Cornwall IFCA
Inshore Fisheries and Conservation Authority

Fal Fishery Order 2016
Biosecurity Plan

Completed by: Cornwall Inshore Fisheries and Conservation Authority (Cornwall IFCA)

Authors: Kate Owen, Colin Trundle, Annie Jenkin, Steph Sturgeon, Hilary Stidwell and Kimara Street

Document Control

Title	Cornwall IFCA Fal Fishery Order 2016 Biosecurity Plan
Author	K Owen
Approver	C Trundle
Owner	Cornwall IFCA
Version	Final
Date of final report	07/10/2021

Revision History

Date	Author	Version	Status	Reason
27/11/2018	K Owen	0.1	Draft	Updates to the 2015 plan
18/07/2019	A Jenkin, S Sturgeon	0.1_QA	Draft	QA
06/10/2021	C Trundle	Final	Final	Minor text revision

Cited as:

Owen, K., Trundle, C., Jenkin, A., Sturgeon, S and Stidwell, H. 2019. Fal Fishery Order 2016 Biosecurity Plan. Cornwall Inshore Fisheries and Conservation Authority (Cornwall IFCA), Hayle.

This document has been produced by Cornwall Inshore Fisheries and Conservation Authority (Cornwall IFCA)

Cornwall IFCA
Office 2,
Chi Gallos
Hayle Marine Renewables Business Park
North Quay
Hayle
Cornwall
TR27 4DD

Tel: 01736 336842 Email: enquiries@cornwall-ifca.gov.uk

Contents

List of Figures

List of Tables

1 Introduction

Biosecurity can be defined as measures taken to identify, prevent, or reduce the risk of diseases and/or non-native species from being transported to and establishing in areas where they are not currently present.

Biosecurity is a responsibility for everyone working in the shellfish harvesting industries. It is necessary at all levels; from the control of disease and pests at an international level, to the implementation of national controls, and finally down to best practice biosecurity measures carried out locally.

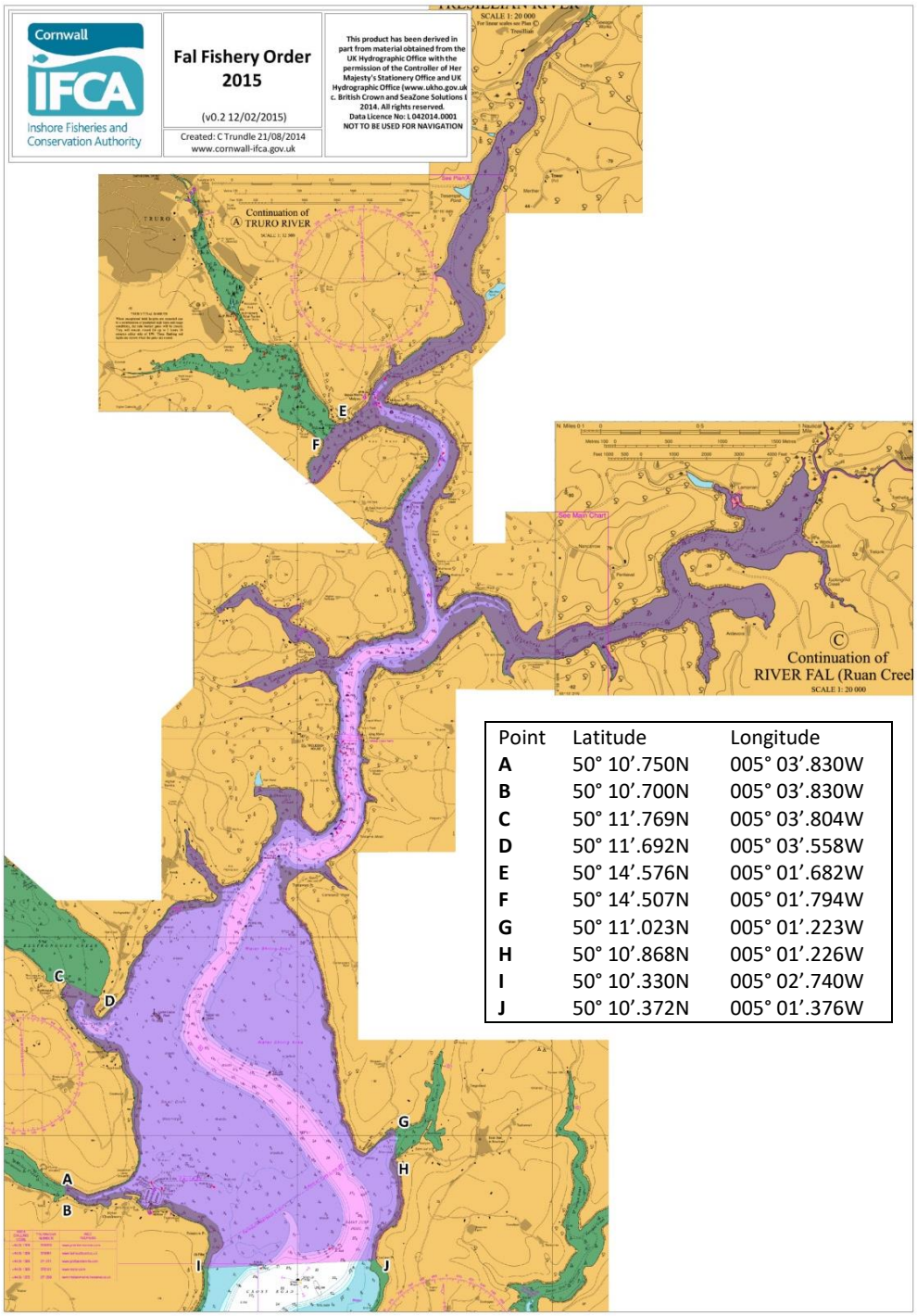
The Aquatic Animal Health (England & Wales) Regulations 2009 highlights the role of biosecurity planning in controlling the spread of shellfish diseases. Accordingly it places a legal responsibility on Aquaculture Production Businesses (APB) to adopt biosecurity plans as a condition of their licence.

The Fal Oyster Fishery is a wild capture fishery with no recognised APB operating 'on bed' culture within the Fishery. Therefore there is no legal requirement for a biosecurity plan to be in place. However, Cornwall IFCA in its role as the Grantee of the Regulating Order, took the decision in 2015 to have a biosecurity plan as a best practice measure as part of the management of the Fishery. This version of the biosecurity plan is an update to the 2015 biosecurity plan and will work alongside the Cornwall IFCA Biosecurity Plan (Owen *et al.,* 2019) for the whole Cornwall IFCA district.

1.1 The Fal Oyster Fishery

The Fal Oyster Fishery operates in the Fal Estuary on the south coast of Cornwall (Figure 1) and is managed by Cornwall IFCA through the Fal Fishery Order 2016. The Fal Estuary itself is part of the Fal and Helford Special Area of Conservation (SAC) and is also part of the Falmouth Bay to St Austell Bay Special Protection Area (SPA).

The Fal Oyster Fishery is exploited by sail and oar powered vessels only, using hand hauled dredges to target native oysters (*Ostrea edulis*), blue mussels (*Mytulis edulis*) and since 2017 the Variegated scallop (*Mimachlamys varia*) between 1st October and 31st March. There is also year-round gathering of shellfish by hand from the intertidal areas. Under the Fal Fishery Order 2016, a person must not dredge for, fish for or take oysters or mussels in the fishery area unless licensed to do so by the Authority. Monthly catch statistics are required to be completed by every licence holder, as stipulated in the Regulations. Changes to the Regulations in 2017 removed 'queen' scallops (*Aequipecten opercularis* and *Mimachlamys varia)* and pacific oysters (*Magallana gigas*) from any by-catch restriction there had been under the original Regulations. Since 2017 landings of 'queen' scallops in the fishery have increased significantly and they are now one of the main target species.



Point	Latitude	Longitude
A	50° 10’.750N	005° 03’.830W
B	50° 10’.700N	005° 03’.830W
C	50° 11’.769N	005° 03’.804W
D	50° 11’.692N	005° 03’.558W
E	50° 14’.576N	005° 01’.682W
F	50° 14’.507N	005° 01’.794W
G	50° 11’.023N	005° 01’.223W
H	50° 10’.868N	005° 01’.226W
I	50° 10’.330N	005° 02’.740W
J	50° 10’.372N	005° 01’.376W

Figure 1: Map showing the areas of the Fal estuary covered by the Fal Fishery Order 2016

1.2 Biosecurity Plan

Invasive non-native species (INNS) are those which have become established outside of their natural range and are having a significant negative impact on native species and their habitats. The introduction of shellfish disease or the introduction of INNS could pose a serious risk to the viability of the Fal Oyster Fishery. Therefore it is important that the biosecurity plan for the Fal Oyster Fishery is regularly reviewed.

This Fal Oyster Fishery Biosecurity plan is separated into five sections;

- Identified biosecurity risks to the fishery
- Mitigation of the identified biosecurity risks
- Monitoring plan
- Contingency plan
- Established INNS

1.2.1 Identified Risks

The main vectors for shellfish disease and INNS to enter the Fal Oyster Fishery are listed below:

- Live shellfish laid in the Fal Oyster Fishery Area from other areas
- Shellfish transported from other areas to purification tanks where water outflows into the Fal Oyster Fishery
- Fishing vessels from other areas operating within the Fal Oyster Fishery
- Commercial vessels from other areas operating within the Fal Oyster Fishery
- Recreational water users moving in and out of the fishery area

1.2.2 Mitigation of the identified risks

Prevention of shellfish diseases and INNS entering an area is the most effective biosecurity tool. Controlling or eradicating either from an area once established can be very difficult. The following mitigation measures (Table 1) are designed to reduce the risk of shellfish diseases and INNS entering the Fal Oyster Fishery.

Table 1: Identified biosecurity risks to the Fal Oyster Fishery and mitigation measures

Identified Risk	Mechanism	Mitigation Measure
Live shellfish moved into the Fal Oyster Fishery from other areas	Transported shellfish introduce disease into the Fal Oyster Fishery	Any proposal to introduce shellfish from other areas into the Fal Oyster Fishery must have authorisation from Cornwall IFCA. This proposal must be accompanied by a declaration of the source product. Prior to issuing an authorisation to introduce shellfish, Cornwall IFCA may investigate the origin of the stock and assessing any potential risks from its introduction. This may involve requesting the supplier's Biosecurity Measures Plan (BMP). An appropriate Habitats Regulation Assessment (HRA) will also be requested by Cornwall IFCA, who can assist with its production. However, it is the legal responsibility of the person introducing the shellfish to ensure it is free of disease or would lead to the introduction of non-native species in contravention of Sec 9 of the wildlife and Countryside Act 1981. If Cornwall IFCA becomes aware of any current shellfish disease threats these will be communicated to the Fish Health Inspectorate and all licence holders in the most appropriate manner, alongside best practice biosecurity measures. This information will also be displayed on the Cornwall IFCA website. Cornwall IFCA will also ensure licence holders are aware of the control area for *Bonamia ostreae* on the south coast (Map and link to more details in Annex 3) and the control area for *Martelia refringens* in the River Tamar (Map and link to more details in Annex 4).

Live shellfish moved into the Fal Oyster Fishery area from other areas	INNS 'hitch-hike' with transported shellfish	If licence holders import shellfish stock from other areas they are responsible for investigating the origin of the stock and any potential risks from its introduction. This includes assessing whether the shellfish come from an area with known INNS which are not present in the Fal area.
Shellfish transported from other areas to purification tanks where water outflows into the Fal Oyster Fishery	Shellfish disease introduced to the fishery area through the water outflow	Water from shellfish purification tanks should be disinfected before outflowing into the Fal Estuary. Outflow of recirculation systems should be controlled by the conditions of the necessary APB licence, or by any required discharge consent.
Fishing vessels from other areas operating within the Fal Oyster Fishery	Introduction of shellfish disease or INNS on either fishing gear or the vessel itself	The Fal Oyster Fishery is generally worked by local fishermen and boats from other areas are unlikely to work in the fishery. However, vessels in other fisheries will work both inside and outside of the fishery area. Cornwall IFCA will promote good biosecurity practices where possible.
Commercial vessels from other areas operating within the Fal Oyster Fishery	Introduction of INNS through ships ballast water or hitch-hiking on vessel hulls	Commercial vessels working internationally should already be following International Marine Organisation (IMO) legislation regarding their ballast water management. This means ballast water should not be exchanged in coastal waters. All commercial vessels should be regularly de-fouled and will be coated in ant-fouling paint, however this is outside of the jurisdiction of Cornwall IFCA.
Recreational water users moving in and out of the fishery area	INNS may hitch-hike on the hull of water craft. This includes (but is not limited to); vessels, kayaks, paddleboards and windsurfing boards.	There are a number of biosecurity campaigns targeting recreational water users which should be promoted where possible by Cornwall IFCA officers. These include the 'Check, Clean, Dry' campaign from the GB Non-Native Species Secretariat and 'The Green Blue' environmental program from the Royal Yachting Association (RYA). Both campaigns will

		be promoted on the biosecurity page on the Cornwall IFCA website.

1.2.3 Monitoring

Early detection will be critical in the event of a shellfish disease or INNS species arriving in the Fal Oyster Fishery. The following monitoring measures are therefore very important:

Licence Holders

- Licence holders should regularly inspect their private beds for signs of elevated mortalities and note signs of elevated mortalities during fishing operations. Unusual or high mortalities to be reported to Cornwall IFCA (contact details in Annex 1).
- Licence holders should also report the presence of any new INNS on their oyster beds, or species observed during fishing, to Cornwall IFCA.

Cornwall IFCA

- Cornwall IFCA officers to look for signs of mortalities and INNS during routine inspections carried out within the fishery, in addition to the annual Fal oyster fishery survey.
- Cornwall IFCA to maintain records of all inspections and surveys.
- Cornwall IFCA to investigate all reports of elevated mortalities and INNS and maintain records of these reports.

1.2.4 Contingency Plan

If new diseases or INNS are identified in the fishery then a rapid response from Cornwall IFCA will be critical.

Shellfish Disease

Immediate response:

- Inform the Fish Health Inspectorate and Port Health of the nature of the outbreak (contact details in Annex 1).
- Brief all Cornwall IFCA officers of the presence of any disease outbreak, its effects and methods for reducing the spread of the disease.
- Inform all licence holders, by the most appropriate means, of the presence of a disease and what actions they can take to reduce the spread of the disease.
- Place information on the Cornwall IFCA website providing details of how to prevent the further spread of the disease.

Determining the source and extent of outbreak and controlling spread:

- Cornwall IFCA officers to assist in identifying both the source and the extent of the disease through surveys, sampling and inspections.
- Invoke temporary closures within the Fishery to prevent the movement of vessels from spreading the disease.
- Revoke any licences or authorisations to fish or lay any stock within the Fishery to prevent any further spread of the disease.

- Record the sighting on the MBA recording page and relevant 'alert' page if it is a national alert species (Details in Annex 2).
- If the species is considered 'high-risk' for either the Fal Oyster Fishery itself, or wider fisheries within the district, then further action will be required by Cornwall IFCA. High risk species include (but are not limited to); Chinese mitten crab *(Eriocheir sinensis),* carpet sea squirt (*Didemnum vexillum*), Asian shore crabs (*Hemigrapsus sanguineus* and *Hemigrapsus takanoi*) and American lobster (*Homarus americanus*). Response to 'high-risk' species will need to be consulted with Natural England, Marine Management Organisation (MMO) and Centre for Environment, Fisheries and Aquaculture Science (Cefas).
- Draft species information and advice to be disseminated to license holders and to go on the Cornwall IFCA website. This should include species identification information, details of who to contact if they are caught and advice on what to do with the specimen. Advice should also include relevant biosecurity measures, to avoid spreading the INNS. This information will vary with species and should be drafted using best knowledge at the time.

1.2.5 Established INNS

Estuaries are known to be 'hot-spots' for the introduction of INNS and there are already well-established non-native species present in the Fal Oyster Fishery. These include (but are not limited to) the slipper limpet (*Crepidula fornicata),* pacific oyster (*Magallana gigas*), leathery sea squirt (*Styela clava*) and numerous species of seaweed.

Cornwall IFCA would not attempt to eradicate INNS unless as part of a national program. It is widely accepted that prevention is the best tool, as eradication attempts are very costly and difficult.

Cornwall IFCA will continue to monitor the presence of species which may interact with the Fishery. Monitoring slipper limpet abundance has now been incorporated into the annual Fal oyster survey and all slipper limpets collected are disposed of properly back on land. Since the change in 2017 in the Regulations under the Fal Fishery Order 2016 pacific oysters cannot be returned to the Fishery once caught and their presence will be also be monitored as a non-native in the annual survey.

1.3 Review

This biosecurity plan will be reviewed in conjunction with the district wide biosecurity plan in 2024 in five years' time and thereafter on a five-year rolling program. However, if there are any significant outbreaks of shellfish disease, either nationally or in the Fal, then a sooner review will likely be required. Likewise if new INNS establish in the Fal then a review of this plan may be required.

Annex 1: Contact Details

Cornwall IFCA

Office 2,

Chi Gallos,

Hayle Marine Renewables Park

North Quay

Hayle

01736 336 842 / enquiries@cornwall-ifca.gov.uk

Fish Heath Inspectorate (Cefas)

Fish Health Inspectorate

Barrack Road

The Nothe

Weymouth

Dorset

DT4 8UB

01305 206 700 / fhi@cefas.co.uk

Cornwall Port Health

Port Health Office

The Docks

Falmouth

Cornwall

TR11 4NR

01872 323090 / porthealth@cornwall.gov.uk

Marine Management Organisation

Chi Gallos,

Hayle Marine Renewables Park

North Quay

Hayle

01736 757303

INNS

MBA recording page for INNS: mba.ac.uk/recording/

GB NNSS recording page for alert species: nonnativespecies.org/index.cfm?sectionid=81

Alternatively alert species can be emailed to: alertnonnative@ceh.ac.uk.

Annex 2: Further information

Fal Oyster Fishery

www.cornwall-ifca.gov.uk/fal-fishery

Fish Health Inspectorate

www.gov.uk/government/groups/fish-health-inspectorate

Cornwall Port Health

www.cornwall.gov.uk/environment-and-planning/cornwall-port-health-authority/

Shellfish disease and biosecurity best practice

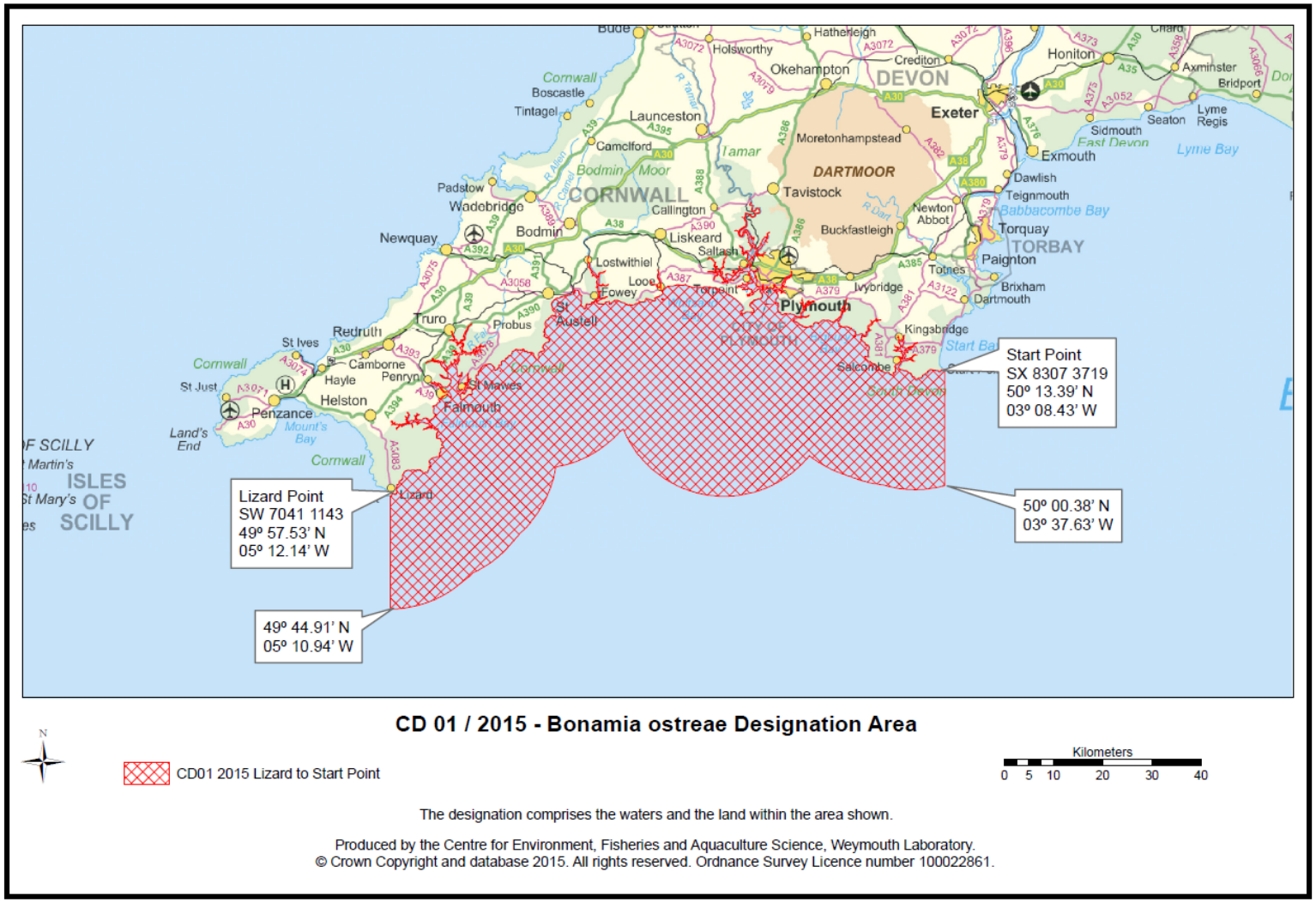
www.gov.uk/guidance/prevent-fish-or-shellfish-diseases#serious-fish-and-shellfish-diseases

www.marinescience.blog.gov.uk/2015/07/17/shellfish-diseases-how-to-prevent-spread/

Invasive non-native species:

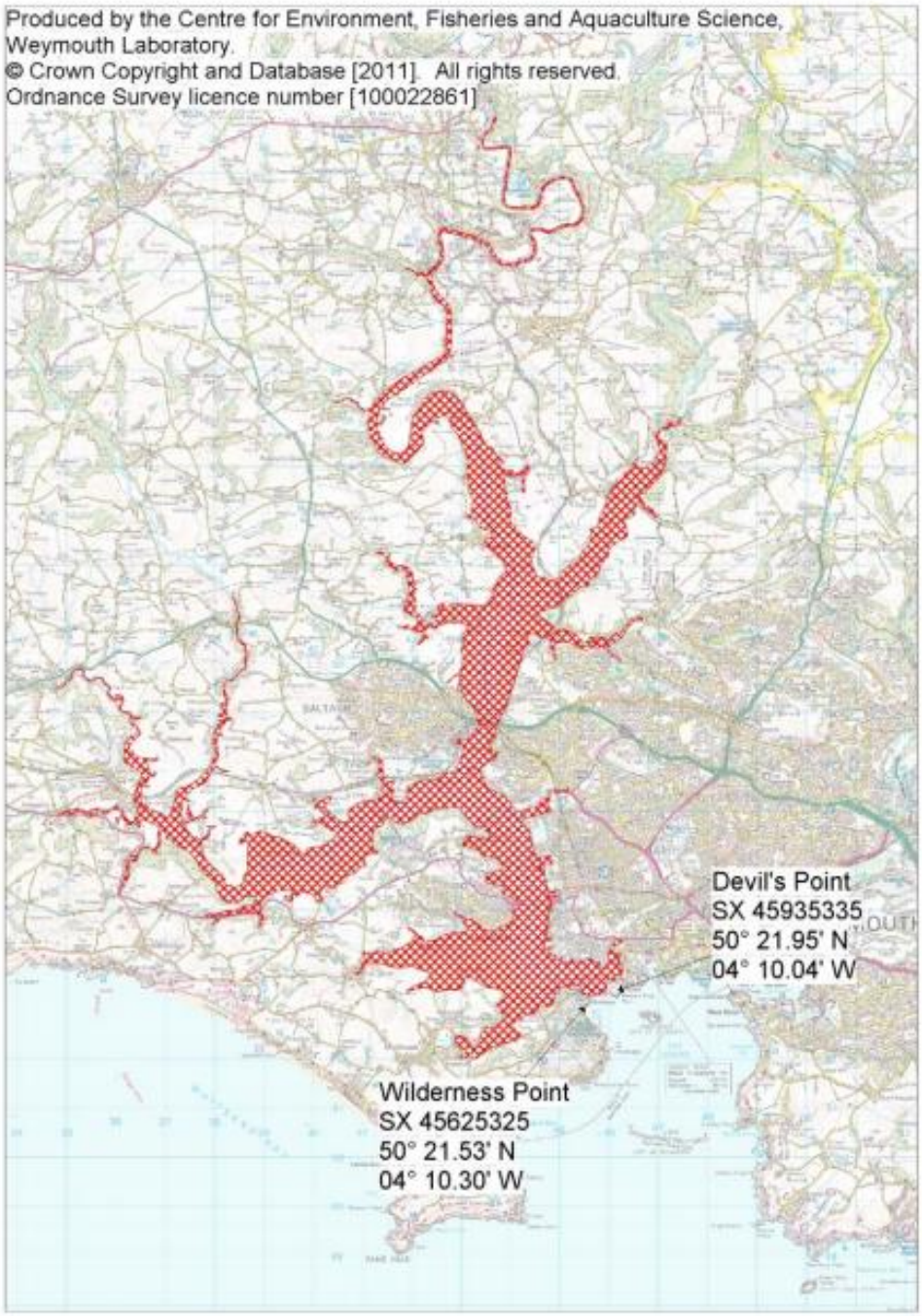
GB Non-Native Species Secretariat: www.nonnativespecies.org

Annex 3: *Bonamia ostreae* control area



Annex Figure A: Bonamia ostreae control area. Available from:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/545850/Devon_Cornwall_Bonamia_Ostreae_CD01.pdf [Accessed: 27/11/2018]

Annex 4: *Martelia refringens* control area



Annex Figure B: Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/466273/River_Tamar_Cornwall_and_Devon.pdf [Accessed: 27/11/2018]