**Description Kilchoan Algae farm**

The Kilchoan estate is a cultural and educational enterprise. It is focused on ecological restoration, rewilding, and preservation of both the marine and terrestrial habitats for the benefit of the people of Argyll and the world. With the algae farm we want to contribute towards a cleaner environment and a sustainable food source.

**Financial resources**

The cost of installation and operation of the farm will be provided by Kilchoan Management ltd. (6000£)

**Production and strategy plan**

The aim is to cultivate sugar kelp *Laminaria* *saccharina,* the cultivation of the seaweed will run over a full yearly cycle, beginning of deployment August / September 2021 with hopefully regular harvesting throughout the year*.* The farm site will be regularly checked for damage and repairs by Marnik van Cauter who is a full-time employee of Kilchoan Management ltd. The kelp will be harvested 2 times a year, this will be done with hired vessels which are suitable equipped for this kind of work.

**Future plan**

If the trial farm (2 x 60 m lines) proves to be successful, there is a potential to expand within the applied area.

**Decommissioning measures**

In case the lease is terminated- ended, or the farm is unsuccessful. Kilchoan management ltd will be responsible for the decommissioning of the farm. The used anchors will be removed, and the seabed restored to its original state.

**MPA**

The farm is in the Loch Sunart to sound of Jura MPA which has been designated for the protection of the flapper skate. The kelp farm will be a nursery for small fish and will have no impact on the demersal fish species.

**Stakeholders**

Due to the location of the kelp farm being located into the bay there will be no effect for boat traffic. There are no present moorings in the area other than the ones owned by Kilchoan Estate. The area has been monitored since December 2019 and the site location was chosen in an area outside of the usual creel fishing grounds.

**Please note maps**

Mapping undertaken using OSGB36 grid references.

Conversion to ETRS89 via [www.ordnancesurvey.co.uk/gps/transformation](http://www.ordnancesurvey.co.uk/gps/transformation).

A discrepancy of up to 3m may occur in this process and it is recommended OSGB36 is used for plotting.

However, ETRS89 was compared to WGS84 on Memory Map software and discrepancy of 0.002 of a degree was noted and considered negligible.

**Cultivation Equipment**

Trial farm:

- 2 x 60m longlines which are suspended.

- 2 x 20 foam buoys.

- 4 x 100l cushion buoys: Used to tension the lines

- 4 x 2 tonnes concrete anchors.

- 1 x yellow special marker buoys at the Southern seaward corner of the longlines.

-340 meter of seeded lines *(Laminaria saccharina)*

Total farm size: 920 m2

All components are removable.

**Location**

The farm will be in Kilchoan bay, Loch Melford, Argyll and bute, PA34 4XD.

The trial farm coordinates mark the location of the holding anchors for the farm (see map 1-2500).

|  |  |  |
| --- | --- | --- |
| **Site coordinates** | | |
| Trial farm | | |
| A | 56°15’26.345N | 05°33’12.446W |
| B | 56°15’23.985N | 05°33’15.716W |
| C | 56°15’26.131N | 05°33’12.019W |
| D | 56°15’23.803N | 05°33’15.292W |
| Application area | | |
| W | 56°15’29.584N | 05°33’14.607W |
| X | 56°15’29.771N | 05°33’8.112W |
| Y | 56°15’17.487N | 05°33’15.461W |
| Z | 56°15’18.552N | 05°33’21.200W |

-Yellow special marker buoy: N 56.25626°/ W 005.55483°

**Method statement**

August 2021

Day 1: Set 4 anchors with boat and barge supplied by kames fish farm. The deployment of the anchors will done according to Kames HS protocol and marine practice.

Day 2: Dive survey to check moorings and riser rope and installment of longlines.

Day 3: Dive survey final check on moorings and add small cushions buoys and extra weights.

September 2021

Day 1: Seeding lines (weather dependent)

Day 2: Dive survey to see if components are secured.

More information regarding the monitoring of the farm can be found in the ‘Consultation report-1’.