



Several and Regulating Orders Management Plan

Applicants for Several and Regulating Orders are required to submit a management plan for a minimum five year period. Applicants must undertake to improve the cultivation/management of the fishery.

- The purpose of the management plan is to establish what you intend to achieve through the granting of an Order. It will enable us to assess the merits of your application and will constitute a tool against which performance in the fishery can be monitored. If conditions in the fishery change so that the plan is no longer relevant, you will need to let us know and draw up a new one.
- Please complete all relevant sections after reading the Notes for Guidance on Several/Regulating Order applications (NIS 3), using additional sheets of paper as necessary. Send the completed form and the other application documents listed in the Checklist on page 6 to the address given above.
- Please note that English Nature are consulted about all applications for Several and Regulating Orders. In some circumstances they make recommendations regarding the proposed activity at the site. You are advised to consult all interested parties before you apply.

General details

Please give the applicant's:

- official name

Wash Mussels Limited

- full postal address

62 Burnham Road
Leigh-on-Sea
Essex

SS9 2JS

- telephone number
(including national dialling code)

01702 480730

- fax number
(including national dialling code)

0870 7058950

What is the location and size of area, in hectares, of the site?

This Application and Management Plan relate to five mussel lay plots along entirely subtidal, but marginal areas of the Stour Estuary (Essex & Suffolk). The size of the plots ranges from 10 ha to 34 ha, totalling 84 ha.

For details of the locations, including coordinates, of these five plots see Table 1 on page 8 of the Environmental Statement.

What kind of Order are you applying for and which species will it cover?

A Several Fishery Order under the Sea Fisheries (Shellfish) Act 1967 (as amended) for a Trial Fishery for Blue mussel *Mytilus edulis* (only). No other species will be targeted, although crabs will be caught on the beds as part of the predator/pest control measures and treated as an additional commercial species (subject to a separate fishing licence application).

How long do you want the Order to last? Please explain why.

Initially for a period of five years only, as this is a Trial Mussel Fishery. Annual monitoring will establish whether the fishery is environmentally benign and sustainable, whilst also being economically viable. However, the Environmental Statement (ES) and the Supplementary ES contain already comprehensive lists of strict mitigation measures that will ensure no adverse effect(s) on features of nature conservation interest and on the integrity of this European Marine Site (Special Protection Area), designated under the EC Habitats Directive 1992.

Please give details of any businesses or activities, including other fisheries, currently operating on, or in the vicinity of, the site (you should make such parties aware of your proposals at an early stage). Please explain how the Order is likely to affect them.

There are currently no businesses or activities operating in or on the sites. Careful consideration was given to the choice of sites in order to prevent adverse impacts on nature conservation interests and human activities.

A small oyster fishery has taken place sporadically over the years. The proposed mussel lay plots, however, do not overlap with any oyster beds. Should Native oysters be encountered when harvesting the mussels, these would be returned to known Native oyster beds.

A report submitted to the Eastern Sea Fisheries Committee in November 2004 stated in relation to the estuary *"On a local scale, a small number of commercial fishing vessels operate within the estuaries on a part time basis, and angling from boat and shore is undertaken by local and visiting anglers. Some unregulated gill-net fishing is also undertaken within the estuaries, when fish are caught in gill-nets for personal consumption, but illegal gill-netting is also conducted for black-market profit (it is illegal to sell the catch from unlicensed netting activity, but it has proved difficult to eradicate this practice)."* Because of the nature of the mussel mariculture and the proposed locations of the mussel lays, it is unlikely that the mussel culture will come into any conflict with any legitimate fishery interests, such as gill-netting. The general effect of a Several Fishery Order for mussels is to restrain the use of fishing gear which would be environmentally damaging.

continued

Please give the last three years' annual production figures of the fishery by volume and value.

To our knowledge, there has not been any shellfish production in the past ten years. Survey information (Section 3 in Environmental Statement) suggests that there has most probably never been any active mariculture in the Stour Estuary. Based on the work carried out by our consultant, it is anticipated that this trial fishery will successfully demonstrate the suitability and capacity of the Stour Estuary to contribute in particular to the implementation of the reformed EU Common Fisheries Policy and UK Government Policy in general in respect of environmentally sustainable and economically viable Shellfish Production Businesses.

Please give details of any consultations with interested parties to date, including any objections raised and any agreements reached regarding future use of the fishery. Has this Management Plan been agreed with English Nature?

Natural England (NE) was consulted on the original Environmental Statement (ES). NE's response letter can be found in Appendix I of the Supplementary ES. The letter states that *"Natural England is broadly satisfied with the scope of the Environmental Statement."* and *"Overall, Natural England welcomes the extensive discussion and thorough mitigation proposals."* No objections were raised, except for some queries and requests for further information. All of these were subsequently addressed in the Supplementary ES.

Continued from Page 2 Box 2

Please give details of any businesses or activities, including other fisheries, currently operating on, or in the vicinity of, the site (you should make such parties aware of your proposals at an early stage). Please explain how the Order is likely to affect them.

The Stour and Orwell Estuaries European Marine Site Management Scheme (2003) states:

“Little commercial fishing activity takes place within the estuaries. Large boats are banned within the 12-mile limit and even the smaller boats only tend to come into the estuaries during periods of bad weather.”

“The presence of wild beds of native oysters (*Ostrea edulis*) enhances the environmental importance of the site and the Eastern Sea Fisheries Joint Committee will ensure that the gathering of this species, if permitted, would be carried out in accordance with national Biodiversity Action Plan guidelines as well as the Habitat Regulations.”

“There is no known commercial hand gathering of shellfish taking place within the estuaries at present. This is because shellfish are not readily accessible to hand gatherers around the estuaries, especially in numbers large enough to warrant a commercial operation.”

A number of studies of disturbance regarding wildfowl and waders have been undertaken on the Stour Estuary. In respect of wildfowling along the margins of the Estuary, there appears to be a general consensus (incl. BTO) that it is at a lower level (in term of events) than many other potentially disturbing activities, such as dog walking and jetskis. Indeed at a longer time scale there is anecdotal evidence which suggests that wildfowling is either stable or decreasing on the Stour.

See also Section 3 of the Environmental Statement (ES) and Section 7 of the Supplementary ES for further details on the natural and anthropogenic characteristics of the Stour Estuary.

The Trial Mussel Severe Order will not affect any businesses or activities in, on or in the vicinity of the sites.

■ Cultivation and Management Practices

Please give details of the following:

- **for a Several fishery (or the Several areas of a Hybrid Order)**
 - proposed method of cultivation (e.g. inter tidal; sub-tidal; ground, trestles (trays, bags); floating; long-line; suspended);
 - husbandry plans (e.g. control of pests/fouling organisms; removal of sediment; provision of cultch; establishment of artificial reefs; general stocking densities);
 - supply of seed (natural resources available as seed; hatchery reared stock);
 - harvesting methods; and
 - estimated production of each species to be cultivated for the first five years of the Order.

PROPOSED METHOD OF CULTIVATION

Cultivation will be by way of subtidal bottom lays only. No structures will be required.

HUSBANDRY PLANS

N.B. See also Section 4 in the Environmental Statement (ES) and Sections 9, 11 and 14 of the Supplementary ES for further details.

Setting up: Before relaying seed mussel for the first time, the plots will be 'cleaned' with a Dutch-style mussel dredge (for details see Section 4.6 in the ES and Section 11 of the Supplementary ES), foremost to remove predators and pests, in particular Slipper limpets that are very abundant on Plot 5.

Relaying of seed mussel: Mussel seed relaying will be carried out immediately subsequent to seed mussel gathering. Targeted precision relaying of seed mussel by boat will be achieved by using a GPS to areas that will also have been temporarily marked by buoys.

Control of predators/pests: Only crabs, starfish and slipper limpets are of relevance to this application. Crabs will be caught by way of baited pots (subject to a separate fishing licence application) and removed from the fishery as an additional commercial species. It is envisaged that starfish mops will be employed at times of high starfish infestation of the beds. This gear entangles starfish which are then recovered, removed and disposed of alive outside any marine protected areas. Slipper limpets will be removed by way of dredging prior to the relaying of seed mussel and at harvesting. These will then be disposed of in EA licensed landfill sites. Furthermore, should non-native wild Pacific oysters be encountered that have been recorded as having settled in the Stour Estuary (Source: Eastern IFCA), these will be removed and retained.

Stocking densities: General stocking densities will not exceed 5 kg per m².

Supply of seed mussel: Seed mussel will be sourced from local, ephemeral beds that are abundant along the coast of East Anglia, such as at Cromer, Great Yarmouth and Ramsgate. Whilst there are also significant seed mussel resources in The Wash and around Carmarthen Bay (South Wales), these will not be targeted, chiefly because of the annually recurring atypical cockle mortalities there and the very high risk of transferring pathogens from these areas to the Stour Estuary.

Harvesting methods: Harvesting will be dictated by growth and sizes, but it is envisaged that this will occur 12 to 18 months after relaying. The mussels will be harvested by mussel dredgers with one or two dredges on each vessel. Two types of steel frames will be used: the Dutch-style mussel dredge and the Box dredge. Depending on the local conditions on a lay, for instance quantity of mussels, type of substrate (whether muddy or sandy), etc., it will be decided which type of dredge to deploy at that stage. The mussel dredges are equipped with a bar to prevent bottom penetration. This design was developed to only skim the sediment surface and not penetrate it whilst removing the mussels.

Estimated production of Blue mussels for the first five years of the Order: A maximum of 2,100 tonnes per annum, ca. 10,000 tonnes over 5 years.

■ Cultivation and Management Practices continued

- for a Regulated fishery (or the Several areas of a Hybrid Order)
 - proposed regulations and restrictions to be applied to the fishery;
 - number of licences likely to be issued against each likely demand, and the criteria you intend to use to allocate licences;
 - proposed harvesting methods; and
 - estimated landings for each species to be cultivated for the first five years of the Order.

Not applicable, as this is an application for a Trial Mussel Several Fishery Order only.

■ For BOTH several and Regulated fisheries

Please explain your plan for the enforcement and monitoring of the Order and evaluation of the aims of the Management Plan.

For further details of the management of this Trial Mussel Several Fishery Order in the Stour Estuary, please refer to the Environmental Statement (August 2012) and the Supplementary Environmental Statement (September 2013).

We are going to keep detailed records of the locations, distribution, amount and size of relayed seed mussels within the plots which will be marked with buoys. This will also be applicable for the harvesting operations. Records of possible losses due to predation, adverse weather conditions and smothering by way of sedimentation will also be kept.

The mussel lay plots are situated in two Inshore Fisheries and Conservation Agency (IFCA) districts, *i.e.* the Eastern IFCA and the Kent & Essex IFCA. This will be beneficial for regulatory purposes as Section 7 of the Sea Fisheries (Shellfish) Act 1967 (as amended) is enforceable by IFCAs as well as by the Grantee of the Order.

Enforcement of any interference with the mussel stocks within the boundaries of the Fishery Order will be undertaken by the Grantee: Section 7 of the Sea Fisheries (Shellfish) Act 1967 (as amended) creates both a criminal offence and a civil wrong which (as advised by Ministers) can be enforced not only by the Grantee of the Order, but also by the IFCAs and other public bodies. Furthermore, our contacts along the Stour Estuary will be informed of the locations of the mussel plots, so we can be alerted should activities take place that will affect the mussel lays, *i.e.* foremost poaching.

Annual monitoring by drop-down video, always along the same pre-determined transects and the recording of by-catch, followed by an annual review of the data features as part of the mitigation measures and Management Plan. The recording of by-catch data was included to ascertain an important facet of the sustainability of this trial fishery. Furthermore, should we decide in the future to apply for Marine Stewardship Council status, by-catch recording would be one of the conditions. The plots will also be inspected annually by way of SCUBA-diving.

No monitoring of bird disturbance will be required, because the high tide roosts are not proximal to the subtidal mussel lays.

In general, the management of this trial fishery will be subject to Principle 3 of the Marine Stewardship Council's guidelines for a responsible and sustainable fishery from the very beginning:

PRINCIPLE 3 – "THE FISHERY IS SUBJECT TO AN EFFECTIVE MANAGEMENT SYSTEM THAT RESPECTS LOCAL, NATIONAL AND INTERNATIONAL LAWS AND STANDARDS AND INCORPORATES INSTITUTIONAL AND OPERATIONAL FRAMEWORKS THAT REQUIRE USE OF THE RESOURCE TO BE RESPONSIBLE AND SUSTAINABLE."

The annually gathered monitoring data will no doubt be of great value to regulators and nature conservation agencies and will assist in decision-making and advice. Consequently these data will be submitted to Defra, Cefas, IFCAs, Natural England, and the findings also made available to Natural Resources Wales, Scottish Natural Heritage and Seafish.

We shall adhere strictly to all measures in the agreed Management Plan (MP)

■ Hygiene and disease

Directive 91/492/EC requires classification of shellfish harvesting areas. What is the current hygiene classification status of the area to be covered by the Order? Has any part of the site been designated under the Shellfish Waters Directive (79/923/EEC)? Please give details.

The Stour Estuary has been designated as a Shellfish Water under the Shellfish Waters Directive (79/923/EEC). However, the only known classification appears to relate to the small and sporadic Native oyster fishery. Between 2002 and 2006 this classification has been "B". In 2001 the classification was provisional on account of limited sampling, indicative of low levels of fishing activity. We do not know whether the Native oyster fishery is still active, as the Stour is a recommended Marine Conservation Zone and Native oyster beds are one of the features. A Cefas Sanitary Survey Report does not appear to be available (yet?).

Please give details of any history of shellfish disease problems (e.g. bonamia, marfanella) in the area.

Not applicable, as no incidents known. For details of the proposed Biosecurity measures, see Section 5 in the Environmental Statement (ES) and Section 6 in the Supplementary ES.

■ The environment

Has any part of the site been designated as, or will the Order impact on:

- a Special Area of Conservation (SAC) under the Habitats Directive?
- a Site of Special Scientific Interest (SSSI)?
- a protected wetland under the Ramsar Convention?

YES NO
YES NO
YES NO

If YES please give details:

The Stour Estuary, its habitats and species, are subject to a plethora of national, European and international nature conservation designations (for details see relevant sections in the Environmental Statement and Supplementary ES):

- (1) Stour and Orwell Estuaries Special Protection Area (Section 7.2 in ES and Section 3 in Supplementary ES)
- (2) Stour and Orwell Estuaries Ramsar Site (Section 7.3 in ES)
- (3) Stour and Orwell Estuaries recommended Marine Conservation Zone (Section 7.4 in ES and Section 5 & 9 in Supplementary ES)
- (4) Stour Estuary Site of Special Scientific Interest (Section 7.5 in ES)
- (5) BAP Habitat: Sheltered muddy gravels (Section 7.6 in ES)
- (6) Nationally Scarce Species: Tentacled lagoon worm *Alkmaria romijni* and Starlet sea anemone *Nematostella vectensis* (Section 7.7 in ES)

All of these designations with their respective features, plus BAP habitats and species and nationally scarce species, have been described and considered in detail (Sections 6 – 8 in the ES), including their distribution and sensitivities (Sections 3.2 & 3.3 in ES), within the Environmental Statement (and Supplementary ES) and comprehensive and appropriate mitigation measures have been proposed (Sections 6.3 & 8.2 in ES).

Please give any other relevant information.

The Environmental Statement has taken full account of the Conservation Objectives for the Stour and Orwell Estuary European Marine Site, as contained in English Nature's advice given under Regulation 33(2) of the Conservation (Natural Habitats &c.) Regulations 1994 (issued 23 January 2001). Consequently, a statement to inform a Habitats Regulations Assessment (HRA) under Regulation 61 of The Conservation of Habitats and Species Regulations 2010 (as amended) has also been provided in Section 8 of the Environmental Statement. It assesses the potential impacts on the Special Protection Area and Ramsar Site and recommends mitigation measures that will prevent adverse effect on site integrity.

■ Checklist of documents to accompany the Management Plan

- | | Tick box |
|---|-------------------------------------|
| ● Your completed Management Plan application form (FIS 3A) | <input checked="" type="checkbox"/> |
| ● Two copies of the Admiralty chart of the area | <input checked="" type="checkbox"/> |
| ● All necessary consents | <input type="checkbox"/> |
| ● For companies incorporated under the Companies act, a copy of the Memorandum and Articles of Association and any Special Resolution | <input checked="" type="checkbox"/> |
| ● For other corporate bodies, copies of relevant instruments of incorporation, charter or local Acts of Parliament | <input type="checkbox"/> |
| ● Additional sheets | <input checked="" type="checkbox"/> |

Data Protection Act 1998

Defra will use this information, including personal data, provided on form FIS 3A (Severall & Regulating Orders Management Plan) primarily for purposes of considering applications and the issuing and monitoring of Severall and/or Regulating Orders as described in form FIS 3 (Notes for Guidance).

Defra may also use the information, including personal data and annual return figures, for other legitimate purposes including Disease control (both in monitoring and outbreak situations) and compliance with quotas and other fisheries restrictions. The information may also be disclosed to other Fisheries Departments in the UK, their agencies and authorised agents and to other government departments for these same purposes.

Information (including personal data) may also be released on request, including under the Environmental Information Regulations, the Code of Practice on Access to Government Information and the Freedom of Information Act 2000.

Defra or its appointed agents may contact you in connection with occasional customer research aimed at improving the services that Defra provides to you.

Signature

G. D. Osborne
 Graham Osborne, Director, Wash Mussels Limited

Date

2/1/2014

Please now send this form and the documents listed above to the Department for Environment, Food and Rural Affairs at the address given on the front page