (mussels, oysters, scallops, sea urchins, sea cucumbers etc). If in future, opportunities present themselves for IMTA to be developed, Mara will consider these and apply for additional trophic license consent through the appropriate Marine Scotland route.

