

Devon and Severn IFCA Response to Severn Estuary Commission Call for Information

2nd May 2024

Introduction and Scope of Response

The Inshore Fisheries and Conservation Authorities (IFCAs), including Devon and Severn IFCA (D&S IFCA), are statutory regulators. The IFCAs are responsible for the sustainable management of sea fisheries resources in English waters from baselines out to six nautical miles. D&S IFCA's District includes waters from baselines to six nautical miles on the south and north coasts of Devon and north Somerset, and the waters of the Severn Estuary out to the median line with Wales (as shown in Figure 1). As the Call for Information refers to areas within and adjacent to those boundaries, and subsequent Projects may generate effects which interact with D&S IFCA's core role, it is appropriate that D&S IFCA responds to this Call for Information.

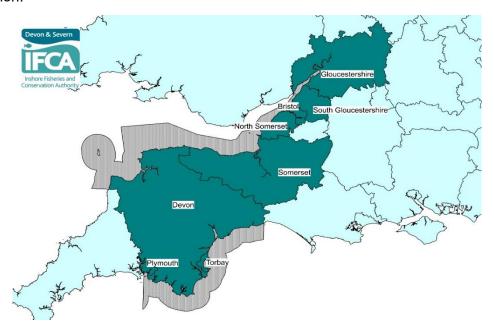


Figure 1. Map of Devon and Severn IFCA's District, showing in grey the sea area from baselines to 6nm (or the median line with Wales).

The ten regional IFCAs have a shared vision: "Inshore Fisheries and Conservation Authorities will lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry."

The powers and duties of the IFCAs are provided by the Marine and Coastal Access Act (2009; the Act). The IFCAs' main legal duties are described in Section 153 of the Act. They must manage the exploitation of sea fisheries resources in their Districts, balancing the social and economic benefits of exploiting the resources of sea fisheries in their Districts with the need to protect the marine environment, or help it recover from past exploitation.

Under Section 154 of the Act, IFCAs must seek to ensure the conservation objectives of any MCZs in the District are furthered. IFCAs are also deemed Relevant Authorities for marine areas and EMS, under the Conservation of Habitats and Species Regulations 2017. D&S IFCA is therefore a Relevant Authority, for example, for the Severn Estuary Special Area of Conservation (SAC).

Under Section 153(2c) of the Marine and Coastal Access Act (2009) IFCAs must also take any other steps which in the authority's opinion are necessary or expedient for the purpose of making a contribution to the achievement of sustainable development when performing its duty to manage the exploitation of sea fisheries. Furthermore, the IFCA Vision includes championing inshore fisheries, which rely on healthy, sustainable inshore populations of fish.

D&S IFCA has identified the need for an Ecosystem Approach to the management of all activities in the marine environment, including consideration of marine developments in (or otherwise affecting, e.g. via cross-border sites) its District. D&S IFCA's primary role in such matters is to ensure that fisheries, fish and fish habitat are considered thoroughly and meaningfully by marine managers and developers.

In this Call for Information, the Severn Estuary Commission has, among other tasks, highlighted the need to:

- (i) review the evidence base,
- (ii) understand and assess: the physical and ecological characteristics of the estuary, especially the importance of its unique environment and the future impact of climate change, the relevant policy and legislation, the current and potential future uses of the estuary, and
- (iii) identify the key socio-economic and environmental challenges and opportunities of developing tidal energy schemes.

To support these tasks, D&S IFCA has collated a short list of previous reports published by D&S IFCA that are directly relevant to the needs identified above, in addition to a selection of relevant reports, Plans and legislation published by others. This list is shown in Table 1, below.

It is important to note the age of some of the documents outlined in Table 1, and to highlight that more up-to-date information may now be available. For example, through direct communications with the Commission, developers and statutory bodies, D&S IFCA may be able to:

- (i) provide guidance on interactions between developments and existing users of the sea.
- (ii) provide guidance on interactions between developments and fish species,
- (iii) enable GDPR-compliant contact with relevant stakeholders
- (iv) provide summaries of current and recent fishing activity
- (v) provide information to help explore opportunities for reducing negative interactions, and
- (vi) support efficient use of D&S IFCA's many published reports and consultation responses.

It is also important to note that a range of recent and ongoing scientific research programmes have been expanding the evidence base for fish in the Severn Estuary, including their interactions with essential fish habitat and marine development infrastructure. This is an evolving research landscape which should be engaged with thoroughly and iteratively as the research progresses.

Table 1. Summary of additional documents likely to be of value for the Severn Estuary Commission's Call for Information.

Ref. #	Reference	Author	Date	Brief Description
1	Marine and Coastal Access Act	HM Government	2009	Marine and Coastal Access Act 2009, including relevant information on Marine Planning & Licensing
2	D&S IFCA Tidal Lagoon Position Statement	D&S IFCA	2015	This briefing note is intended to raise the key issues that concern D&S IFCA in terms of the possible effect tidal lagoons will have on the fish and fisheries (both commercial and recreational) and the habitats upon which these depend and the current trajectory of development of those lagoons. Highlighting these concerns at an early stage it is intended to help developers to understand the IFCAs position and to aid in the planning of any survey work which might in part directly address some of those concerns.
3	D&S IFCA Response to Hendry Review	D&S IFCA	2016	Devon and Severn IFCA response to a call for evidence under the Hendry Review of tidal lagoons, focussing on the environmental and economic considerations of potential lagoon impacts on fish and fisheries
4	CD4.1 Environment Agency Appropriate Assessment 2020	Environment Agency	2020	Environment Agency Appropriate Assessment considered during PINS Inquiry for Appeal Reference APP/EPR/573. A more up to date Appropriate Assessment may be available from the Environment Agency's HPC team, but broadly this covers a range of important considerations for an NSIP in the Severn Estuary, including the importance of considering impacts to the fish assemblage subfeature of the Estuaries feature of the Severn Estuary SAC.
5	D&S IFCA Representation to PINS for Appeal Reference APP/EPR/573	D&S IFCA	2021	This representation highlights the concerns that D&S IFCA has regarding the Appeal brought by EDF to the Planning Inspectorate (APP/EPR/573) regarding a permit variation application relating to acoustic fish deterrent at Hinkley Point C (Somerset). This representation focusses predominantly on the potential harm to the fish features of the Severn Estuary European Marine Site. Though related to a different Project than is being considered in this call for information, the representation refers to key topics that should be considered for any NSIP/large marine development in or near to the Severn Estuary, in particular: (i) the basis for considering the fish assemblage as a sub-feature of the Severn Estuary SAC's Estuaries feature when undertaking Habitats Regulations Assessments, EIA scoping etc; (ii) the scale at which harm to fish populations should be assessed; (iii) the most appropriate way of estimating future harm caused to fish populations by considering equivalent adult values of fish entrained or impinged or otherwise harmed by infrastructure; (iv) the concept of adaptive management

				and its applicability in the case of NSIPs. This also includes a summary of a genetics and morphometrics study undertaken by Swansea University and other research institutes, focusing on herring. This demonstrates that local genetically-discrete stocks of herring exist at small spatial scales in and around the Bristol Channel, and indicates the need to consider these as discrete units when determining impacts of developments on fish populations.
6	D&S IFCA's Fisheries Research and Management Plans for Herring, Skates and Rays, and Bass.	D&S IFCA	2021	These Fisheries Research and Management Plans (FRMPs) outline the ecology and related fisheries for commercially and ecologically important species in the north of D&S IFCA's District, which includes the inner Bristol Channel and Severn Estuary (out to 6nm or the median line with Wales). It also highlights potential threats to these species including from marine developments. Other FRMPs are available for whelk and squid, though those on herring, skates and rays and bass are likely more relevant for the inner Bristol Channel and Severn Estuary.
7	EA Proofs of Evidence in PINS Inquiry APP/EPR/573	Environment Agency	2021	The Environment Agency's Proofs of Evidence for PINS Inquiry for Appeal Reference APP/EPR/573. This relates to a case regarding Hinkley Point C (Somerset), but covers a range of important considerations for an NSIP in the Severn Estuary, including the importance of considering impacts to the fish assemblage sub-feature of the Estuaries feature of the Severn Estuary SAC.
8	EA Statement of Case and Annexes in PINS Inquiry APP/EPR/573	Environment Agency	2021	The Environment Agency's Statement of Case and related documents for PINS Inquiry for Appeal Reference APP/EPR/573. This relates to a case regarding Hinkley Point C (Somerset), but covers a range of important considerations for an NSIP in the Severn Estuary, including the importance of considering impacts to the fish assemblage sub-feature of the Estuaries feature of the Severn Estuary SAC.
9	South West Marine Plans	ММО	2021	Published June 2021 the South West Inshore and South West Offshore Marine Plans provides guidance for sustainable development from the border with Wales to the River Dart in Devon.
10	Fish nurseries in a changing world: towards functional indicators of habitat quality	UKRI	2023	This is an ongoing project aiming to further our understanding of the value of coastal habitats for fish species, focussed on Severn Estuary. The group involved in the research (including Dr Ben Ciotti, University of Plymouth; Dr Anna Sturrock, University of Essex) has a range of previous and ongoing research projects that are not listed here but are relevant for consideration.

				Scientific Background: The identification and conservation of "Essential Fish Habitat" is emerging as a research, management and policy priority. Protecting habitats required for every life-stage is necessary to create sustainable fisheries and conserve threatened species, but knowledge of fish habitat needs is very limited, particularly for juveniles. Juveniles are often critically dependent on shallow, inshore areas which are heavily impacted by human activities. Little is known about these young stages because they are rarely targeted by commercial fisheries or fisheries-independent surveys. Currently, juvenile habitat quality is typically assessed simply on the basis of the abundance of fish they contain. Functional indicators such as fish growth, survival and movement into the adult population are often overlooked, but are essential to quantifying the importance of different areas as fish nurseries. Methodology This PhD project involves 1) laboratory experiments to develop novel molecular and geochemical indices of feeding, growth and movement in free-ranging juvenile fish; and 2) extensive field work in the Severn Estuary to apply these tools in a real-life setting and identify key habitat needs of a commercially valuable species, the common sole <i>Solea solea</i> .
11	North Devon Fishermen's Association	NDFA	NA	The NDFA would be an important point of contact regarding impacts on/interactions with commercial fishing in the area. D&S IFCA would recommend early contact with the NDFA. The NDFA website states their mission "Is to support our small fishing fleet by securing a sustainable future for North Devon's fishing industry and fish stocks. • To be a voice for the fishing industry in North Devon. • To work closely with other organisations to protect and conserve fish stocks in the Bristol Channel. • To support new entrants to the fishing industry and support those who want to upskill. • To strengthen the network of all those who work within the fisheries sector."
12	D&S IFCA Officers and Resource Library	D&S IFCA	Various	D&S IFCA's Officers have a range of knowledge on fish and fisheries in the area, and may be able to provide guidance on interactions between developments and (i) commercial fisheries, (ii) recreational fishing, (iii) aquaculture, (iv) fish species, including enabling GDPR-compliant contact with

				relevant stakeholders, providing summaries of current and recent fishing activity, exploring opportunities for reducing negative interactions, and supporting efficient use of D&S IFCA's many published reports and consultation responses.
13	Working Group on the Value of Coastal Habitats for Exploited Species	ICES	Various	The Working Group on the value of Coastal Habitats for Exploited Species (WGVHES) compiles information on habitat distributions for exploited species and integrate habitat value into population dynamic models. WGVHES aims to determine the relative value of coastal nursery habitats (such as seagrass beds, kelp beds, and rocky bottoms), feeding grounds, and spawning areas for the species of interest to ICES, in coordination with the Working Group on Marine Habitat Mapping (WGMHM). The WGVHES site has further links tothe group's reports and sharepoint site for detailed information. It will be important to consider the value of coastal habitats for fish species, as these habitats may be affected by marine development infrastructure and operations.
14	Somerset intertidal habitats	Somerset Wildlife Trust	Various	An online interactive Geographic Information System showing the distribution of intertidal habitats in Somerset, which include protected habitats such as Sabellaria and a range of essential fish habitats that should be considered at a Plan and Project level.
15	Local Nature Recovery Strategies	Various	Various	There are a range of geographically-relevant Authorities creating Local Nature Recovery Strategies (e.g. Devon, Somerset Council, West of England Combined Authority, Gloucestershire), which may include non-statutory marine elements. These will be important to consider at all stages.