Sustainable Inshore Fisheries Trust

SEAWEED CULTIVATION - REGULATORY VISION

MARCH 2021

SIFT recognises the many socio-economic benefits to be gained from the sustainable development of the seaweed cultivation industry in Scottish waters. We support the progressive expansion of the sector, **provided that** the potential cumulative effects on marine ecosystems and the consequences for other legitimate uses of the marine environment are taken into account. This requires a robust and transparent decision-making process, leading to the imposition of clear, effective, and enforceable conditions on seaweed cultivation in order to remove or minimise the threat of any detrimental impacts of this activity.

To this end, SIFT calls for:

A comprehensive Cost Benefit Analysis of seaweed cultivation

If the Scottish Government is to support expansion of the Scottish seaweed cultivation sector, then there should be an economic appraisal of its policy. The appraisal should be consistent with HM Treasury's Green Book (Central Government Guidance on Appraisal and Evaluation) and address the impact such an expansion would have on other parts of the economy, so that a clear and objective assessment of the net impact can be seen.

Revisions to the Seaweed Cultivation Policy Statement

The 2017 Seaweed Cultivation Policy Statement should be revised to include a number of more detailed and specific policies that align with best international practice on this subject, such as provisions developed by the Aquaculture Stewardship Council (e.g. prohibitions on the use of mutagenic, carcinogenic and teratogenic pesticides and the use of persistent toxins) and the objectives of the UN Global Compact's Seaweed Manifesto.

The revised Seaweed Cultivation Policy Statement should specifically introduce the following new policies:

1. A **prohibition on artificial enrichment** to aid production or for any other reason (in line with existing licence conditions);
2. **A prohibition on the use of mutagenic, carcinogenic and teratogenic pesticides or other persistent toxins**;
3. Safe and effective **mitigation measures to minimise risks of entanglement with marine species,** with mandatory reporting of any entanglements that do occur;
4. Authorities must have regard to **Guidance from NatureScot on the siting and location of seaweed farms** (see below)**;**
5. A requirement for **regular monitoring of seaweed farm equipment** to ensure that it remains fit for purpose and able to withstand damage from adverse weather conditions**;**
6. A requirement for **regular monitoring of the marine environment** in order to ensure that seaweed cultivation does not have an adverse impact upon marine species and nutrient levels;
7. A prohibition on **non-local species being introduced** onto any seaweed cultivation site, with specific guidance on the acceptable distance from which seaweed spores may be collected;
8. A requirement for a **bio-security policy** that addresses the risks of introducing non-local species and potential pathogens to a particular seaweed cultivation facility;
9. Minimum standards for **data-collection across all facilities to allow the Scottish Ministers to practice adaptive management**, as called for in General Policy 20 of the National Marine Plan;
10. A **presumption against seaweed cultivation in locations which are known to contain seabed habitat recognised as a Priority Marine Feature**.

In addition, the current distinction in the Seaweed Cultivation Policy Statement between Small-Medium (with fewer than 50 x 200m lines) and Large seaweed farms (with more than 50 x 200m lines) needs to be revised. The distinction fails to allow for significant factors such as the distance between lines, the question of whether rope lines, nets or sheets are the growing medium, or the possibility that lines may be either longer or shorter than 200m. The distinction between sizes of seaweed farm needs to be based upon the area occupied by the farm.

A new Strategic Environmental Assessment of seaweed cultivation

A revision of the Scottish Government's seaweed cultivation policy should be accompanied by a new Strategic Environmental Assessment (SEA) to update the SEA undertaken in 2013. This would take into account the new scale of proposals and the increasing evidence of potential environmental risks associated with seaweed cultivation.

Revision of the National Marine Plan

Any future revision of the National Marine Plan (NMP) should be used as an opportunity to include a new chapter on seaweed cultivation to reflect the increased importance of this activity within the Scottish marine area and to harmonise the NMP with a revised Seaweed Cultivation Policy Statement (see above). Placing these policies in a revised NMP would ensure that decisions are made in accordance with the policies, unless relevant considerations indicate otherwise.

Identification of seaweed cultivation locations in Regional Marine Plans

Regional Marine Plans should be required to identify locations where seaweed cultivation will be supported, based upon a careful evaluation of impacts upon other marine users and threats to marine ecosystems, taking a precautionary approach. Revisions to the NMP should be used to promote the development of such policies by future Regional Marine Planning Partnerships.

Current drafts of RMPs relating to seaweed are inadequate. For example, the Clyde Pre-Consultation Draft Regional Marine Plan simply provides in POLICY AQUA 2 that '*Applications for the development of seaweed cultivation should demonstrate that proposals are in accordance with the Scottish Government's Seaweed Cultivation Policy Statement and any subsequent guidance and/or planning requirements'*. This provides no guidance to developers or decision-makers as to the opportunities or constraints for seaweed farming at a regional level. To ensure that Regional Marine Plans are useful for developers and decision-makers, Scottish Ministers should issue further guidance on the development of appropriate spatial policies for Regional Marine Plans, in line with the recommendations of the Environment and Climate Change Committee of the Scottish Parliament in their Report on the Development and Implementation of Regional Marine Plans in Scotland (December 2020).

Crown Estate Scotland (CES) Leases

CES has the powers to grant a seabed Lease or Lease Option Agreement (LOA) to any company or individual who submits an application along with an acceptable Business Plan and evidence of adequate funding. There must be clearer guidance regarding the adequacy of these Business Plans and funding to ensure that Leases or LOAs are only granted to appropriately designed developments.

Furthermore, the duration of initial LOAs must be shortened from three years without charge to one year. The granting of a seaweed cultivation LOA effectively sterilises the area subject to the LOA against development of all activities – not solely seaweed farms. Developers that wish to extend the LOA beyond the first year should be entitled to do so, but on payment of an appropriate charge.

Guidance from NatureScot on the siting and development of seaweed cultivation sites

There must be guidance for developers, their consultants and regulatory bodies, on how to minimise risk from the siting and development of seaweed cultivation facilities to the marine environment, other marine users and to the seascape. Accordingly, NatureScot should publish a Guidance Document on Seaweed Cultivation, much as it has done for other commercial developments in marine locations (e.g. *Guidance - Offshore Renewables - Assessing the impact on coastal landscape and seascape* or *Guidance Note - Assessing collision risk between underwater turbines and marine*

wildlife). The Guidance should cover issues including:

- Siting and development in shallow waters;
- Siting and development in areas of weak tidal flow;
- Visual Impact Assessment methodologies.

The seaweed cultivation industry is at an early stage of development and there is not yet consensus on how farms should be designed. For example, there are a variety of growth media for seaweed - long lines, nets and woven sheets (placed either vertically or horizontally in the water), using either mooring ropes or metal frames. Each of these will have different impacts upon the marine environment. In view of this, it is vital that the Guidance is kept under frequent review as the industry, and the technology it deploys, evolves.

Marine Licensing

Pre-application consultations

Pre-application consultation procedures relating to marine licensing should be strengthened to avoid pre-consultation being a 'tick-box exercise'. This could be achieved by requiring a second pre-application consultation event to provide feedback to the public on the views received during the earlier stages of the process, as has been proposed by the Scottish Government for the terrestrial planning process.

An alternative and simpler approach is to require a developer to make its report of the pre-application consultation event (as required under the Marine Licensing (Pre-application consultation) (Scotland) Regulations 2013) publicly available and to send an electronic copy to all registered participants at the event. Such a change would not only increase transparency in the licensing process, but it would allow participants to judge whether their comments had been taken into account and to make further representations to Marine Scotland should they wish. In addition, any other written consultation submissions received by the developer should also be made publicly available, either directly by the developer or along with the marine licence application on the Marine Scotland website.

Consultation with local authorities

Local authorities should be given a greater role in the seaweed cultivation licensing process in order to ensure more local democratic input. Moreover, local authorities do have a role in the development of on-shore seaweed facilities, such as seaweed drying and processing facilities which are an integral part of the seaweed cultivation business and therefore their involvement in marine licence applications would permit a coherent approach to development consent. One option is to put seaweed aquaculture in the same position as finfish and shellfish aquaculture by requiring planning permission for such developments. However, this approach would require an amendment to the planning legislation and it would significantly increase the administrative burden on seaweed farms.

An alternative and more pragmatic approach is to designate relevant local planning authorities as statutory consultees who the Scottish Ministers must consult prior to determining a licence application. This could be easily achieved by an amendment to the Marine Licensing (Consultees) (Scotland) Order 2011 and it would promote coherence with other regulatory regimes, as local authorities are already involved in an advisory role on marine developments which are covered by The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

Environmental Impact Assessments

Seaweed cultivation must be included under Schedule 2 of the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 in order to ensure a more rigorous assessment of environmental impacts for larger sites. Such a change will address the current gap in the legislation which currently lists '*projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes*' in schedule 2 but only lists '*intensive fish farming*' as a relevant aquaculture project susceptible to EIA.

Cumulative Impacts
The Scottish Ministers should expressly take into account any cumulative impacts of multiple seaweed farms in the same area when determining an individual licence application in accordance with General Policy 21 of the NMP. To assist decision-makers in carrying out this process, the Application Form for an algal farm marine licence should be amended to explicitly require applicants to identify potential cumulative impacts and to demonstrate how cumulative impacts have been taken into account in designing the proposed facility.

Transparency
It is vital that all documents relating to licence applications (such as a Biosecurity Plans) are published on the Marine Scotland Licence Applications website page.

Enforcement
There must be an enforcement policy which sets out a framework through which marine licence conditions will be monitored, inspected, and enforced. There should be an annual fee charged for licences, with the revenue raised contributing to the cost of enforcement. This approach to cost recovery is adopted in other industries, including the fishing industry, and has been the subject of detailed proposals (in the context of fisheries enforcement) by SIFT (Management costs).

Seaweed cultivation in Marine Protected Areas and other designated sites
Greater care needs to be taken towards authorisation of seaweed cultivation facilities sited within a Nature Conservation MPA or other site designated for nature conservation or historic preservation purposes. There is currently no general prohibition on the cultivation of seaweeds in designated sites. However, there is understood to be pressure from the seaweed cultivation industry to develop farms in such areas, as this would generate less resistance from the mobile gear fishing industry.

To achieve a precautionary approach to the protection of these important sites, decision-making authorities must impose stringent requirements that licence applicants:

- subject the entire proposed site to comprehensive benthic surveys;
- provide evidence that no harm will be done to protected features of the site or to other priority marine features located in the area;
- ensure there is ongoing regular monitoring across the entire licenced site. The drafting of licence conditions addressing frequency and timing of monitoring must take into account any seasonality of the protected features of the site and the different activities (such as seeding or harvesting) in the cultivation process;
- require that there be prompt remedial action where harm is identified.

Integrated Multi-Trophic Aquaculture (IMTA)
IMTA, which uses seaweed to absorb excess nutrients escaping from fish farms, may become a significant driver of seaweed cultivation. However, IMTA's potential to enable the further expansion of fish farming raises a range of regulatory questions relating to licences for sites cultivating multiple species, the purpose of CES leases, and how finfish aquaculture Controlled Activities Licences may need to be adjusted. SIFT believes these should be addressed by the finfish aquaculture regulatory regime.