

Marine Conservation Zone Assessment

Site name:	Tamar Estuary MCZ UKMO 20130023
Protected feature(s):	Intertidal biogenic reefs Intertidal coarse sediment Blue mussel (<i>Mytilus edulis</i>) beds Native oyster (<i>Ostrea edulis</i>)

Fishing activities assessed at this site:

Screening Assessment

Intertidal handwork: Handwork (access from vessel)

Intertidal handwork: Handwork (access from land)

Static – pots/traps: Pots/ creels

Static – pots/traps: Cuttlepots

Static – pots/traps: Fish traps

Lines: Longlines (demersal)

Lines: Handlines (rod/ gurdy etc.)

Lines: Jigging/ trolling

Miscellaneous: Commercial diving



D&S IFCA Reference
TAM-MCZ-001

Contents

1. Introduction	3
2. MCZ site name(s), and location	3
3. Feature(s) / habitat(s) of conservation importance (FOCI/HOCI) and conservation objectives.	3
Table 1: Protected features relevant to this assessment	3
4. Gear/feature interaction in the MCZ categorised as 'red' risk and overview of management measure	3
5. Activities under consideration	3
6. Is there a risk that activities are hindering the conservation objectives of the MCZ?	4
7. Can D&S IFCA exercise its functions to further the conservation objectives of the site?	4
8. Referenced supporting information to inform assessment	5
9. In-combination assessment	5
Table 2: Relevant activities occurring in or close to the site.....	5
10. NE consultation response	5
11. Conclusion	6
12. Summary table	7
13. References.....	9
Annex 1: Site Map(s)	10
Figure 1 – Tamar Estuary MCZ showing habitat types and species records	10
Annex 2: Pressures Audit Trail.....	11

1. Introduction

This assessment has been undertaken by Devon & Severn Inshore Fisheries and Conservation Authority (IFCA) in order to document and determine whether management measures are required to achieve the conservation objectives of marine conservation zones (MCZs). The IFCA's responsibilities in relation to management of MCZs are laid out in Sections 124 to 126, & 154 to 157 of the Marine and Coastal Access Act 2009.

2. MCZ site name(s), and location

The Tamar Estuary MCZs are located in two spatially separate areas. The MCZs cover an area of approximately 15km² and include the upper reaches of the Tamar and Lynher estuaries of South Devon and Cornwall. As this site crosses the border between Devon & Severn IFCA and Cornwall IFCA, this assessment will be solely for the Tamar Estuary MCZ in Devon & Severn IFCA district.

Further information regarding the MCZ and its protected feature can be found in the Tamar Estuary MCZ Factsheet¹.

3. Feature(s) / habitat(s) of conservation importance (FOCI/HOCI) and conservation objectives

Table 1: Protected features relevant to this assessment

Feature	General management approach
Intertidal biogenic reefs	Maintain to favourable condition
Intertidal coarse sediment	Maintain to favourable condition
Blue mussel (<i>Mytilus edulis</i>) beds	Maintain to favourable condition
Native oyster (<i>Ostrea edulis</i>)	Recover to favourable condition

The conservation objectives for these features are that they are brought to, and remain in, favourable condition.

4. Gear/feature interaction in the MCZ categorised as 'red' risk and overview of management measure

None – this site has no gear-feature interactions categorised as “red” risk. Under the Devon and Severn IFCA Mobile Fishing Permit Byelaw, which came into place on 1st January 2014, vessels using mobile fishing gear are prohibited from Plymouth Sound and Estuaries SAC. This protects the reef feature of the EMS and as the Tamar MCZ co-locates with the site, the MCZ features are also protected from demersal towed gear.

5. Activities under consideration

- Intertidal handwork: Handwork (access from vessel)
- Intertidal handwork: Handwork (access from land)
- Static – pots/ traps: Pots/ creels
- Static – pots/ traps: Cuttlepots
- Static – pots/ traps: Fish traps
- Lines: Longlines (demersal)

¹ MCZ Factsheet <http://publications.naturalengland.org.uk/category/1721481>

- Lines: Handlines (rod/ gurdy etc.)
- Lines: Jigging/ trolling
- Miscellaneous: Commercial diving

6. Is there a risk that activities are hindering the conservation objectives of the MCZ?

No,

Evidence:

Intertidal handwork:

- Handworking (access from vessel & land) is thought to be occurring at a low level and is predominantly for recreational purposes, as there are very few shellfish beds to gather from on this site. There is a prohibited classified shellfish harvesting area for all species within the Tamar (Cefas, 2015). The Food Standards Agency current shellfish classification (2015-2016) designated prohibited areas in Plymouth for bivalve harvesting or production includes the Tamar (all beds above Henn Point). D&S IFCA carried out a year long bait collection survey in 2014/2015 and during which found no evidence of handworking activity within the site. There are no sightings data for this activity and D&S IFCA are not aware of any commercial hand gatherers operating within the MCZ.

Static - pots/ traps:

- These activities are not thought to be occurring in the MCZ. However there is no evidence to confirm that they are definitely not occurring at low levels, so they cannot be completely ruled out. D&S IFCA has a Potting Permit byelaw in place and currently twelve permits are issued for commercial vessels with the base port of Plymouth, although these vessels are thought to operate outside of the MCZ.

Lines:

- Commercial line fishing is not thought to be occurring in the MCZ. There is only one known commercial long-liner operating near the site that works around the mouth of the Tamar, but not as far up as the MCZ. There is no record of commercial line fishing within the MCZ, however, there is no evidence to confirm that these activities are not occurring, so they cannot be completely ruled out.

Commercial diving:

- Commercial diving activity is not thought to be occurring in the MCZ. However there is no evidence to confirm that it is definitely not occurring at a low level, so it cannot be completely ruled out. Currently 11 commercial diving permits have been issued by D&S IFCA under the Diving Permit Byelaw to fish within the D&S IFCA District. These 11 permit holders are all based in south Devon and have base ports of one at Axmouth, two at Beesands, four at Dartmouth, one at West Bay, one at Brixham and two at Lyme Regis. Without a permit it is prohibited to remove a crab (*Cancer pagarus* or *Maja squinado*) lobster (*Homarus gammarus* or *Palinurus elephas*) and scallop (*Pecten maximus*) under the D&S IFCA Diving Permit Byelaw. Diving means any underwater swimming activity.

See Davies (2016) for more information regarding fishing activities occurring in Torbay MCZ.

7. Can D&S IFCA exercise its functions to further the conservation objectives of the site?

Yes,

Evidence:

- Enforcement of current byelaws
- Monitoring and review of current byelaws

- With the Diving Permit Byelaw, D&S IFCA can monitor the numbers of commercial divers in the district.
- The Potting Permit Byelaw can gauge where any future changes or developments may occur.
- Through the IFCA's Byelaw Review process, D&S IFCA will be reviewing all byelaws relating to hand-gathering. There is the intention to create a permitting byelaw that covers hand-gathering, which would allow the IFCA to monitor levels of this activity in the future, and adapt permit conditions to changes in effort/ environmental conditions if necessary.
- Changes can be made to the permit conditions, via consultation, if the D&S IFCA deems it to be necessary. This could include limitations or spatial/temporal restrictions. The permitting system allows for adaptive management.

8. Referenced supporting information to inform assessment

N/A

9. In-combination assessment

Table 2: Relevant activities occurring in or close to the site

Plans and Projects		
Activity	Description	Potential Pressure(s)
No other plans or projects known to be occurring within Tamar Estuary MCZ	The impact of future plans or projects will require assessment in their own right, including accounting for any in-combination effects, alongside existing activities.	N/A
Outside of the MCZ	Maintenance dredging at HMNB Devonport	Resuspension of sediment (smothering)
Outside of the MCZ	Thanckes Oil Jetty demolition and construction of Yonderberry Jetty, Torpoint	Resuspension of sediment (smothering)
Other activities being considered		
Fishing Activity	Description	Potential Pressure(s)
Crab tiling	Activity is occurring, with 3,516 crab tiles recorded in 2012. However, the crab tiles were found not to be occurring on the features assessed. Additionally, as the activities assessed (section 5) are not occurring, it is thought there is no in-combination effect.	Abrasion, disturbance and penetration of the substrate Removal of target and non-target species
Bait digging	Bait digging has not currently been assessed but it is thought there is no in-combination effect as the activities assessed (section 5) are not occurring. However, the interaction of in-combination effect for bait digging will be taken into account at a later date.	

It is believed there is no likelihood of significant adverse effect on the interest features from in-combination effects with other plans or projects.

10. NE consultation response

N/A Natural England has not been consulted at this stage.

11. Conclusion

The activities assessed are not believed to be occurring within the MCZ. Therefore, D&S IFCA conclude that there is no significant risk of the activities hindering the achievement of the conservation objectives for Tamar Estuary MCZ.

12. Summary table

Feature or habitat of Conservation interest	Conservation objectives / Target attributes (Natural England, 2015)	Activity	Potential pressures from activity and sensitivity of habitats to pressures. (Natural England, 2015)	Potential exposure to pressures and mechanism of impact significance	Is there a risk that the activity could hinder the achievement of conservation objectives of the site?	Can D&S IFCA exercise its functions to further the conservation objectives of the site? If Yes, list management options
Intertidal biogenic reefs	Maintain the extent and distribution Maintain extent of supporting habitat	Handwork (from vessel & land) Static pots/traps Longlines (demersal) Commercial diving	<ul style="list-style-type: none"> •Abrasion/disturbance of the substrate on the surface of the seabed •Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion •Removal of target species •Removal of non-target species 	No exposure Activities not believed to be occurring within the MCZ.	No	Yes, Management measures could include: 1. Monitor activity levels 2. Enforcement of byelaws 3. Monitoring and review of current byelaw
Intertidal coarse sediment	Maintain the extent and distribution Maintain the presence and spatial distribution Maintain the distribution of sediment composition Maintain species composition of component communities	Handwork (from vessel & land) Static pots/traps Longlines (demersal) Commercial diving	<ul style="list-style-type: none"> •Abrasion/disturbance of the substrate on the surface of the seabed •Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion •Removal of target species •Removal of non-target species 	See above	See above	See above

Blue mussel (<i>Mytilus edulis</i>) beds	Extent of subtidal biogenic reef Maintain the environmental conditions important for mussel bed formation.	Handwork (from vessel & land) Static pots/traps Longlines (demersal) Commercial diving	<ul style="list-style-type: none"> •Abrasion/disturbance of the substrate on the surface of the seabed •Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion •Removal of target species •Removal of non-target species 	See above	See above	See above
Native oyster (<i>Ostrea edulis</i>)	Recover the presence and spatial distribution Recover the population size Maintain the reproductive and recruitment capability Maintain the extent and distribution of supporting habitats	Handwork (from vessel & land) Static pots/traps Longlines (demersal) Commercial diving	<ul style="list-style-type: none"> •Abrasion/disturbance of the substrate on the surface of the seabed •Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion •Removal of target species •Removal of non-target species 	See above	See above	See above

13. References

Cefas (2015) Classification zone map - Plymouth <https://www.cefas.co.uk/cefas-data-hub/food-safety/classification-and-microbiological-monitoring/england-and-wales-classification-and-monitoring/classification-zone-maps/>

Davies, S. (2016) Tamar Estuary MCZ Fishing Activity Report. Devon and Severn IFCA Report.

Natural England (2015) Draft Conservation Advice for Tamar Estuary Marine Conservation Zone (MCZ)

Annex 1: Site Map(s)

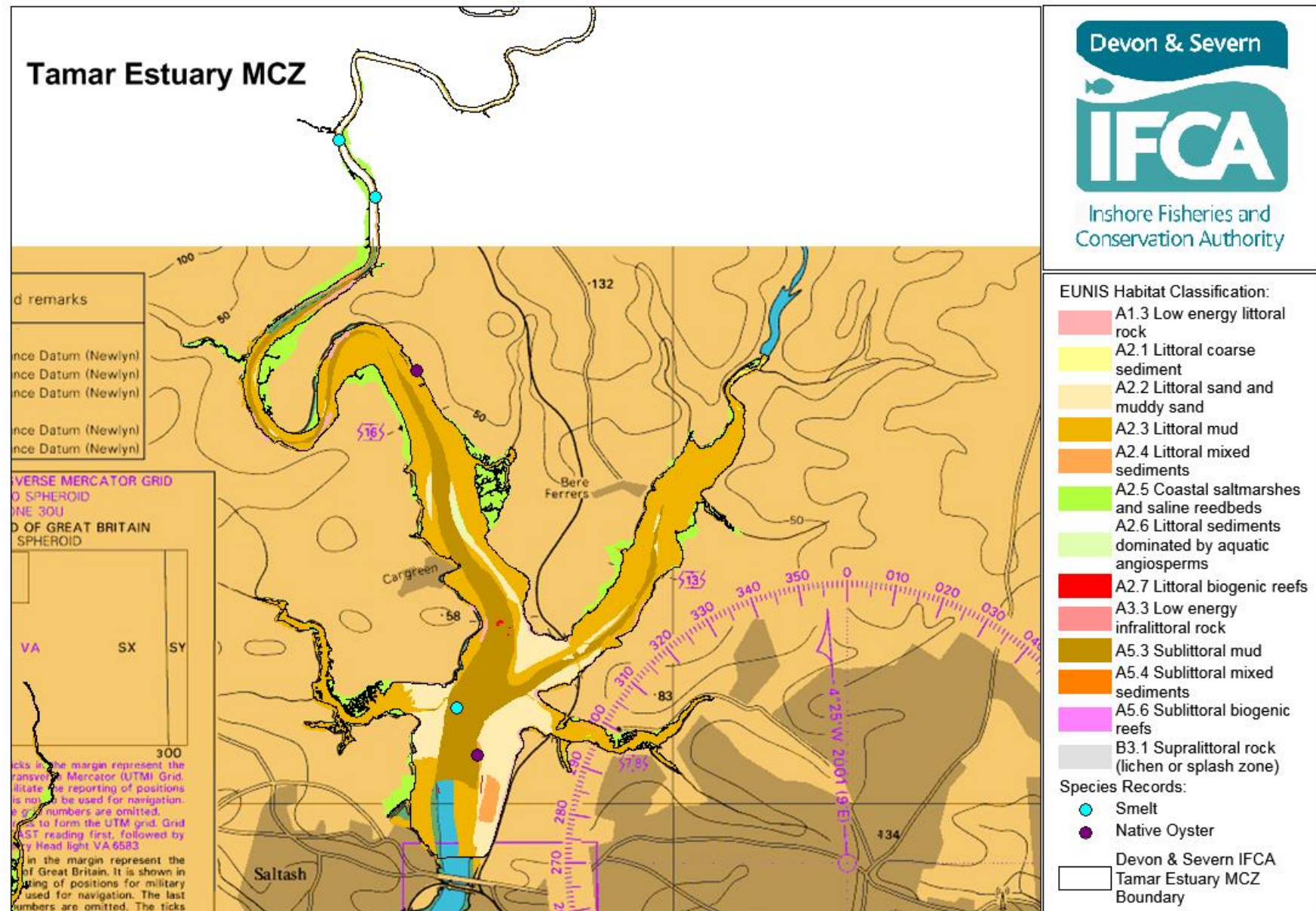


Figure 1 – Tamar Estuary MCZ showing habitat types and species records

Annex 2: Pressures Audit Trail

Fishing Activity Pressures: Anchored nets/ lines Shore-based activities	Blue mussel (<i>Mytilus edulis</i>) beds	Intertidal biogenic reefs	Intertidal coarse sediment	Native oyster (<i>Ostrea edulis</i>)	Screening Justification
Abrasion/disturbance of the substrate on the surface of the seabed	S	S	NS	S	IN – Need to consider spatial scale/intensity of activity to determine likely magnitude of pressure
Deoxygenation		NS	NS		OUT – Insufficient activity levels to pose risk at level of concern
Genetic modification & translocation of indigenous species	IE	IE			OUT - the fleet operates in local area only so risk considered extremely low
Hydrocarbon & PAH contamination. Includes those priority substances listed in Annex II of Directive 2008/105/EC.	NS	NS	NS	NS	OUT - Insufficient activity levels to pose risk of large scale pollution event
Introduction of other substances (solid, liquid or gas)	IE	IE	IE	IE	OUT - Insufficient activity levels to pose risk of large scale pollution event
Introduction or spread of non-indigenous species	S	S	IE	S	OUT - the fleet operates in local area only so risk considered extremely low
Litter	IE	IE	IE	IE	OUT – Insufficient activity levels to pose risk at level of concern
Organic enrichment	NS	NS	IE	NS	OUT - Insufficient activity levels to pose risk of large scale pollution event
Penetration and/or disturbance of the substrate below the surface of the seabed, including abrasion	S	S	NS	S	IN – Need to consider spatial scale/intensity of activity to determine likely magnitude of pressure
Physical change (to another seabed type)		S	S		OUT – Insufficient activity levels to pose risk at level of concern
Removal of non-target species	S	S		S	IN – Need to consider spatial scale/intensity of activity to determine likely magnitude of pressure
Removal of target species		S			IN – Need to consider spatial scale/intensity of activity to determine

					likely magnitude of pressure
Synthetic compound contamination (incl. pesticides, antifoulants, pharmaceuticals). Includes those priority substances listed in Annex II of Directive 2008/105/EC.	NS	NS	IE	NS	OUT - Insufficient activity levels to pose risk of large scale pollution event
Transition elements & organo-metal (e.g. TBT) contamination. Includes those priority substances listed in Annex II of Directive 2008/105/EC.	NS	NS	IE	NS	OUT - Insufficient activity levels to pose risk of large scale pollution event