Session 14: Inshore Fisheries

Moving aquaculture offshore: The developing landscape and multiple benefits

Presentation to the **Ocean Recovery** Online Conference 21st January 2021



Presentation contents

1. The developing landscape

- Why move aquaculture offshore?
- The strategic planning framework
- 2. The challenges and development needs
 - Rapid expansion of economic and conservation activities in English waters
 - Case study: Offshore wind farms
 - Specific challenges to moving aquaculture offshore
- 3. Approaches, co-existence and next steps
 - Current and emerging state of art
 - Coexistence with other maritime activities
 - The way forward



The developing landscape
Why move aquaculture offshore?
The strategic planning framework

- The developing landscape
- 1. Why move aquaculture offshore?
- Crowded inshore waters
- Vulnerable to terrestrial pollution
- Dynamic and changeable
 environmental conditions
- Poor flushing rates



Photo: Erik Woolcott / Sea Grown Ltd.

The developing landscape

- 2. The strategic planning framework
- English Aquaculture Strategy (2021 – 2040)
- Regional aquaculture strategies
- Marine Plans under the Marine and Coastal Access Act (2009)

 Marine Management Organisation

 South West Inshore and South West Offshore Marine Plan

 Draft for consultation

 January 2020

 Dorset

 Marine Value

 Strategy



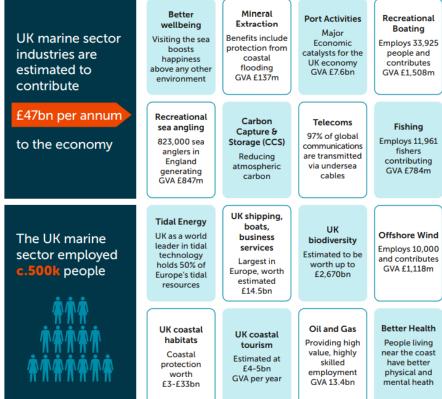
2020	English Aquaculture Strategy 2021 - 2040
Dorset Mariculture Strategy	Final Report
2020-2025	November 2020 SEAFOOD 2040
Dorset & East Devon Aquaculture	

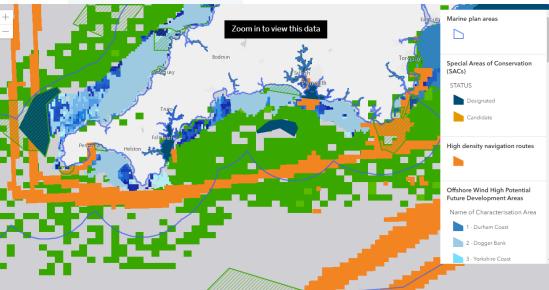
The challenges and development needs Rapid expansion of economic and conservation activities in English waters Case study: Offshore wind farms Specific challenges to moving aquaculture offshore

Moving aquaculture offshore: The developing

landscape and multiple benefits

- The challenges and development needs
- 1. Rapid expansion of economic and conservation activities in English waters
- Competition for sea space will become increasingly competitive
- The area set aside for environmental conservation is also set to increase, most likely with greater restrictions for extractive activities therein.

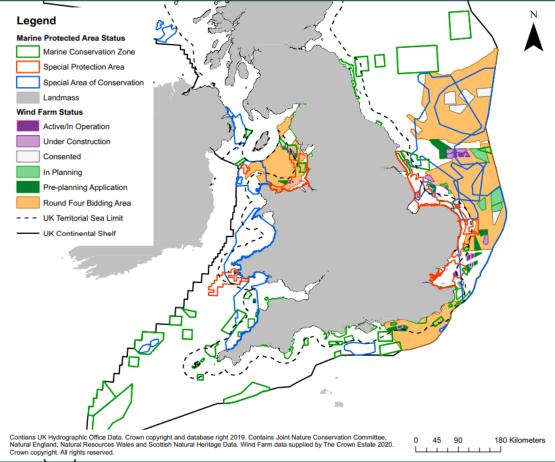




The challenges and development needs

2. Case study: Offshore wind farms

- The Offshore Wind Sector has the ambition to power one third of British electricity with offshore wind by 2030
- Currently mostly focused in the shallower North Sea, but will move deeper and further offshore



Source: Benyon Review Into Highly Protected Marine Areas.

The challenges and development needs

- 3. Specific challenges to moving aquaculture offshore waters
- Hostile physical environment
- Logistical challenges
- Lack of knowledge and information

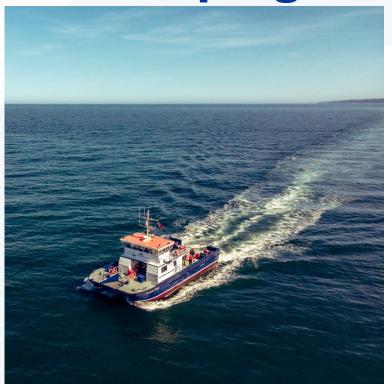


Photo: Erik Woolcott / Sea Grown Ltd.

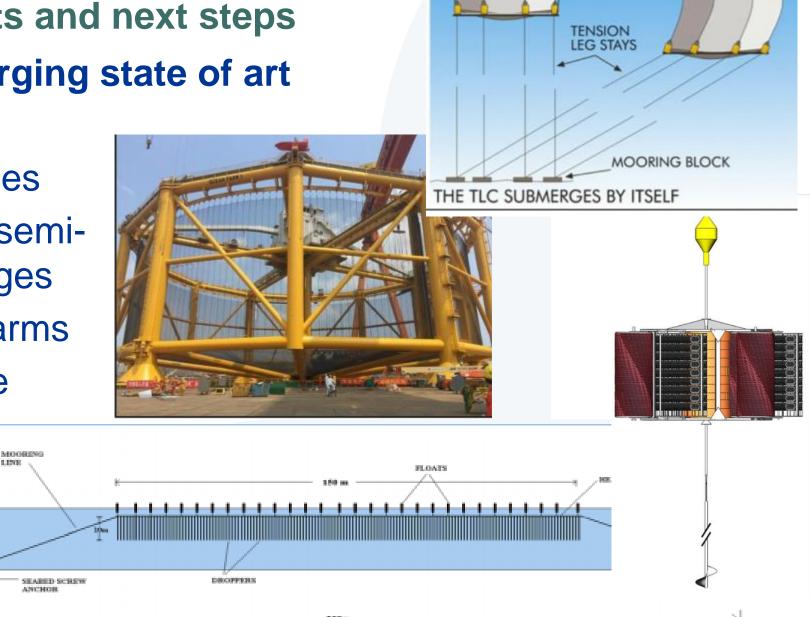
Approaches, benefits and next steps

- Current and emerging state of art
- Coexistence with other maritime activities
- The way forward

Moving aquaculture offshore: The developing landscape and multiple benefits UPPER CONICAL NET

Approaches, benefits and next steps

- 1. Current and emerging state of art
- Finfish
 - Tension leg cages
 - Submersible & semisubmersible cages
 - Vessel-based farms
- Shellfish and algae
 - Longlines
 - Submerged towers



PRINCIPAL NET-PEN

Moving aquaculture offshore: The developing

SOSSEC

System

Buoyancy

Lonaline

Mooring

Mussels

landscape and multiple benefits

Approaches, benefits and next steps

- 2. Coexistence with other maritime activities
- Capture fisheries
 - Co-location
 - Stock enhancement
 - Habitat protection
- Renewable energy
 - Co-location
 - o CSR



Pvlon O

Seaweed/Mussel Culture Mooring

Offshore-Ring





Longline

Approaches, benefits and next steps

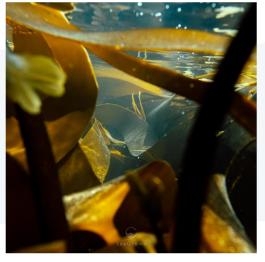
- 3. Next steps
- Support the pioneers
- Build alliances and partnerships
- Support the development of the English 'Blue economy'

Offshore Shellfish Ltd.



Dorset Coast Forum / Butterfly Effect Films / Dorset Cleaner Fish

Erik Woolcott / Sea Grown Ltd.



Tim Huntington - tim@consult-poseidon.com

consult-poseidon.com

