Annual Plan Recommendation - Annex 2:

Fisheries Research and Management Plan Officer: March 2021 - March 2023

This document outlines the need for a Fisheries Research and Management Plan (FRMP) Officer within Devon and Severn IFCA (D&S IFCA), funded from Reserves for an initial period of two years. D&S IFCA, in partnership with North Devon UNESCO Biosphere, has hosted a FRMP Officer on a 14-month fixed-term basis since January 2020, funded through the European Maritime and Fisheries Fund (EMFF). A continuation and expansion of the FRMP Officer role provides an opportunity for D&S IFCA to produce comprehensive and robust FRMPs to shape local, regional and national research and management directions at a critical time for UK fisheries management.

FRMPs: Enabling an ecosystem-based approach to fisheries management

The FRMPs use a localised and ecosystem-based fisheries approach to summarise current knowledge and explore research and management needs for key fisheries. The ecosystem approach strives to balance diverse societal objectives, by accounting for the knowledge and uncertainties about biological, physical and human components of ecosystems and their interactions and are accounted for in management. The FRMPs are different from previous work in this area because they also take local and historical knowledge into account and include the cultural and heritage value of the fisheries. The inclusion of a local perspective on fisheries management and the utilisation of D&S IFCA's expertise in practical delivery of fisheries management is of crucial importance for the development of an Ecosystem Approach to fisheries management. By implementing this ecosystem approach, the FRMPs also address a range of broad policy drivers and are therefore well placed to inform high-level discussions on future fisheries management.

Over the last year, D&S IFCA's FRMP Officer has been exemplary in working with the scientific community as well as with the fishing industry to produce comprehensive FRMPs for five key species in the north of D&S IFCA's District. In addition to providing thorough reviews of the ecology, fisheries and management for the focal species, the FRMPs take a pioneering approach to integrate local and historical knowledge with scientific research outcomes, building the knowledge base and highlighting knowledge gaps to inform future research and management opportunities. Each FRMP includes a prioritised set of research requirements that needs to be addressed (by D&S IFCA and/or external organisations) to enable appropriate management of the relevant stock(s). The FRMPs also provide recommendations for fisheries management, making the case for local, sustainable, ecosystembased fisheries management where realistic and appropriate. The completion of the first set of FRMPs, and consideration of future FRMP work by D&S IFCA, has also come at an opportune time for contributing to regional and national discussions on research, management and policy directions.

Policy Context - a shifting policy and management landscape, informed by FRMPs

At a National level, FRMPs are an opportunity to contribute to the aims of the 25 Year Environment Plan (25YEP), specifically *securing clean, healthy, productive and biologically diverse seas and oceans*. The 25YEP sets out the Government's vision to improve and restore the environment, including by using "an ecosystem approach to fisheries management [that] aims for more sustainable management [and] seeks to minimise impacts on non-commercial species and the marine environment". Furthermore, Defra's Marine Pioneer programme, set up to trial innovative approaches to managing the environment and inform delivery of the 25YEP, has highlighted a need for fisheries managers to apply an ecosystem-based approach that prioritises the protection of natural assets and supports sustainable and viable fishing. The Marine Pioneer identified D&S IFCA's FRMPs as a key step towards achieving this. The Marine Pioneer also highlighted that developing improved fisheries management requires participation of stakeholders to ensure that a range of perspectives and expertise are applied to co-developing sustainable solutions and this is at the heart of FRMP development.

Under the Fisheries Act (2020), the UK is now committed to a renewed, world-class approach to fisheries management. This is to be achieved in part via the implementation of an ecosystem-based approach to fisheries management, though specific legislation for fisheries management measures is yet to be developed. Under the Fisheries Act, the fisheries authorities are able to publish Fisheries Management Plans (FMPs) for particular fish stocks, fishing types and sea areas. These FMPs are a key requirement of the Fisheries Act and will form the basis of future UK fisheries management. Importantly, D&S IFCA's FRMPs have been very well-received by the Marine Management Organisation's evidence team, who are looking at the data needs for the national FMPs, and FRMPs continue to shape important high-level discussions.

Achievements to date

The FRMP Officer has produced five FRMPs, focusing on bass, herring, whelk, skates & rays, and squid in the north of D&S IFCA's District. These plans:

- (i) Provide a full ecosystem-based review of the ecology, fisheries and management for the focal species, which can be used by a range of stakeholders as a comprehensive source of fish and fisheries knowledge
- (ii) Provide an evidence base that enables evaluation of the impacts of human activities on fisheries, fish and habitats, and which can be used to engage with other organisations, for example in the implementation of the Fisheries Act (2020)
- (iii) Highlight current evidence gaps, enabling a rationalised and prioritised approach to future scientific and socio-economic research by D&S IFCA and other organisations
- (iv) Identify considerations for fisheries management, and pave the way for local, sustainable, ecosystem-based management where realistic and appropriate.

The FRMP work has a high profile from local (District) to national scales, having been presented and discussed throughout the Marine Pioneer programme, with MMO and Defra, and at national conferences (e.g. Coastal Futures/Ocean Recovery Conference 2021, and South West Marine Ecosystems 2021).

Direct relevance to the work of D&S IFCA

The 2020-2021 Annual Plan identified that evidence gathering is at the core of D&S IFCA's management decisions and that this will be reinforced by industry and stakeholder engagement to help inform any potential future management measures. The processes involved in developing each FRMP (e.g. stakeholder engagement and interviews), and the published FRMPs themselves, are excellent opportunities to meet these aims.

FRMPs are excellently placed to inform Marine Licence Application Consultations, EIRs, and issuing dispensation/authorisations this work as they take an ecosystem-based approach that considers the impacts of these other external pressures (such as licensable marine developments and resource extraction) on fish, habitat and fisheries, and therefore represent an excellent source of District-relevant information on these matters.

There is broad recognition that fisheries management needs effective decision-making and industry support at the local level. This relies on a number of factors, including sufficient funding, area-specific evidence-gathering, and involvement of the fisheries sector and wider community. It also relies upon national policy being flexible and able to ensure these regional initiatives can work in synchrony with national efforts. FRMPs are able to address these factors and are a viable way for D&S IFCA to feed into national policy discussions while demonstrating the value of regional decision-making at the level of IFCA Districts. FRMPs are likely to be critical in enabling a localised application of the ecosystem approach to ensure effective fisheries management that centres around collaborative partnerships and an understanding of local social, environmental and economic considerations.

Future work

In the proposed two-year extension to the FRMP post, the FRMP Officer will:

- (i) Continue extensive stakeholder engagement to inform development of FRMPs
- (ii) Extend the FRMPS already produced for five species across the whole D&S IFCA's District.
- (iii) Develop a further eight FRMPs for species (outlined below) across D&S IFCA's District, to feed into District- and national-level research and management.
- (iv) Maintain a watching brief regarding the five published FRMPs, ensuring that they are up to date with the best available evidence and that viable options for management are considered and suggested to the relevant regulator as and when appropriate.

A proposed timeline for the work is presented in Table 1. The species for future FRMPs may include scallops, spurdog, cod, sole and plaice, and spider crab, brown crab and lobster. Some species covered in the five FRMPs produced so far are also relevant for the south of D&S IFCA's District, and will also be extended across the whole of D&S IFCA's District. An initial effort towards assessing non-quota species may be considered valuable, particularly in informing the debate surrounding effort management. Other recreationally-important species are also under consideration. These species were identified by D&S IFCA Officers working in collaboration with the Marine Pioneer's Marine Working Group, and the North Devon Fishermen's Association, who were involved in guiding species choice for the five FRMPs completed to date (herring, sea bass, whelk, skates & rays, and squid).

Stakeholder feedback

A small selection of stakeholder feedback is presented here for reference.

"FRMPs combined the IFCA's desire to have all the research and management information of important species in one dynamic document with the 25YEP ambition to deliver better outcomes for nature and coastal communities at both national and local scales.

FRMPs as an approach to fisheries management were very prescient as the Fisheries Act's main management tool will be Fisheries Management Plans. Once the Joint Fisheries Statement is agreed with the Devolved Administrations Defra will work with fisheries managers, the industry and others to develop FMPs based on existing evidence and best practice. D&S IFCA will be at the forefront of this effort due to their expertise in this area. I believe this will provide evidence for the structure, scale and content of the FMPs and highlight the requirements of local fisheries managers to enable them to contribute to the national fisheries objectives. It will also provide evidence of what work is required to reach our shared sustainability goals for the fish stocks and the industry. This will be crucial in these early years of being an independent coastal state.

The stocks that D&S IFCA have chosen to focus on to date are in some cases of great relevance to national management challenges e.g. bass, whelks, skates and rays. The FRMPs will support the evidence base required for appropriate management of these stocks and provide D&S IFCA with the information to improve sustainability within their District."

- Dr Aisling Lannin, Head of Evidence - Marine Management Organisation

"[The FRMPs] are already proving to be very helpful to frame the management of these species and leading towards more localised management measures. The plans are innovative, involving not only the fishing industry but recreational fishers in the development and considering impacts beyond fishing on fish stocks – an ecosystem-based approach. [The FRMPs] have been well received by the evidence team at the Marine Management Organisation, who are looking at the data needs for future Fisheries Management Plans that are emerging as part of the fisheries bill. Martin [the FRMP Officer] has done an excellent job of compiling data from a range of sources. The process has been exemplary

in working with the scientific community and working well with the fishing industry in North Devon and Somerset, and has produced comprehensive and complete plans that will guide future work through the IFCA on the North Coast through a range of detailed recommendations. Replicating this on the south coast would provide a bigger picture of the range of issues, challenges and opportunities at a regional level, that will then help to identify where there are opportunities for more localised management."

- Andrew Bell, Coordinator - North Devon UNESCO Biosphere

"These FRMPs are an important project for us, because local knowledge needs to be included more in fisheries and marine management. We have shown that herring are spawning nearby and have evidence of local nursery grounds for other species. FRMPs could help this evidence to be used for better management and to protect fish habitat. We hope that [the FRMPs] will also improve communication between the IFCA and fishermen so that the regulations can be fairly enforced."

- Paul Date, Commercial fisherman

FRMP development and implementation timeline

New FRMPs will be developed in stages over the two-year contract period. Based on experiences with developing five FRMPs over 2020–2021, it is envisaged that two FRMPs will be completed in each six-month period to March 2023. Substantial stakeholder engagement is required for FRMP development and will be ongoing throughout the project. The FRMP Officer will also schedule specific engagement opportunities (e.g. interviews and workshops) at regular (six-monthly) intervals to maintain stakeholder involvement on timescales that allow stakeholder input to feed into the next round of FRMP development (i.e. in the first two months of each FRMPs development). These scheduled engagement opportunities will be used to uncover and expand on local knowledge pertinent to the next set of FRMPs, and to feedback to stakeholders on the previous set of FRMPs.

Table 1: FRMP Implementation Timeline

		2021										2022												2023		
Activity	M	Α	M	J	J	Α	S	0	N	D	J	F	М	Α	M	J	J	Α	S	0	N	D	J	F	М	
Informal stakeholder engagement																										
Formal stakeholder engagement (interviews, workshops, feedback etc)																										
New plans 1 & 2																										
New plans 3 & 4																										
New plans 5 & 6																										
New plans 7 & 8																										
Keep abreast of new evidence relevant to all published plans																										
Watching brief for FRMP input to policy and management (District & national)																										
Scheduled outreach and comms. (*see footnote)								1			2			3						1			2			

^{*}Several outreach and communications opportunities have been identified that would allow the FRMPs to reach diverse audiences and raise the profile of D&S IFCA's work in this area, including Severn Estuary Ecological Research Forum¹, Coastal Futures², South West Marine Ecosystems³. Presentations to the Authority will also be arranged as agendas allow.