# 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 (FIS 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

THE TOLLESBURY & MERSEA NATIVE OYSTER FISHERY COMPANY LTD

- Registered address; 15 High Street West Mersea Essex CO5 8QA Correspondence address: 154a Coast Road West Mersea CO5 8NX
- full postal address

• Telephone number

07596632254

•	What is the location and size of area, in hectares, of the site?	River Blackwater. Map attached. Approx 1266 hectares. This area is determined by mean low water and therefore is liable to vary.
•	What kind of Order are you applying for and which species will it cover?	Several Fishery Order Native oysters – Ostrea edulis Gigas oysters – Crassostrea gigas ) Hard shell clams - Mercenaria mercenaria ) for purposes of control of pests and Mussels – Mytiloida ) invasive species
•	How long do you want the Order to last? Please explain why.	Twenty years. The cultivation of the ground and management of the native oysters is an ongoing process and the quantity and quality produced can alter annually due to stressors such as weather ie temperature and rainfall. Native oysters are a slow growing creature and can take up to five years to reach maturity. Therefore, a Several Order of less than 25 years would not enable us to plan and adapt as necessary to see the results of any major investment made.

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.

Within the Several Order ground trawling and gill netting may occur.

Within the vicinity of the Several Order there is oyster cultivation in the upper part of the river Blackwater (Maldon Oysters), the river Colne (Colchester Oyster Fishery) as well as surrounding creeks by individual oyster growers. There is also dredging in the neighbouring public fishery when allowed by local bye-laws. The Several Order being held by The Company has not affected any of these fisheries in the past and there is no foreseeable reason why this would change.

The Essex Native Oyster Restoration Initiative (ENORI) has an area neighbouring the Several Order ground and we are working closely with them, supplying young native brood oysters and helping and advising with regard trials of cultch, harvesting etc with the aim of increasing the spatfall and number of native oysters within the MCZ.

Pleasure boat activity is practiced throughout the whole of the area and this is not affected by the management of the Several Order.

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

2017/2018 – 2240 kg sold at £3/kg = £6,720.00 2016/2017 – 2366 kg sold at £3/kg = £7,098.00 2015/2016 - 2547 kg sold at £4.06/kg = £10,340

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?

Letters informing possible concerned organisations, societies, clubs and government departments have been sent out informing them of our intention to renew the Several Order and requesting their support for our application. A full list of addressees with any comments is attached. No objections have been received.

No objection has been received from English Nature at the time of this submission.

## ■ 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;
  - o provision of cultch; establishment of artificial reefs; general stocking densities);
  - o 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.

**Method of Cultivation:** Maintenance of sub-tidal oyster stock by cleaning and harvesting by ground dredging will continue together with adaptive management methods mentioned below to create suitable areas for spatfall.

Husbandry Plans: Control of pests and non-native species ie gigas, clams, mussels, starfish, American tingles.

Gigas may be dredged in areas where they are abundant. Otherwise gigas, clams, mussels, and starfish will be destroyed as and when found in the dredge. Traps for American tingles (roof tiles placed on the mud and tied down), have been put down in certain areas to collect tingle spawn. Any oysters dredged up with spawn are destroyed. Harrows will be used for cleaning to help break up the formation of C.fornicata (slipper limpet) chains.

Bonamia is present in certain areas of the Several Order and care is taken that all equipment is cleaned before any dredging or cleaning is undertaken in the areas clear of bonamia. Regular testing for bonamia is undertaken by Cefas.

**Provision of Cultch**: Currently cultch is moved within the Several Order as required. Should it be necessary to introduce it from elsewhere, under current legislation a licence would have to be applied for.

Cultch usually takes the form of old native or gigas shells or slipper limpets. Trials are being looked at within a neighbouring ENORI restoration box for the use of mussel and cockle shell and these maybe used in the future if the trials are successful. The cultch is usually laid on the oyster beds prior to spatfall having been stored on land for some months or even years to kill off any creatures native or otherwise to prevent spread of non-native species and disease. The cultch is sometimes crushed before laying to enable greater coverage and more area for spatfall.

**Supply of Seed:** Under an adaptive management framework, The Company are creating three Conservation boxes in which the native oyster will not be harvested, with the aim of establishing an untouched spawning stock. The control of invasive species will be undertaken by occasional dredging of the Conservation boxes.

Seed or spat is naturally occurring during the early summer. Prior to this time the managed oyster beds are readied for the spat by being cleaned, invasive species removed and if necessary cultch being laid. After a successful spatfall the areas are left for twelve months to protect the newly settled juveniles. By having areas such as the Conservation boxes and not over harvesting the Fisheries boxes, the amount of spat will be maximised as much as possible. The spatfall is very susceptible to changes in water temperature, weather and pollution, stressors that are not controllable. Spatfall should occur every year but is dependent upon these factors as is the amount of spatfall.

Continued below...

#### Cultivation and Management Practices continued \_

- for a Regulated fishery (or the Several areas of a Hybrid Order)
  - $\circ \quad$  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
  - $\circ$  estimated landings for each species to be cultivated for the first five years of the Order

Not applicable

#### Cultivation and Management Practices cont'd from above

**Harvesting Methods:** The oysters are dredged using a ladder dredge with a maximum width of 2.43m and fitted with skegs on the bottom to prevent damage to the sea bed. Dredges with teeth are not allowed within the area of the Several Order.

We are currently working with the University of Essex to see how quickly the oyster beds recover after dredging. Filming, side sonar and grab samples (looking at the type and amount of species) have been undertaken prior to dredging. After dredging this was repeated taking grab samples also from a control area. Further filming and samples will be taken over the next year. It may be that, dependent upon the results, the dredge shape and size could be re-evaluated.

**Estimated Production:** We would be looking to harvest 20% of the size 1 (>70mm) to sell. On the basis of our latest stock survey this would be about 16,000kg in the first year. Thereafter we would aim for similar figures but this would depend upon the maturity of the younger stock being reached against possible adverse conditions such as weather and disease.

A stock survey was undertaken in September 2018 showing good numbers of native oysters. We hope that by using the data and methods adopted over the last two decades and adaptive management mentioned above, the stock numbers will continue to increase.

The management plan is looking at the next 25 years (duration of the new Several Order) but as mentioned above, the natural sensitivity of the spat and native oyster to water temperature, weather and disease will mean that our management plan will be reviewed during each year and amended accordingly to take in the effect these stressors have had on the spatfall and oyster growth during the course of the year.

### 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.

The boundaries of the Several Order are marked and regularly maintained by the use of withies and buoys. Neighbouring river users have been informed of the boundary and the meaning of the withies and marker buoys.

The aim of The Company in having the Several Order is to:

- a) Maintain breeding populations and spawning stock above the minimum levels.
- b) Establish brood stock areas.
- c) Clean and separate native oyster shell, break up slipper limpet chains.
- d) Removal of invasive species.
- e) Laying of cultch in areas where it is being lost.
- f) Work with the University of Essex to assess stock levels, ground recovery, the effect of bonamia on native oyster growth, to monitor water temperature and veliger density within the water column to ensure ground is prepared in time ready to receive the spat and to determine tingle spawning areas to prevent spread.
- g) Assess sediment loading on subtidal mixed sediment.
- h) Work with Anglian Water and Essex Native Oyster Restoration Initiative (ENORI) to encourage high water quality.
- i) Sell stock to ENORI to establish brood stock areas in line with conservation objectives and management plan within the MCZ.
- j) Work with EDF with regard the new nuclear power station at Bradwell.

### ■ 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?

Class B.

Please give details of any history of shellfish disease problems (e.g. Bonamia, Marteilia, OsHV-1) in the area.

Bonamia has been present in the river Blackwater since the 1980s. The river is tested annually and shows reducing levels of incidence.

OsHV-1 – has been seen in gigas but has not been present for several years.

Marteilia – has never been recorded in this area.

# The environment

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

- A Special Area of Conservation (SAC)?
- A Special Protected Area (SPA)?
- A Site of Special Scientific Interest (SSSI)?
- A protected wetland under the Ramsar Convention?

If **YES** please give details of the Habitats Regulation Assessment that has been conducted:

The Several Order area is under SAC and SPA status. Areas of SSSI are adjacent but not included in the Several Order area. Ramsar Convention – The Blackwater is a Ramsar site down to the intertidal zone. The Several Order is within a Marine Conservation Zone (MCZ).

A Habitat Regulation Assessment has been conducted and is attached.

#### Checklist of documents to accompany the Management Plan

- □ Your completed Management Plan application form (FIS 3A)
- □ Two copies of the Admiralty chart of the area marked with the Order area (or an electronic version)
- □ All necessary consents
- □ For companies incorporated under the Companies act, a copy of the Memorandum and Articles of Association and any Special Resolution
- □ For other corporate bodies, copies of relevant instruments of incorporation, charter or local Acts of Parliament
- □ Any additional sheets with supporting information, including the Habitats Regulation Assessment where appropriate

#### General Data Protection Regulation (GDPR)

Defra will use this information, including personal data, provided on form FIS 3A (Several & Regulating Orders Management Plan) primarily for purposes of considering applications and the issuing and monitoring of Several 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 regulatory requirements and fisheries data reporting. 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.

ignature	Date
	Please now send this form and the documents listed above to:
	Michael Gubbins Department for Environment, Food and Rural Affairs Fish Health Inspectorate Cefas Laboratory Barrack Road Weymouth Dorset DT5 1AE
	Or by email to: <u>Michael.gubbins@defra.gsi.gov.uk</u>