



D&S IFCA's Quadrennial Report 2015-2018

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."

Contents

Introduction and Overview.....	3
Success Criterion 1	5
IFCAs are recognised and heard, balancing the economic needs of the fishery whilst working in partnership and engaging with stakeholders	5
Self-Assessment.....	5
Case Study 1: The Development of the Netting Permit Byelaw - Going Above and Beyond Minimum Statutory Efforts to Engage ‘Hard-to-Reach’ Sectors	8
Success Criterion 2	13
IFCAs implement a fair, effective and proportionate enforcement regime.....	13
Self-Assessment.....	13
Case Study 2: Using New Technology - Making Effective Use of Limited Resources	15
Success Criterion 3	18
IFCAs use evidence based and appropriate measures to manage the sustainable exploitation of sea fisheries resources and deliver marine environmental protection within their districts.	18
Self-Assessment.....	18
Table 3 – Evidence Gathering	22
Success Criterion 4	25
IFCAs have appropriate governance in place and staff are trained and professional ...	25
Self-Assessment.....	25
Case Study 4: The Process of Reviewing Permit Byelaw Permit Conditions.....	27
Success Criterion 5	28
Self-Assessment.....	28
Table 4 - Best Use of Evidence	31
Annex 1 Devon & Severn IFCA Metrics	33

Version	Date	Author (s)	Reviewer (s)
1.0	27.08.18	Mat Mander, Neil Townsend, Elizabeth West	
1.1	28.08.18	Sarah Clark	
1.2	30.08.18		Mat Mander, Sarah Clark
1.3	31.08.18		Mike Williams, James Marsden
1.4	31.08.18		Sarah Clark (amendments only)
1.5	03.09.18		Elaine Hayes, Sarah Clark (amendments only)

Introduction and Overview

Over the reporting period 2015 to 2018, Devon and Severn Inshore Fisheries and Conservation Authority (D&S IFCA) has developed its chosen approach to inshore fisheries and conservation management. The D&S IFCA is confident that the approach it has taken meets the National Vision for IFCAs, achieves the outcomes expected of the organisations and fulfils its duties under the Marine and Coastal Access Act 2009 (MaCAA).

D&S IFCA has the largest District of all IFCAs and has the unique status, amongst IFCAs, of having two coasts. D&S IFCA has the smallest budget for mainland IFCAs, £733,600 for 2018-2019, and relies upon Defra New Burdens money to meet over 55% of its annual budget¹. D&S IFCA has some other challenging metrics², including having 42% of its District designated as Marine Protected Areas (MPAs) and over 450 commercial vessels and 538 recreational vessels either trawling, potting, netting or diving in the District. Recreational sea angling is also a significant sector in the District as is shellfish Mariculture which takes place within many of the District's Estuaries, along near shore coastal areas and offshore within Lyme Bay.

D&S IFCA works with other fisheries regulators having adjoining boundaries with two other IFCAs and the Welsh Government along with the Marine Management Organisation (MMO) and the Environment Agency. Necessary evidence gathering for the District promotes partnership working with many NGOs, Cefas, Natural England, MMO and Defra.

D&S IFCA has always sought to be innovative in its approach to fisheries and conservation management. Technology is being introduced into fisheries management and the D&S IFCA will achieve its long-term aim in 2018 of introducing vessel monitoring systems on all vessels, over 6.99m in length, using mobile (trawls and dredges) fishing gear. Drones have already been made use of in a survey context and their future use in compliance monitoring must be a possibility. The D&S IFCA also welcomes the national initiative to introduce catch returns for the under 10 metre commercial catching sector. D&S IFCA took the decision to sell their large patrol vessel and now delivers all its sea-based enforcement and environmental work from small vessels of eight metres or less.

D&S IFCA has now introduced four out of the six activity-based permit byelaws that have been identified to complete its regulatory role in managing fishing activity. In addition, D&S IFCA has two further byelaws, Size of Vessel Byelaw and Applications Byelaw, to complete the legislative framework. In the reporting period, the Diving Permit Byelaw, Potting Permit Byelaw and the Netting Permit Byelaw have all been introduced to sit alongside the Mobile Fishing Permit Byelaw. This leaves only two anticipated byelaws to develop: the Hand Working Permit Byelaw and the Hook and Line Permit Byelaw. Collectively, these byelaws will form the core of D&S IFCA's

¹ Based on 2018/2019 figures. New burdens represent only 26.5% of largest IFCA budget 2018/2019

² Full metrics set out in Annex 1 to this report

approach to regulating the commercial and recreational activities that take place in the District and deals, to a certain extent, with 'Illegal Unreported Unregulated' fishing. The permit approach provides greater flexibility in the way fisheries and conservation are managed providing a regulatory mechanism that can react more readily and effectively to changes in the marine environment and the way fisheries operate. The permit approach encourages stakeholder engagement in the management process and comprehensive reports have been developed to record the evidence and basis for the decisions. These reports are publicly available for all to read on D&S IFCA's website. D&S IFCA supports the delivery of the Ecosystem Approach to management, which is detailed below.

In 2009, Defra made it clear within its publication 'Safeguarding our Seas', that the Ecosystem Approach should be adopted in UK marine policy. The same paper paved the way for the MaCAA and hence the formation of IFCAs and the development of the UK's Network of Marine Conservation Zones (MCZs). In 2018 the Government published its 25 Year Environment Plan (25YEP), which confirms the UK's commitment to the Ecosystem Approach in relation to marine and fisheries management.

One of the core principles of the Ecosystem Approach is that management should be decentralised to the lowest appropriate level in order to involve all stakeholders and balance local interests with the wider public interest with the understanding that, the closer management is to the ecosystem, the greater the responsibility, sense of ownership, accountability, public participation, and use of local knowledge. This clearly resonates strongly with the work that D&S IFCA has undertaken during 2015 to 2018 and features strongly in the recorded work set out against the expected outcomes in this report.

Success Criterion 1

IFCAs are recognised and heard, balancing the economic needs of the fishery whilst working in partnership and engaging with stakeholders

Definition

IFCAs will be visible, respected and trusted regulator within coastal communities and will maintain and deliver a strategy to communicate their vision and duties effectively. IFCAs will engage with policy makers, industry, Non-Governmental Organisations (NGOs), recreational and commercial users; and other regulators. They will work jointly and collaboratively with partner organisations across boundaries; will participate and contribute to the development and implementation of regional and national marine policy, including the marine planning regime; will take long-term strategic decisions and manage risks effectively. IFCAs may maintain a national body to co-ordinate the activities of authorities that are party to arrangements.

Expected Outcomes

- The IFCA will maintain and implement an effective communication strategy.
- The IFCA will maintain its website, ensuring public access to current fisheries and conservation information for the District, including management requirements and byelaws.
- Non-reserved IFCA Committee papers will be published
- The IFCA will contribute to co-ordinated activity at a national level
- The IFCA and its principal partners will have a clear understanding of roles and responsibilities. Memoranda of Understanding with MMO, Natural England, Environment Agency and Cefas will be maintained.
- Opportunities for greater efficiencies, effective joint working will be explored and implemented when feasible.

Self-Assessment

The outcomes for Success Criterion 1 are inter-linked to different forms of communication. The different communication strategies formulated and utilised by D&S IFCA, during the qualifying period, have developed both naturally and have also been adapted to suit both the capabilities of the organisation and the wide range of audiences it aspires to reach. Reviewing how D&S IFCA implements and delivers its communications has resulted in different initiatives being delivered. Evaluating their effectiveness and determining how best to measure their success is not always straight-forward.

Self-assessment relating to communications has been divided into different subject areas and evidence has been provided for each topic, together with a case study based around a consultation process to develop a Netting Permit Byelaw. This self-assessment places some focus on our vision for on-going communications, how internal process has been refined in order for D&S IFCA to move forward and continue to deliver several of the objectives.

Different Audiences

A list of the different audiences (including those specified within the definition) with which D&S IFCA engages is documented in **Tables 1a,1b and 1c below**. These include persons involved in fishing (commercial and recreational users), policy makers, Non-Governmental Organisations (NGO's), local stakeholder groups, MPA management groups, other regulators and partner organisations. These audiences are simple to define but, the type of engagement varies dependent on the subject matter. The "open" D&S IFCA communications using multi-media formats has a potential for reaching a far wider audience. D&S IFCA engages regularly with other IFCA's, in particular those neighbouring the District – Cornwall and Southern IFCA's. This close working relationship allows for the sharing of information, cross- warranting and undertaking joint enforcement and research

Tailored Communications and Delivery

Our communications and engagement include the standard type of communications such as representation, engagement and input at a local, regional and national level on varied and relevant subject matter. D&S IFCA attends and engages in appropriate meetings, forums, project planning and daily interaction with the fishers it regulates. The objectives of communications and engagement range from long-term strategic planning to communications directly related to management and intended management of different fishing activities. Key strategic engagement priorities are documented in the Annual Plan and encompass workstreams directly related to Sections 153 and 154 of MaCCA.

Website

The website has become a key communication tool and the content is subjected to regular review. D&S IFCA has recently commissioned the building of a new website more suited to the information it considers is important and interesting reading for different audiences. Internal information management systems have been refined (as set out in the Annual Plan 2018-19) with particular focus on the Freedom of Information Act 2000, General Data Protection Regulation 2018 and the associated Publications Scheme. D&S IFCA has delivered, wherever possible, full information transparency. The new website has incorporated an open resource library (separated into eight key areas of IFCA work including regulation and research information) that will grow over time and will demonstrate D&S IFCA's purpose, long and short-term objectives, past achievements, evidence bases and its decision-making processes. News items (blogs) will be directly linked to work streams and objectives documented in the Annual Plan. The use of Facebook and Twitter will be harmonised into this overarching communication strategy. This strategy will promote further development of electronic newsletters and quarterly reporting. Although not the only measurable, automated social media reporting will continue to provide statistics, including total number of impressions, engagements, Twitter following and overall 'Klout' rating, which reached 56 in by February 2018. The Klout comparison table below shows our standing compared to other organisations and IFCA's. Stakeholder feedback will also be used to continually refine this area of communication.

Klout Comparison Table:			
<u>Organisation</u>	<u>Klout</u>	<u>Twitter Followers</u>	<u>FB Likes</u>
National			
Environment Agency	88	516k	36k
Defra UK	80	122k	7k
MMO	77	6.5k	1k
Regional IFCA's			
Devon Wildlife Trust	64	28k	8k
Environment Agency SW	63	23.5k	-
Devon & Severn IFCA	56	2.4k	107
Westcountry Rivers Trust	53	3.6k	834
Natural England SW	52	3.6k	-
Southern IFCA	51	2.5k	700
Marine Institute (Plymouth Uni)	51	4.5k	48k
Eastern IFCA	45	995	155
Severn Estuary Partnership	45	1.5k	193
Northumberland IFCA	43	565	265
Kent & Essex IFCA	42	471	23
Association of IFCA	41	294	16
South Devon & Channel Shell fishermen	41	547	1.3k
North Western IFCA	39	570	44
Sussex IFCA	36	1.3k	547
Isles of Scilly IFCA	24	330	378

Klout Comparison Table February 2018

Stakeholder Data Base

D&S IFCA has made effective use of the permitting byelaw model that it has been adopted. The ability to improve communications between D&S IFCA and stakeholders was one of the key benefits identified in all permit byelaw Impact Assessments to date. Four fishing activities are currently regulated via permitting byelaws. This model has generated a database of over one thousand permit holders (including recreational fishers), which enables direct communication, often via cost effective email. All permit holders are directly notified in relation to consultations, with recent reviews of Mobile Fishing, Potting and Diving Permit Conditions being good examples of this practice. The implementation of General Data Protection Regulations (GDPR) has prompted D&S IFCA to seek consents for retaining personal contact details of other contacts where there is not a clear lawful basis to retain the information without consent. A master contact database is subjected to regular refinement.

Reporting and Documentation

Transparency with information is now a key area of D&S IFCA communications. All decision-making processes are documented and this now goes beyond just the minutes of Full Authority, Finance and General Purposes Sub-Committee and Byelaw and Permitting Sub-Committee meetings. Due to the implemented permitting byelaw model adopted by D&S IFCA, changes to permit conditions can be reviewed where rationale and evidence exists to justify change. Fully documenting this process and providing all stakeholders with all information is achieved via expanding consultation reports containing hyperlinks to cited evidence bases. It is anticipated that this approach will be repeated in any new byelaw making process that is conducted and will complement the mandatory Impact Assessments that are also formulated.

Case Study 1: The Development of the Netting Permit Byelaw - Going Above and Beyond Minimum Statutory Efforts to Engage 'Hard-to-Reach' Sectors

The creation of the Netting Permit Byelaw was complex and took over two years to be confirmed. Communication relating to the pre-consultation and formal consultation phases went considerably beyond the IFCA Byelaw Making advice published by Defra. Extensive pre-consultation was conducted in two separate phases each lasting for several weeks. Standard communications were supplemented by website displays and use of on-line survey forms. The mandatory requirements for the formal consultation were clearly and substantially surpassed. The consultation period, which was extended to 56 days and was supported by ten regional public events. Visual displays in the mobile events trailer and "hand-out" information was utilised. Officers were able to personally engage with those likely to be affected by proposed changes. Effectiveness of the communications delivered during formal consultation is hard to assess. Over three hundred formal response letters were submitted by stakeholders of which more than two hundred of these responses were supportive of a new Netting Permit Byelaw. Continuation of communications was delivered in the form of several reports relevant to the process. A response and recommendation report was prepared and made available to all those that had responded. Other reports were created to supplement the final Impact Assessment with particular focus on process and specific elements of rationale. Several of the stakeholders who responding to the consultation and either supported or objected to the management proposals were provided with an opportunity to attend a full Authority meeting and address the members. The opportunity allowed for new evidence to be provided before members recommended that the Byelaw was submitted for confirmation.



Table 1a – Local Engagement

Scale	Engagement type	Sector	Stakeholder	IFCA involvement
Local	Stakeholder Group	Public, conservation, regulatory, industry	SeaTorbay	Provide information and input
Local	Policy/ research group	Regulatory -EMS management group	Association of Severn Estuary Relevant Authorities (ASERA)	Chair; regulatory and research input
Local	Stakeholder meeting	Regulatory -EMS management group	Tamar Estuaries Consultative Forum (TECF)	Regulatory
Local	Policy/ research group	Regulatory -EMS management group	Exe Estuary Partnership Committee/ Executive Group	Communicating evidence findings on shellfish stocks and HRAs. Providing regulatory advice
Local	Stakeholder meeting	Public, conservation, regulatory, industry	Exe Estuary Forum	Presenting Research and Management information
Local	Stakeholder meeting	Public, conservation, regulatory, industry	Dart Estuary Forum	Providing Regulatory and Mariculture information
Local	Stakeholder meeting	Public, conservation, regulatory, industry	Lundy MPA forum	Research findings; regulatory role; Pioneer Project
Local	Policy/ research group	Regulatory -EMS management group	Lundy Management Group	Research findings; regulatory role; Pioneer Project
Local	Stakeholder meeting	Public, conservation, regulatory, industry	Avon Estuary Forum	Providing Research and Management Information
Local	Stakeholder meeting	Public, conservation, regulatory, industry	Yealm Estuary Forum	Providing Research and Management Information
Local	Stakeholder meeting	Public, conservation, regulatory, industry	Salcombe and Kingsbridge Estuary Forum	Providing Research and Management Information
Local	Policy/ research group	Commercial fishing industry	North Devon FLAG	Steering and advising on proposals
Local	Stakeholder meeting	Commercial fishing industry	North Devon Biosphere Marine Working Group	Liaison with industry
Local	Stakeholder meeting	Commercial fishing industry	South Devon and Channel Shellfishermen's Association	Monthly meetings to update association members of research and management proposals
Local	Stakeholder meeting	Commercial fishing industry	IPA	Co-chairs with MMO
Local	Stakeholder meeting	Commercial fishing industry, academia' Regulatory' conservation	Lyme Bay Reserve Consultative Committee	Updating on regulatory changes and disseminating evidence gathering outputs
Local	Stakeholder meeting	Recreational fishing	Attendance at numerous RSA club meetings and competitions	Presenting on work of the IFCA

Scale	Engagement	Sector	Stakeholder	IFCA Involvement
Local	Project participation	Recreational fishing	Minehead Angling Festival	Liaising with anglers
Local	Project participation	Recreational fishing	FishTrail project	Liaising with anglers
Local	Engagement event	Public	FishStock, Brixham	Disseminating information on IFCA work and communicating with the public
Local	Engagement event	Public	Salcombe Marine Awareness Day	Disseminating information on IFCA work and communicating with the public
Local	Engagement event	Public	Spirit of the Exe Festival	Disseminating information on IFCA work and communicating with the public
Local	Engagement event	Public	School visits	Highlighting the work the IFCA undertakes
Local	Presentation	Public, academia	University lectures	Presenting on specific work areas and research e.g. Mariculture
Local	Presentation	Public, conservation, regulatory	North Devon Area of Outstanding Natural Beauty	Providing Research and Management Information
Local	Presentation	Public	National Coastwatch Institute	Updating the members of the NCI on IFCA regulatory and research work
Local	Presentation	Public	Somerset Coast Conference	Presenting on specific work areas and research

Table 1b – Regional Engagement

Scale	Engagement type	Sector	Stakeholder	IFCA involvement
Regional	Policy/ research group	IFCA	South West IFCA's group (Cornwall, Southern, D&S)	Sharing regulatory, policy and strategic information
Regional	Policy/ research group	Regulatory, research	Defra Impact and Evidence Group (IEG)	Updating on research project work' input into future research proposals
Regional	Policy/ research group	Regulatory	Defra Marine Protected Areas Group (MPAG)	Updating on research project work' input into future research proposals
Regional	Policy/ research group	Regulatory	Hinkley Marine Technical Forum	Provision of research and regulatory evidence
Regional	Stakeholder meeting	Regulatory	Marine Planning team, MMO	Input knowledge on habitats and fishing activities in D&S IFCA district
Regional	Local Authorities, regulatory agencies, fishing activities	Regulatory	Devon Standing Environment Group	Provide information on activities and habitats within the district
Regional	Policy/ research group	Regulatory, industry, academic	Project Inshore	Input information on the fishing activities and stocks within the district to inform national Project
Regional	Policy/ research group	Regulatory, industry, academic	Project UK	Fisheries Improvement Plans for several species – D&S IFCA sits on steering groups
Regional	Presentation	Industry, conservation, regulatory, academic	Severn Estuary Forum	Providing Research and Management Information
Regional	Presentation	Industry, regulatory, academic	Scallop seminar hosted by SWFPO	Presenting D&S IFCA scallop research findings
Regional	Presentation	Academic	National Oceanography Centre	Presenting on research and management work of the IFCA.
Regional	Presentation	Industry	National Federation of Fishermen's Organisation (NFFO)	Presenting on research and management work of the IFCA.
Regional	Stakeholder meeting	Industry, regulatory, academic, conservation	Spurdog project steering group	Member of steering group, providing advice
Regional	Presentation	Conservation, regulatory, academic	South West Marine Ecosystems conference	Presenting on specific work areas and research

Table 1c – National Engagement

Scale	Engagement type	Sector	Stakeholder	IFCA involvement
National	Stakeholder meetings	Industry, regulatory, academic,	Shellfish Association of Great Britain Crustacean and Mollusca Committees	Chair of Crustacea Committee. Members of both committees. Presentations on IFCA work and providing input into national discussions
National	Policy	Regulatory	NIMEG	Collaborative working with other intelligence agencies
National	Policy/ research group	IFCA, regulatory, research, academic	IFCA Technical Advisory Group	Secretariat; updating on D&S IFCA research
National	Policy/ research group	Regulatory, academic	Institute of Fisheries Management Estuarine and Marine Committee	Committee member; providing information on research outputs
National	Policy/ research group	Regulatory, industry	Defra elasmobranch steering group	Steering group member providing research and management information
National	Stakeholder meeting	Regulatory, academic, industry	Seafish Skates and Rays group	Group member providing research and management information
National	Policy/ research group	Regulatory, industry, academic	Project Inshore	Input information on the fishing activities and stocks within the district to inform national Project
Trans-national	Policy/ research group	Regulatory	Cardiff Bay Tidal Lagoon expert topic panel	Member providing research and management information
Trans-national	Policy/ research group	Academic, conservation,	Severn Estuary Ecological Research Forum	Founder of group and steer. Providing Research and Management Information. Help direct future projects
Trans-national	Joint working	Regulatory	D&S IFCA and Welsh Government Fisheries Function	Collaborative working with across the Severn Estuary
Trans-national	Joint working – local authorities, Welsh Government, agencies	Regulatory	Bristol Channel Standing Environment Group	Providing information on fishing activities and habitats, contact for environmental emergencies
Trans-national	Project participation	Regulatory, academic, research, mariculture industry	EUROHAB	Project partner – main role involvement with mariculture industry. Dissemination and trialling project outputs
National	Presentation	Regulatory, academic, industry	Coastal Futures	Presenting on D&S IFCA work
National	Presentation	Industry, regulatory, academic,	Shellfish Association of Great Britain (SAGB) Annual Conference	Chair and facilitating conference sessions
National	Presentation	Regulatory, academic	Institute of Fisheries Management (IFM) annual conference	Presenting on D&S IFCA work
National	Presentation	Regulatory, academic	Institute of Fisheries Management (IFM) Estuarine and Marine Specialist Section conference	Presenting on D&S IFCA work
National	Presentation	Regulatory, academic	Pioneer Programme Conference	Presenting on D&S IFCA work
Trans-national	Presentation	Regulatory, academic	Royal Geographical Society conference	Presenting on D&S IFCA work

Success Criterion 2

IFCAs implement a fair, effective and proportionate enforcement regime.

Definition

The IFCA enforcement regime is risk-based, makes appropriate use of intelligence, meets legislative standards and complies with the Regulators Code. It should make effective use of the resources available to regulators; complement and align, if possible, with the regimes in adjacent IFC Districts and management by other organisations including the MMO and Environment Agency. Consistency and fairness are important. Regulatory compliance is promoted. Enforcement action is carried out by trained, professional officers working to clear standards of conduct.

Expected Outcomes

- The IFCA will publish its enforcement risk register and strategy, clearly setting out its approach to achieving regulatory compliance and potential sanctions that may be applied for infringements and/or offences.
- The IFCA will manage operational activity (e.g. through a Tasking & Co-ordination Group) and capture, record, evaluate and disseminate intelligence that is compatible with partner organisations. It is engaged in joint working with partner organisations.
- Warranted Inshore Fisheries and Conservation Officers (IFCOs) will be trained and accredited to nationally agreed standards. They will maintain professionalism and make appropriate interventions to deliver efficient, effective enforcement activity
- The IFCA will have developed consistency in regulations (byelaws) with other organisations

Self-Assessment

D&S IFCA Enforcement and Compliance Strategy

D&S IFCA publishes its Enforcement and Compliance Strategy, which sets out key details related to the following:

- Principles for better regulation
- Powers and approach to management (Byelaw Strategy and Byelaw Review)
- Use of technology
- Standards for investigations
- Training requirements and standards for enforcement officers
- Working together
- Enforcement operations

Implementing a Fair, Effective and Proportionate Enforcement Regime

D&S IFCA operates an intelligence led and risk-based approach to enforcement. This is in line with the National Intelligence Model followed by other enforcement agencies and improves the sharing of intelligence giving a better overview of potential illegal activities. This intelligence is

monitored by an appointed officer and fed in to regular Tasking and Control Group meetings from which officers are expected to develop enforcement plans that reflect the predicted risk but also any reports of suspicious activity. The plans set out the activities the shore and sea patrols are intended to monitor and then officers fill in the patrol log to record what actions were taken.

Intelligence and information are shared between IFCA, MMO and EA and other Government Agencies. The sharing of this information is crucial to ensure a co-ordinated; cross agency approach to enforcement is achieved. All inspections carried out by officers will be recorded on MCSS.

To support the reporting of suspicious or suspected illegal activity D&S IFCA has an out of hours contact number. D&S IFCA felt that it was important that callers wishing to report suspicious activity had a realistic opportunity to speak to a Duty Officer that could as a minimum record the information to inform future patrols. The Duty Officer may have the opportunity to call officers whilst they are conducting operations and provide them with the information. Very often callers are reporting activity as it is happening and the Duty Phone provides the opportunity for real time reporting and potentially allows for immediate action.

Enforcement Activity, Resources and Technology

D&S IFCA has limited resources and cannot respond to all reports and managing expectations is both important and challenging. In 2014 D&S IFCA took the decision to sell the its large 22 metre patrol vessel, in part due to the pressure to balance D&S IFCA's budget and has made use of much smaller craft since. Smaller craft have both advantages and disadvantages at sea, but this has no impact on shore-based operations, where it is the limited number of officers coupled with a very large District that presents more of a challenge. These challenges have driven D&S IFCA to be pro-active in maintaining and enhancing close working relationships with other regulators. Joint working is of high importance for D&S IFCA in order to maximise its enforcement capability. Regular joint working with the MMO, in particular Brixham and Plymouth MMO Offices, is a very good example of how the organisations' collaborative working can be of real benefit and has been recognised at a national level as a model for others. During the reporting period D&S IFCA has seconded Environment Agency staff to work as warranted IFCOs and has also contracted other security businesses to aid with enforcement patrols, especially within the many estuaries of Devon.

Professional, well-trained enforcement officers are key to the delivery of effective targeted and well-planned operations, and in this regard D&S IFCA has achieved well-documented success in terms of enforcement and prosecutions. Table 2 highlights some of the enforcement work undertaken by D&S IFCA. During the reporting period, the legal powers of IFCOs to enforce European legislation was inadvertently removed by Defra. This led to officers being unable to undertake fully the work that had previously taken place and as a result the level of infringements and prosecutions had been reduced over this period. These powers were restored in August 2018.

Advancements in new technology have been enthusiastically embraced by D&S IFCA in order to increase its effectiveness in enforcement operations. D&S IFCA is committed to the use of new technology and the permitting byelaw model (which allows for relatively rapid changes in the

Permit Conditions) has allowed for the introduction of remote monitoring technology on all mobile fishing vessels over 6.99 metres in length.

Creating Better Regulation

Ensuring a fair, proportionate and effective enforcement regime is linked to the management regulation that is introduced and enforced. D&S IFCA has seized upon the opportunity, whilst conducting its review of inherited Byelaws, to develop legislation that better supports the management of sea fisheries resources, and enables it to deliver the duties under Sections 153 and 154 of MaCAA. The ability to introduce permits is considered by D&S IFCA to be making effective use of the resources available to regulators and this Authority has made full use of Section 156 of MaCAA which sets out the provisions that may be made by byelaw.

D&S IFCA has consciously moved away from the more rigid traditional byelaw model. An activity-based strategy has been implemented and permit byelaws (utilising permit conditions) have been developed which offer flexibility for the management of different fishing activities involving both commercial and recreational sectors. As a result, the creation of multiple new stand-alone byelaws has not been required which has saved money, time and enabled appropriate and proportionate control measures to be introduced in the most timely fashion. To avoid sub-delegation, elements of management are fixed and a robust review procedure has been implemented which must be followed to make any changes to the flexible permit conditions. Not only has this approach allowed for changes when needed, but it also provides all fishers with the opportunity to engage and potentially influence the regulations that they must then adhere to. It is felt that this approach has the potential to drive behavioural change and promote compliance.

The byelaw strategy (activity-based permit model) adopted by D&S IFCA, is different to the approach taken by the adjoining IFCAs and achieving a consistent approach in terms of management or agreeing on key principles was not always possible. A byelaw review group including Cornwall IFCA (CIFCA), D&S IFCA, Southern IFCA and Sussex IFCA was created to explore the potential to have harmonisation in regulation across the South and Southwest. Despite the best efforts of the officers at the meeting it became apparent that there are regional differences that require tailored management. A good example is the size of vessel restrictions across the districts reflecting, in part, the fisheries and the prevailing local sea conditions. CIFCA has a vessel maximum length of 18.28m for trawling vessels, 15.24m in D&S IFCA, Southern IFCA 12m and Sussex IFCA 14m.

However, consistency has been applied to specific control measures, with an example being an increase in the minimum conservation size of brown hen crab to 150mm and spiny lobster to 110mm (D&S IFCA potting permit conditions) to mirror a CIFCA restrictions and provided a better fit with the management required for the Authority's district.

Case Study 2: Using New Technology - Making Effective Use of Limited Resources

Embracing and introducing new technology, where it is appropriate, is a key objective of D&S IFCA. D&S IFCA has recognised the significant benefits to both regulators and fishers associated with the introduction of a reliable I-VMS system. Effective monitoring of all mobile fishing vessels will help safeguard Marine Protected Areas (MPA) that are closed to all types of demersal mobile fishing to protect designated habitats and features. Conversely, I-VMS may provide greater

potential for mobile fishing vessels to gain greater access to less sensitive areas adjacent to closed areas.

The Mobile Fishing Permit Byelaw came into force in 2014. The Byelaw provides the framework for permits (conditions of use) to be created, some of which can be flexible. Flexibility exists in specific categories which include catch, gear, time and spatial restrictions. To avoid sub-delegation, the Byelaw must clearly set out how much scope there is for flexibility and how changes (if required) will be made. A review procedure is clearly documented in the Byelaw. The Byelaw was future proofed to a degree as it clearly demonstrated that remotely accessed electronic reporting devices, which may be required in the future, can be accommodated by the Byelaw.

In 2017, a process began to refine the Mobile Fishing Permit Conditions and introduce Inshore Vessel Monitoring Systems to all permitted mobile fishing vessels over 6.99 metres. Working in conjunction with Common Seas (a non-profit making, Non-Government Organisation), funding was secured for the purchase of over 80 units. Consultation was undertaken with all stakeholders and the rationale behind this initiative was fully documented in the consultation reports which were made available and posted on the D&S IFCA website. After a lengthy and robust process, in April 2018 the D&S IFCA Byelaw & Permitting Sub-Committee agreed that Mobile Fishing Permit Conditions should be subjected to amendment to incorporate this new technology. In August 2018, (after a period of units being fitted to vessels) revised permit conditions were circulated to all existing Mobile Fishing Permit Holders. This demonstrates the inherent flexibility of the permit byelaw model utilised by D&S IFCA.

Table 2 - Enforcement Activity

Category	Metric	Details Required	Total 2015	Total 2016	Total 2017	Total 2018 to date	Total
Inspections of sea	Vessel patrols	Any patrol vessel or survey (mother /daughter boat combination as one patrol	32	80	74	23	209
	Fishing vessel boarding	Any fishing vessel (including unregistered / unlicensed) inspected at sea, where boarding was in pursuit of any relevant duty	Not recorded	14	55	10	79
Inspections ashore or in port	Shore patrol	Excursion/visit of any length to any part of the coast for an inspection observation of fishing related activity	15	40	12	7	74
Investigation outcomes	Verbal Warnings/advisory letters	Warnings, re-briefs or letters to minor breaches of legislation (no further action taken). Where both were issued to one person/company, count as one action	1	6	2	4	13
	Case files generated	For a serious breach of legislation which was thought would or did lead to a formal warning letter or the application of legal sanctions	19	63	32	25	139
	Formal written warnings	For a serious breach of legislation where evidence was gathered was sufficient to take legal proceedings, but where a letter was instead deemed the most appropriate action	2	27	9	8	46
	Formal cautions	All cautions relevant to any one case	0	1	2	0	3
	FAPs offered	All FAPs relevant to any one case	4	9	8	2	23
	Individual/companies prosecuted	All persons and company's relevant to any one case	1	6	5	0	12

Success Criterion 3

IFCAs use evidence based and appropriate measures to manage the sustainable exploitation of sea fisheries resources and deliver marine environmental protection within their districts.

Definition

The IFCAs were created as statutory inshore regulators by the Marine and Coastal Access Act 2009. They are relevant authorities for implementing international environmental commitments including the Birds, Habitats, Water and Marine Strategy Framework Directives and make an important contribution to securing a network of well managed marine protected areas, including European Marine Sites and Marine Conservation Zones. Fisheries Management Plans identify local management measures which should be based on evidence; be timely; subject to appropriate consultation and in step with national initiatives and priorities. An IFCA should balance the social and economic benefits of exploiting sea fisheries resources with the need to protect the environment. It should contribute to sustainable development.

Expected Outcomes

- The IFCA will identify issues likely to affect sustainable management of the marine environment in the IFC District; undertake risk assessment and gap analysis; review appropriateness of existing measures; evaluate management options and develop and implement proportionate marine management solutions
- The IFCA will support implementation of a well-managed network of marine protected areas by: developing a range of criteria-based management options; implementing management measures to ensure that inshore fisheries activities comply with the Marine and Coastal Access Act 2009 and the revised approach to managing commercial fisheries in European Marine Sites; and that local management contributes to delivery of targets for the Marine Strategy Framework Directive, Water Framework Directive and Marine Plans.
- The IFCA will develop Fisheries Management Plans for priority species where appropriate. Shared objectives will be developed with identified partners; actions identified and best practice reflected so that management contributes to sustainable development.

Self-Assessment

Ecosystem Approach

D&S IFCA is committed to an Ecosystem Approach. Whilst the Ecosystem Approach is still being defined and contextualised in relation to fisheries management, common to all interpretations is the consideration of wider ecosystem impacts of fishing on habitats and non-target species and the consideration of all potential human impacts on habitats, fish and the ecosystem. This broader consideration of the potential human impacts on fish stocks brings several other policy areas, such as marine planning and UK energy policy under the umbrella of issues which D&S IFCA must be aware of and input into where appropriate. Commitment to the Ecosystem Approach has been reaffirmed by the UK Government's 25-year environment plan, and in the current white

paper on Sustainable Fisheries for Future Generations. Much of the work the D&S IFCA undertakes is looking at the broader ecosystem and the impacts of activities that take place with it. Examples of this are found in the joint being undertaken as part of the Marine Pioneer Programme, in particular the project working with Blue Marine Foundation on investigating the stock structure, distribution and habitat use of the Atlantic Herring. Other examples can be found in the varied and in depth work the IFCA undertakes in the Severn Estuary, such as research to understand the use of *Sabellaria* by fin fish and the mapping of the extent of *Sabellaria* in the Severn Estuary.

Permit Byelaws and Incorporating New Evidence

The permit byelaw approach adopted by D&S IFCA allows the regular revision of permit conditions based on new evidence, gathered through the extensive research undertaken by officers. This achieves the flexible, adaptive management required. D&S IFCA is currently revising HRA and developing monitoring and control plans to align with byelaw review reporting periods.

Research Plan

Evidence is central to management decisions for D&S IFCA. The very best available evidence is needed to fulfil the IFCA's duties under Ss.153 and 154 MaCCA. D&S IFCA produces an Annual Research Plan, which sets out the research projects and survey work for the forthcoming year to deliver Success Criteria 3 and 5, and ensures the IFCA manages the sustainable exploitation of sea fisheries resources and delivers marine environmental protection within its District. Whilst some projects are short term, designed to gather specific evidence, others are part a long-term evidence gathering strategy.

Marine Protected Areas

D&S IFCA has ten European Marine Sites (EMSs), six Tranche 1 and 2 Marine Conservation Zones (MCZs) and a possible six new Tranche 3 MCZs. Many of these sites are co-located and some have shared boundaries with other IFCAs, the MMO and Welsh Government. A total of 2329 gear - feature interactions have been identified for D&S IFCA's European Marine Sites, and of these only 100, relating to bait collection, remain to be assessed. For Tranche 1 MCZ 549 interactions have needed some form of assessment. For Tranche 2 a further 663 gear feature interactions are being assessed. Evidence gathering for ground-truthing the distribution of protected species and habitat and collecting data on fishing effort and location, along with writing MPA assessments has been a major workstream over the past four years and continues to be a major part of D&S IFCA Environment officers' work. Table 3 shows some of the projects undertaken during the last four years.

Over this reporting period D&S IFCA has demonstrated comprehensive collection of habitat data and fisheries assessments. It uses both D&S IFCA owned surveying equipment such as the Flying Array, and shared IFCA equipment such as the ARIS Sonar camera, to gather evidence to support MPA management. D&S IFCA has used innovative modern technologies to undertake some of the intertidal survey work it has completed. Drones or Unmanned Aerial Vehicles have been used to survey the Exe Estuary and Taw Torridge Estuary to identify, locate and count the number of crab tiles deployed by fishers to collect soft shell 'peeler crabs'.

Local Evidence Gathering for Improved Management of Shared Stocks

Partnership working is at the central of the evidence gathering that D&S IFCA undertakes. Much of the research could not be achieved without working with stakeholders, industry members, NGO bodies and agencies such as Cefas, Natural England and the Environment Agency. Collaboration with academic institutes is also key to fulfilling the evidence gathering function of the IFCA. The IFCA is increasingly involved in finfish research and working with a range of respected specialists in this field, which has increased the knowledge of the IFCA and the development of detailed research projects. For example, finfish data collection on species in the Bristol Channel has been key to inform consultation responses. Ray, Sole and juvenile fish surveys being undertaken provide the basis for future project work and is being used to input into Defra's Marine Pioneer Programme. D&S IFCA also part funds PhD studies to provide in-depth scientific evidence to aid management of the sea fish resources in the district. Currently a Bass PhD is funded together with the University of Plymouth. This is described under Success Criteria 5.

Fisheries Research and Management Plans

Through the Pioneer Programme Devon and Severn is developing the concept of Fisheries Research and Management (FR&M) Plans. These locally-focused documents will gather together information on management of stocks, stock assessments, local knowledge and existing data on the ecology of species. The plans will also identify opportunities for improving local, national and European management, identify data gaps and prioritise research. D&S IFCA sits on the steering groups for two Project UK Fisheries Improvement Plans (FIPs) – Channel Scallops FIP, and Western Channel, Celtic Sea and South West Crab and lobster FIPs. These FIPs will provide the basis for D&S IFCA Fisheries Research and Management Plans for these species. D&S IFCA has gathered and continues to gather data on many fish and shellfish species in the district including spiny lobster, brown crab, European lobster, cuttlefish, mussels, scallops, bass, sole and rays and these data will be used in the develop of plans for these species.

Data collected through the intertidal bivalve surveys are used to manage these fisheries. For example, in the Taw Torridge Estuary SSSI the annual mussel stock assessments are undertaken to review the management measures that have been developed by Natural England and D&S IFCA, to ensure that the hand-gathering of mussels on the public beds is sustainable and allows there to be sufficient stock available to the birds that use the intertidal areas of the SSSI.

Case study 3: Evidence Gathering for Adaptive Management of The Live Wrasse Fishery

A new fishery for live wrasse emerged in 2015/2016 in the D&S IFCA district. The wrasse are caught in pots and transported live overland to Scottish salmon farms where they are used in the control of sea lice, as an alternative to chemical treatments.

Wrasse play an important ecosystem role. Wrasse consume molluscs and crustaceans, such as isopods and amphipods, and play a key function in the ecological health of reef and kelp forests ecosystems. They act as cleaner fish in these ecosystems and to other fish species in the wild.

Wrasse are inshore species, with no EU or UK management measures. They are an important species to recreational users of the marine environment including divers and anglers, and have

been used as pot bait for the commercial potting sector. The emerging fishery occurs in Plymouth Sound and Estuaries European Marine Site. Five species of wrasse are caught, and four of those are retained by fishermen. Each species has a complex life-history and behavioural strategies, making them particularly vulnerable to over-exploitation and there are many gaps in the existing evidence base.

The potting permit byelaw was brought in in 2014, so a suitable management mechanism already existed. A literature review was conducted, and findings from Irish and Norwegian research together with Cefas input were considered. From this research a series of recommendations were made to D&S IFCA Byelaw and Permitting Sub-Committee to bring in reactive and immediate management via the Potting Permit Byelaw. Evidence gaps were also identified which led to the design of a fully documented fishery to provide additional fisheries data to inform more locally tailored management needs. The Sub-Committee agreed to introduce the recommendations including implementing the fully documented fishery; a 120 pot limit per permit holder (with a maximum of 480 pots for the fishery); a requirement to mark wrasse gear; a closed season for spawning from 1st April to 30th June; Minimum (MinCRS) and Maximum Conservation Reference Sizes (MaxCRS) for five species of wrasse (120-230mm for three species, 150-230mm for two other species). An important part of the management process was the requirement of the fishers to allow D&S IFCA officers to undertake on-board surveys to gather catch data to supplement the landing data recorded by the fishers. The literature review also highlighted the benefit of small closed areas within the fishing area and with this in mind, D&S IFCA introduced voluntary closed areas across the Plymouth Sound that lies within its District. All this work was in full collaboration with the fishing industry and Salmon Farm Agent, who were supportive of the management measures

Following the implementation of these measures in 2017, the results of the first year of data collection were collated in a report presented to the Byelaw and Permitting Sub-Committee in November 2017. The report recommended changes to some of the management measures. These included a more restrictive slot size for one species - corkwing wrasse – changing the MinCRS to 140mm and MaxCRS to 180mm; a shift in spawning season closure; the continuation of fully documented fishery; changes to the voluntary closed areas and the introduction of voluntary geographic limit to fishery. The changes in size and spawning restrictions were introduced by reviewing the Potting Permit Conditions in 2018, as described in Case Study 4. The in-depth work undertaken and the introduction of management measures, through the permitting system, means that this fully documented fishery will be assessed as to whether the stocks are being fished sustainably, and may provide a model for the future.

Table 3 – Evidence Gathering

Project	Project Lead	Project Partners	Survey Duration/ Frequency	Rationale	Management Mechanism
Mussel stock assessments: Taw-Torridge, Exe, Teign	D&S IFCA	NE, volunteers	Annual	Inform byelaw development, monitor stocks, set quota, ensure conservation objectives of MPAs are met	Feed into development of IFCA hand gathering byelaw and FR&M Plans
Cockle stock assessments: Exe, Teign	D&S IFCA		Annual	Inform byelaw development, monitor stocks, set quota, ensure conservation objectives of MPAs are met	Feed into development of IFCA hand gathering byelaw and FR&M Plans
Crab tile distribution surveys: Exe, Taw-Torridge, Dart, Teign, Salcombe, Yealm, Avon, Axe	D&S IFCA		Quadrennial	Inform byelaw development, monitor stocks, set quota, ensure conservation objectives of MPAs are met	Feed into development of IFCA hand gathering byelaw
Seagrass mapping	D&S IFCA		Biennial	Inform permit conditions for closed areas	Mobile gear permit byelaw
Bait collection and hand gathering surveys	D&S IFCA		As necessary	Inform byelaw development, monitor stocks, set quota, ensure conservation objectives of MPAs are met	Feed into development of IFCA hand gathering byelaw
Whelk size at sexual maturity	D&S IFCA		3-year project	Inform change in minimum landing size of whelks and potentially spawning season closure.	Potting permit byelaw and development of FR&M Plans. Guidance for industry
Wrasse onboard observer surveys	D&S IFCA		Annual – throughout fishing season	Monitor sustainability of new fishery and effectiveness of new statutory permit conditions	Potting permit byelaw
Wrasse pot saturation experiments	Plymouth University	D&S IFCA	MSc project	Monitor sustainability of new fishery and effectiveness of new statutory permit conditions	Potting permit byelaw
Cuttlepot impact study	D&S IFCA		One-year project	Inform monitoring and control plan for inshore cuttlepot fishery on seagrass	Potting permit byelaw
Habitat mapping - The Prongs	D&S IFCA		Two-year project	Inform management of European Marine Site	Mobile gear permit byelaw
Habitat mapping - Lyme Bay SCI	D&S IFCA		One-year project	Inform management of European Marine Site	Mobile gear permit byelaw
Potting impacts PhD	Plymouth University	D&S IFCA	4-year project	Inform management of European Marine Site	Potting permit byelaw

Project	Project Lead	Project Partners	Survey Duration/ Frequency	Rationale	Management Mechanism
Immature Bass Acoustic Stock Surveillance	Plymouth University	D&S IFCA	3-year project	Inform management of Bass Nursery Areas and surrounding areas	Netting permit byelaw, future development of rod and line permit byelaw
Stear Marshes fish habitat utilisation	Plymouth University	D&S IFCA	3-year project	Understand more about use of compensatory habitats for fish in Severn Estuary	Relevant to wider ecosystem approach, not necessarily local fisheries management
Scallop stock assessment methodology pilots	Cefas	D&S IFCA	Ongoing	Inform management of the species	Inform national policy development
Mapping of scallop habitat in Salcombe	D&S IFCA		One-year project	Work undertaken in response to requests for changes in the boundary of the fishery	Mobile gear permit byelaw
North Devon Skate and Ray Pilot Study	D&S IFCA	North Devon FLAG, North Devon Biosphere Reserve, Northern Devon Coast AONB	One-year project	Inform national policy development, explore possibility of regional management	Possible future national or regional policy
Shark By-Watch UK 2	Cefas	D&S IFCA	One-year project	Inform national policy development, explore possibility of regional management	Possible future national or regional policy
Severn Estuary Sole surveys	Plymouth University	D&S IFCA	Ongoing	Inform national policy development, explore possibility of regional management	Relevant to wider ecosystem approach, not necessarily local fisheries management
Bass Fisheries and Conservation UK	Cefas	D&S IFCA	3-year project	Inform national policy development, explore possibility of regional management	Possible future national or regional policy
Torbay mobile gear impact trial	D&S IFCA	Defra IEG, Ocean Ecology	One-year project	Inform management of Marine Conservation Zone	Mobile gear permit byelaw
Natural England Lundy Habitat Mapping	Cefas	D&S IFCA, EA, NE	One-year project	Inform management of European Marine Site	Mobile gear permit byelaw
Sabellaria mapping in the Severn Estuary	NE/ NRW	D&S IFCA, EIFCA, EA	Ongoing	Inform management of European Marine Site, trial new methodologies for habitat mapping	Relevant to wider ecosystem approach, not necessarily local fisheries management

Project	Project Lead	Project Partners	Survey Duration/ Frequency	Rationale	Management Mechanism
Angling Zone monitoring	D&S IFCA		Two-year project	Monitor activity levels at site and adherence to introduced code of conduct	Angling Zone Codes of Conduct, future netting permit byelaw, future development of rod and line permit byelaw
EUROHAB	Cefas, Ifremer, Plymouth University, EA, University of Caen, Industry	D&S IFCA		Developing a web-based toll to identify harmful algal blooms that impact bivalve fisheries in the SW	Aquaculture Strategy
Pioneer Programme: Bristol Channel Herring Project	Blue Marine Foundation	D&S IFCA, Swansea University, Cefas, Industry	Early planning stages: 3-year project?	Investigate stock unit of herring, support and add value to local fisheries, application of Ecosystem Approach	Relevant to wider ecosystem approach, not necessarily local fisheries management
Pioneer Programme: Bristol Channel Fisheries, Science, Manager Partnerships	Blue Marine Foundation	Industry, D&S IFCA, North Devon Biosphere Reserve	Early planning stages: 3-year project?	Investigate fish stocks through the Ecosystem Approach to management	Potential byelaw permit condition review
Pioneer Programme: Monitoring and Control Plans	D&S IFCA	Blue Marine Foundation, North Devon Biosphere Reserve	Early planning stages: 3-year project?	Rationalise and prioritise management and research options for fish species in D&S IFCA district	Mobile gear permit byelaw; potting permit byelaw; netting permit byelaw; future byelaw development; influence national and regional policy and management

Success Criterion 4

IFCAs have appropriate governance in place and staff are trained and professional

Definition

IFCAs are statutory authorities and sit within the local government family. Authority members may be either general members or local councillors. They comply with Codes of Conduct and the Standing Orders that apply to meetings of local government committees. General members are appointed on merit, through open competition and for a term. They are subject to an annual performance appraisal.

An IFCA is funded by levy, charged to its member councils. Funding originates in local taxation. An IFCA is accountable for its use of public resources and should ensure that a proper auditing regime provides confidence in its commitment and spend of public money. It should make effective use of its resources, including staff and assets. An IFCA has a statutory obligation to prepare and publish Annual Plans and Annual Reports.

Expected Outcomes

- The IFCA will demonstrate its long-term strategic approach to sustainable marine management by having appropriate plan-making, review, update and amendment procedures in place. The IFCA will record its performance against corporate outcomes and indicators as soon as practically possible following the end of the financial year.
- Staff performance management systems will be in place that link to the IFCA success criteria. There will be an induction procedure for new joiners. Staff training and development needs will be identified. Performance will be managed and, where necessary, improvement procedures will be followed.
- The IFCA Committee will be supported by an organised, efficient and effective secretariat. New members will receive an induction pack and briefing from D&S IFCA. There will be a rolling twelve-month schedule of quarterly Authority meetings. Notices of meetings and documentation will be made available in line with Standing Orders.

IFCA Committee meetings will be held in public unless material is either confidential, or exempt within the meaning of the Local Government Act 1972.

Self-Assessment

Standing Orders covering the conduct and operation of D&S IFCA are regularly reviewed. Terms of Reference have been created for the two sub-committees that the Authority uses to oversee its work. The Authority publishes its Financial Probity Policy and Financial and Administrative Regulations. A further series of policies cover the conduct of officers at work. HR and Financial advice and assistance is provided by Devon County Council through a service level agreement.

The Authority meetings are conducted with reference to the Local Government Act 1972, the Department of Communities and Local Government expectations and follows the process set out in The Devon and Severn Inshore Fisheries and Conservation Order 2010.

Agendas for public meeting of the Authority are published ten working days before a meeting. Papers relevant to the agendas are published on the Authority's website prior to the meeting. Members of the public have attended meetings of both the full Authority and the Byelaw and Permitting Sub-Committee and had opportunities to address the Members. Comprehensive minutes from every meeting are made publicly available, after members have agreed them as a true record,

The Authority is also bound by further rules, set out on the face of each of the Permit Byelaws. These rules, which set out the process by which the Authority undertakes a review of the permit conditions, were designed to enable changes to the permit conditions following formal consultation and agreement by the members of the Authority.

New members of the Authority are encouraged to meet with senior officers to understand more about the work of the Authority, and a handbook has been designed for new members of Byelaw and Permitting Sub-committee and members of the public. The guide sets out the remit of the Sub-Committee and how it undertakes a review of the Authority's management approach to fisheries and conservation in the District. Importantly it also sets out how a review of the permits can be triggered and how interested parties can get involved in the review process.

The Authority's Responsible Financial Officer is currently the Head of Devon County Council's Finance Services. Finance officers from DCC conduct an annual internal audit and provide regular budget updates to the Authority. The Authority's budget is regularly reviewed by the Finance and General Purposes sub-committee and the setting of the levy is considered and agreed at the Authority meeting in December each year. The Authority's annual budget is below the threshold for requiring an external audit.

The Authority publishes its Annual Plan and reports on its delivery every quarter. The quarterly reports are considered at each Full Authority meeting and published on the website.

All of the Authority's officers have an annual performance appraisal and a personal development review with a mid-term (six months) update meeting. All officers are security cleared before taking up their employment and undertake a mandatory six months' probation period. All officers must complete and then maintain the mandatory certification for commercial seafarers to be allowed to go to sea and enforcement officers do not get issued a warrant until satisfying the Chief Officer of their competencies in that role. The Authority is a supporter of the national MMO/IFCA enforcement training programme.

General members, appointed to the Authority by the MMO, are selected for their expertise and subject knowledge to support the IFCA's decision making. These appointees are subject to an annual review.

Case Study 4: The Process of Reviewing Permit Byelaw Permit Conditions

Permit Byelaw Permit conditions must be reviewed at least every three years. The review procedure that must be followed is documented in the relevant Permit Byelaw. Conducting this process in practice demonstrates the need for a logical, efficient and organised secretariat. This case study focuses upon the review of the Potting Byelaw.

Byelaw working can be complex and D&S IFCA has formulated the Byelaw & Permitting Sub-Committee to conduct the work that is defined in the Sub-Committee's Terms of Reference. Each member has a different background and this offers various skill sets. Delegated powers have been granted to the Sub-Committee for byelaw permit condition related decision making. The Sub-Committee has four scheduled meetings each year and the opportunity exists for additional meetings to be held as and when required. Meetings are open to the public. Minutes, which due to the technical nature of discussions are often very in-depth, are taken and published when approved at the following meeting.

The recent three-year review of the Potting Permit Conditions included two separate phases of consultation. An open phase (28 days) was conducted providing all stakeholders the opportunity to examine the present conditions and highlight potential changes and the rationale for those changes.

The consultation response is documented by officers in the form of supplements which are presented to Sub-Committee members before meetings. The supplements include relevant evidence bases and officers' comments to provide additional clarity on specific items.

The Sub-Committee uses the best available evidence to inform its decision-making, or can apply a pre-cautionary approach to select key items of management that should be subjected to additional "focussed" consultation. All decision making is fully documented. The agendas for the meetings are directly linked to the supplementary reports that members receive and digest prior to the meeting. The supplements build on the consultation reports that are used during different phases of the consultation and are available for all stakeholders. A final report is completed at the end of the process which incorporates all previous information presented at different times. All of the interim reports and the final reports are available to the public.

Success Criterion 5

IFCAs make the best use of evidence to deliver their objectives

Definition

IFCAs are statutory regulators for their Inshore Fisheries and Conservation District. Decision-making should be based on evidence. All IFCAs are supported by officers who pool their expertise and share best practice as a Technical Advisory Group (TAG). A programme of research activity and monitoring is planned, developed and updated in consultation with partners. The programme informs management decisions and supports justification for additional research and evidence gathering.

Expected Outcomes

- A strategic research plan that contributes to greater understanding of the marine environment and delivery of cost-effective management of sea fisheries resources
- Standard Operating Procedures describe how data is captured and shared with principal partners
- A list of research databases held by the IFCA and the frequency of their review
- Non-confidential meta-data collected through the IFCA research programme should be recorded in a database available to the marine research community

Self-Assessment

Strategic Planning of Evidence Collection

Huge resources and work have been dedicated to managing commercial fishing activities in European Marine Sites (EMS) as result of Defra's Revised Approach, as well as carrying out MCZ assessments for activities occurring within Tranche 1 and Tranche 2 designated MCZs. Evidence collection and research has been the bedrock of this work and the planning of these activities has aligned with Defra's deadline for having management measures in place. The Annual Plan outlines the overall direction for each year and ties together byelaw development, management of fishing activities, compliance, environmental work, evidence gathering. A Research Plan is produced on an annual basis and details the research projects and rationale, costs, partnership working and timeframes. Evidence gathering is also dictated by the process of byelaw making and review and the timeframes set out by the Byelaw Sub-Committee, working closely with the IFCA's Environment team. Additional work (e.g. evidence collection for emerging issues such as the decline in European sea bass, the development of a live wrasse fishery and the 'ray ban' in the Bristol Channel) has required a reactive approach, which has then developed into discreet projects or individual species-based workplans. Reactive work has also been guided by the information produced by Project Inshore, which effectively produced a gap analysis and prioritisation for each IFCA district.

D&S IFCA is developing its long-term strategic approach to evidence gathering and research for each species of sea fish in its District, which will be the foundation of Research and Management Plans for each species. The evidence gathering that has already taken place over the past four years, and further back for some species, is paramount in informing these plans (e.g. mussel

stock assessment and whelk biology studies). The Fisheries Research and Management Plans will be trialled as part of the Marine Pioneer Programme in partnership with the Blue Marine Foundation and Plymouth University.

Cost-Effective Evidence Gathering

As outlined in reporting for Success Criteria 3, partnership working is essential for much of D&S IFCA's evidence gathering activity. It has been and continues to be cost-effective to join up with other organisations including Cefas, Natural England, Environment Agency and academic institutes such as Plymouth University, Exeter University and Swansea University, to undertake evidence gathering that can ensure sustainable use of the marine environment and aid the development of management measures and strategic planning of activities.

At a strategic level, partnership working also helps the IFCA to access external funding mechanisms to undertake some of the evidence gathering and complete the research needs of D&S IFCA. This has been evident in research outputs from projects, such as: FISHTRAIL which looked at the tourist benefits of angling and increasing anglers' awareness of fisheries legislation; I-BASS which involves acoustic tagging of bass in estuaries to investigate movement in and out of estuaries; and EUROHAB which is looking to develop a web-based alert tool for harmful algal blooms that could impact the South West Mariculture and bivalve fisheries.

D&S IFCA has invested in survey equipment to undertake the evidence gathering required to fulfil its objectives. This has included high definition underwater cameras, sidescan sonar, go-pro cameras and static bait cameras. D&S ICA has also purchased potting equipment in an attempt to gather data on spiny lobster populations and funded Sea Search to gather data that has been very useful to reinforce data gathered from Potting Permit holders. D&S IFCA officers have worked closely with members of the fishing industry to undertake survey work, which has been hugely beneficial and informed our reporting.

D&S IFCA has made use of the IFCA's shared equipment, particularly in the Severn Estuary where the Aris Sonar camera was deployed to gather data where high turbidity makes it difficult to deploy traditional underwater cameras. Data were collected to map *Sabellaria* and the Aris camera was also used as a baited camera to assess fish usage of this habitat. D&S IFCA has also trialled other new approaches to evidence gathering, as described earlier, such as using drones for intertidal surveys

Research Institutions have tended to stay away from the Severn Estuary due to the difficulty in data gathering but D&S IFCA has worked closely with academic researchers to progress projects on the fish usage of habitats in the Severn Estuary. This has increased interest in research in the Bristol Channel and helped to inform the IFCA's work.

Meeting Industry Standards for Multiple Use of Data

The evidence gathering by D&S IFCA follows national survey guidelines and is undertaken with full knowledge of the requirements for comprehensive survey planning and delivery. MESH guidelines for surveying are followed and the IFCA ensures it is aware of any updates or changes to these guidelines. D&S IFCA works with academic institutes to ensure that data gathering is undertaken in such a way that it can be scrutinised and stand up to robust statistical analysis. D&S IFCA officers also provide the research proposals and supervise undergraduate and

Masters' placements to help fulfil its research programme. D&S IFCA has developed Standard Operating Procedures and Risk Assessments for all its surveying capabilities.

Research outputs are published in specific reports and these are available on our website once complete. Survey metadata is collected and submitted through MEDIN. Officers have undertaken training in MEDIN to ensure compliance.

Sharing of research outputs and data collection is an important part of demonstrating the work the IFCA undertakes and how its objectives are delivered. D&S IFCA's website has been relaunched and now provides a platform for highlighting all the work that D&S IFCA undertakes and provides a resource library for easy access by members of the public and sharing of information.

Case Study: The European Seabass Workplan - Identifying Evidence Gaps and Developing Research Partnerships to Fill Them

D&S IFCA members raised concerns about lack of effectiveness of the new EU measures that were introduced in 2015 for bass, and whether these measures would improve the bass stocks in D&S IFCA District.

Officers were directed by the Authority to consider what potential bass conservation measures could be introduced in the District to help the stock recovery. In the first instance officers undertook a review of existing EU, national and local measures for protecting bass and, where possible looked at the likely impact of the new EU measures.

Research was undertaken on the life-cycle analysis of bass to look at existing protection and knowledge gaps at different life-history stages. Through this evidence gathering several large knowledge gaps were identified that required work at all levels, from local to regional and national considerations.

Work towards fulfilling the approach approved by the Authority included consideration of bass stocks in the Impact Assessment for the netting permit byelaw, and developing and co-funding a four-year PhD with Plymouth University. Officers supervise the PhD and support its survey work. Through the PhD the I-BASS project was developed, which specifically assesses the fine-scale usage of Bass Nursery Areas by bass. Acoustic tagging of different age classes of bass has been undertaken and acoustic receivers pick up the movement of bass in and out of three estuaries in Devon.

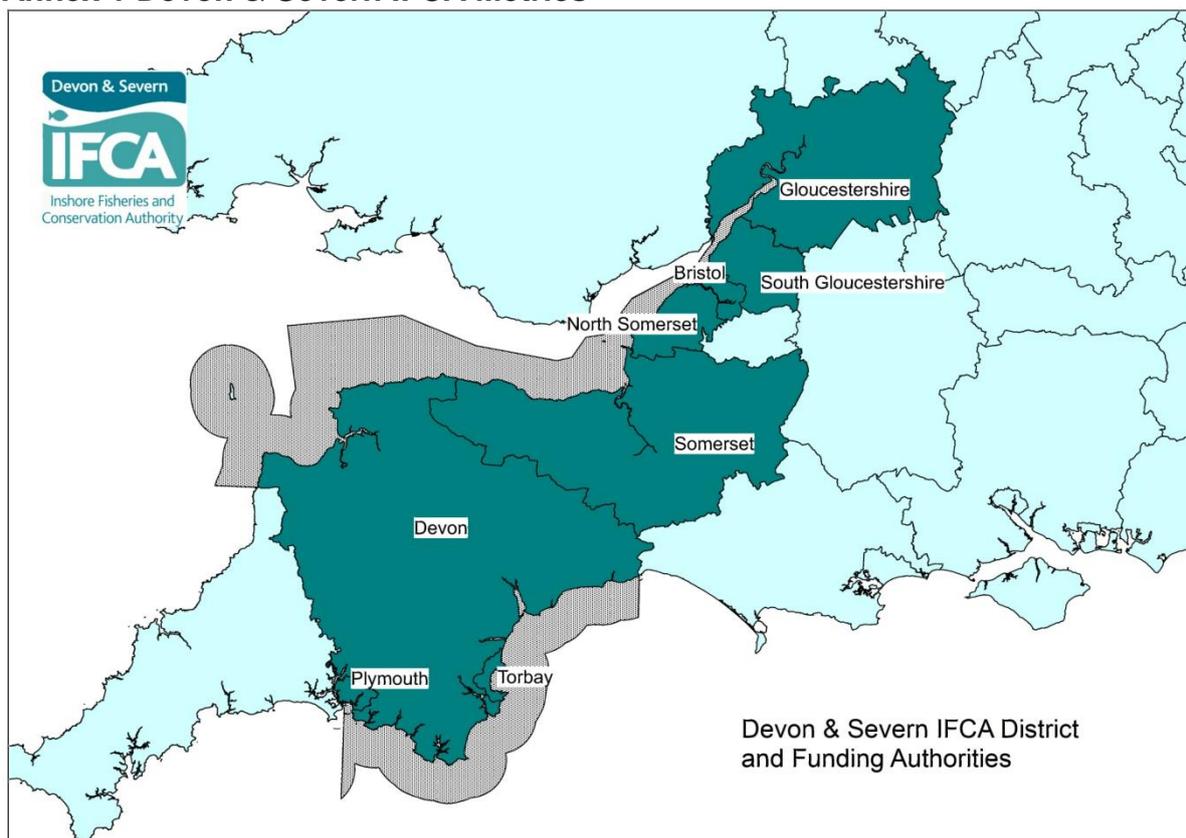
The research undertaken on bass so far has also identified the need for a larger partnership project to look at bass migrations and aggregations within the District. D&S IFCA has worked with Cefas for two years on the development of the Bass Fisheries Conservation UK project, which will help to fill these evidence gaps.

Table 4 - Best Use of Evidence

Strategic Evidence Approach	Process, Project or Workstream	Lead Organisation	Partner Organisations	Stage and Timeframe	Rationale	Management Mechanism
Annual planning	Annual Research Plan	D&S IFCA	EA, Natural England, Cefas, Fishing Industry Universities, IFCA	March each year	This plan outlines the research programme for the year to inform management decisions	Mobile gear permit byelaw; potting permit byelaw; netting permit byelaw; future byelaw development; influence national and regional policy and management
Annual Planning	Annual Plan	D&S IFCA		March each year	Details workstreams and objectives for each year	Mobile gear permit byelaw; potting permit byelaw; netting permit byelaw; future byelaw development; influence national and regional policy and management
Byelaw Development and Review	Byelaw consultations, reviews and impact assessments	D&S IFCA	MMO, Defra		Detailed Review process, adaptive management	Mobile gear permit byelaw; potting permit byelaw; netting permit byelaw; future byelaw development
Standardising research methodologies	Applying MESH guidelines to research, updating SOPs, sharing SOPs,	D&S IFCA	IFCA TAG, individual IFCA, Universities		Requirement to follow national guidelines and ensure survey planning and work is robust	Mobile gear permit byelaw; potting permit byelaw; netting permit byelaw; future byelaw development; influence national and regional policy and management
Making best use of shared IFCA equipment	Numerous individual projects	D&S IFCA	IFCA TAG, Southern IFCA, Eastern IFCA, Swansea University, Natural Resources Wales, Natural England, Plymouth University, Exeter University, Cefas, EA, Fishing Industry	Various – see Annual Plan	Cost – effective evidence gathering, sharing results reducing duplication	Mobile gear permit byelaw; potting permit byelaw; netting permit byelaw; future byelaw development; influence national and regional policy and management
Long-term planning	Pioneer Programme: Monitoring and Control Plans	D&S IFCA	Blue Marine Foundation, North Devon Biosphere Reserve, natural England, Fishing Industry	Early planning stages: 3-year project?	Rationalise and prioritise management and research options for fish species in D&S IFCA district	Mobile gear permit byelaw; potting permit byelaw; netting permit byelaw; future byelaw development; influence national and regional policy and management

Strategic Evidence Approach	Process, Project or Workstream	Lead Organisation	Partner Organisations	Stage and Timeframe	Rationale	Management Mechanism
Long-term planning	Bass workplan	D&S IFCA, PhD	Plymouth University, Cefas, Defra, industry, other IFCA's	Bass workplan 2015, likely review 2019	Review existing local, national and EU management measures for bass, identify opportunities for local work (PhD) and collaborative approach for regional work (Bass Fisheries and Conservation UK)	Netting permit byelaw, future development of rod and line permit byelaw, inform national policy development
Trialling new approaches to local research and management	Pioneer Programme: Bristol Channel Fisheries, Science, Manager Partnerships	Blue Marine Foundation	Industry, D&S IFCA, North Devon Biosphere Reserve	Early planning stages: 3-year project?	Reviewing how management can be applied to different species at different spatial levels, where appropriate	National, Regional and Local
Trialling the ecosystem approach	Pioneer Programme: Bristol Channel Herring Project, Bristol Channel Fish usage	D&S IFCA, Blue Marine Foundation	Plymouth University, Swansea University, Industry, D&S IFCA, North Devon Biosphere Reserve	Early planning stages: 3-year project?	Applying the ecosystem approach to research for fish species in the Bristol channel that may be rolled out around the coast.	National, Regional and Local

Annex 1 Devon & Severn IFCA Metrics



Size of the District

4,522 km² of sea

1,314 km² of coastline

9,141 km² of land

The largest IFCA district, with the added complication of two coasts.

In addition, D&S IFCA has cross-boundary co-operation and joint management responsibilities with 2 adjacent IFCAs (Cornwall and Southern), Welsh Government and the MMO. Lundy Island is 12 miles off the coast and was the first MCZ in the country and has a No Take Zone.

Costs

The annual budget divided by area of sea is £162.23 per km² for 2018.
One FTE for every 377 km² of coastal waters to protect and manage

Fishing Activity within the District

On 1st June 2018 the number of D&S IFCA permits issued were 991 under its permitting byelaw scheme. Each permit lasts for a period of 24 months

Towed Gear Permits	164 Commercial	(84 between 7-12m)
Potting Permits	200 Commercial	331 Recreational
Diving Permits	23 Commercial	199 Recreational
Netting Permits	66 Commercial	8 Recreational

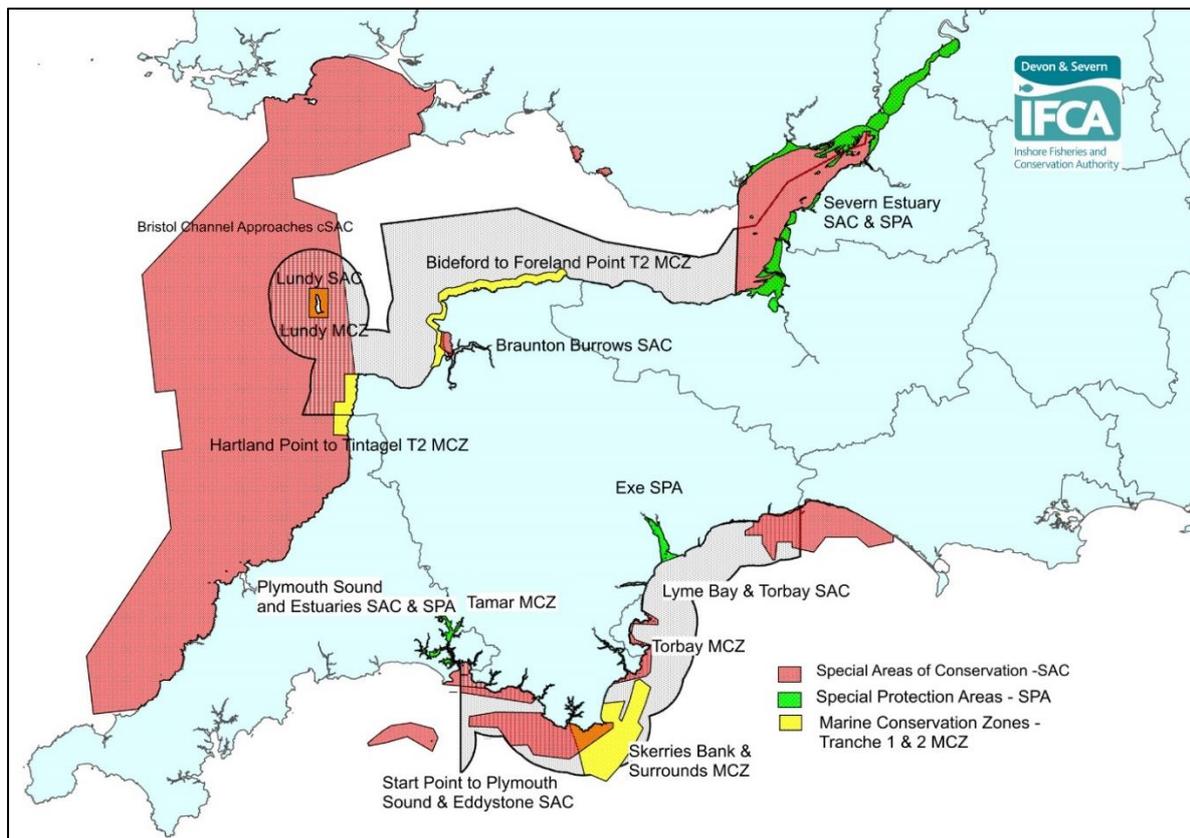
There are 24 ports and harbours ranging in size from the River Parrott to Brixham and Plymouth Harbours, two of the largest fishing ports in England in terms of landings and value of landings.

Enforcement Activity

In the period from April 2017 to March 2018 there were 30 cases where evidence was found by IFCA Enforcement Officers and other agencies. These were the outcomes:

- No further action was taken on 2 of the cases and 1 is still on going.
- 11 Official written warnings were given.
- 9 Financial Administrative Penalties were given.
- 5 court cases were successfully prosecuted.
- 1 case was jointly investigated with the MMO who have taken the lead in the prosecution as it relates to Bass.

Marine Protected Areas



- Ten European Marine Sites including the Bristol Channel Approaches cSAC for Harbour Porpoises are located in the D&S IFCA District.
- Four Tranche 1 Marine Conservation Zones (MCZs).
- Two Tranche 2 MCZs.
- Six new Tranche 3 MCZs within the District are proposed and will be consulted on in Summer 2018.
- 1,881 km² of MPAs (excluding co-location of EMS & MCZ) lie within the D&S IFCA District.
- 42% of D&S IFCA District lies within an MPA before Tranche 3 designations.