

# **Annual Report 2018 - 2019**

For period: 1<sup>st</sup> April 2018 to 31<sup>st</sup> March 2019

4<sup>th</sup> November 2019

# Contents

Overview.		3
Const	ruction of the Annual Report	3
Table 1a	Management of Fishing Activities (Completed Workstreams)	4
Table 1b	Management of Fishing Activities (Incomplete/Ongoing Workstreams)	7
Table 1c	Management of Fishing Activities (Additional Workstreams)	8
Case Stud	ly 1: Introduction of Vessel Monitoring Systems on all towed gear vessels operating in the District	9
Table 2a	Compliance (Completed Workstreams)	. 10
Table 2b	Compliance (Incomplete/Ongoing Workstreams)	
Table 2c	Compliance (Additional Workstreams)	. 12
Case Stud	ly 2: New Patrol Vessel <i>FPV David Rowe</i>	. 13
Table 3a	Evidence (Completed Workstreams)	. 15
Table 3b	Evidence (Incomplete/Ongoing Workstreams)	. 22
Table 3c	Evidence (Additional Workstreams)	. 24
Case Stud	ly 3: To Create a Monitoring and Control Plan from Results of a BACI Survey & other Research undertaken in the Torbay MCZ.	27
Table 4a	Internal Process (Completed Workstreams)	. 29
Table 4b	Internal Process (Incomplete/Ongoing Workstreams)	. 31
Table 4c	Internal Process (Additional Workstreams)	.32
Case Stud	ly 4: The Launch of the New D&S IFCA Website to Deliver Communication	. 33

#### Overview

An Annual Report must be produced as a requirement of section 178 of the Marine and Coastal Access Act 2009. This Annual Report meets that requirement and is focussed on the workstreams undertaken by D&S IFCA between 1<sup>st</sup> April 2018 and 31<sup>st</sup> March 2019 as set out in the D&S IFCA Annual Plan 2018-19.

The monitoring of identified workstreams and documenting which tasks remain on-going or are incomplete has been fundamental in the creation of the D&S IFCA 2019-20 Annual Plan.

#### **Aims of the Annual Report:**

- 1. To be easy to understand and to be effective as a means of reporting;
- 2. To demonstrate the status of workstreams as compared to those identified in the 2018-19 D&S IFCA Annual Plan;
- 3. To highlight which work streams, have been completed by 31st March 2019, or remain on track for completion by the original deadlines;
- 4. To highlight why some workstreams were not completed or not progressed;
- 5. To provide a more in-depth account of specific key tasks (case studies).

#### Construction of the Annual Report

This Annual Report is divided into core work areas.

For each of these areas, tables have been produced which demonstrate the workstreams that have been completed and those that are incomplete or were determined to be on-going and therefore forming part of the 2019-20 Annual Plan.

A further table has been included under each core work area, which documents other workstreams that were not included in the Annual Plan but have required a significant amount of officer time and resources to deliver.

The use of case studies has been used in this report to further explain successful completion of some key tasks.

Table 1a Management of Fishing Activities (Completed Workstreams)

Category	Task	Action	Why?	Progress Status
Management of Fishing activity	To introduce further management measures under the Mobile Fishing Permit Byelaw	To introduce the requirement for all Mobile Fishing Vessels between 6.99 & 15.25 metres to have fitted a fully functional IVMS fitted.	To have a fully monitored Mobile Fishing fleet within the D&S IFCA's District improve monitoring and management of these fisheries, in relation to the protection of MPA habitats.	New permits issued on 28 <sup>th</sup> August 2018.
		To work with Common Seas to install 84 IVMS units on Mobile Fishing Vessels between 6.99 and 11.99m.	To meet the conditions of the EMFF grant for the installation of the IVMS units	All units installed by 15 <sup>th</sup> August 2018.
		To create new permit Annexes (charts).	To reflect restrictions in spatial access to mobile gear vessels. in particularly in MPAs	New permits issued on 28th August 2018.
		To finalise new application forms and other associated policy documentation.	To update existing form to capture the necessary information and be GDPR compliant	Work completed on 28 <sup>th</sup> August 2018 - New documentation established and added to online shop in September 18.
		To introduce an increase size in Minimum Conservation Reference Size (MCRS) of whelks.	To reflect the D&S IFCA's scientific research into the sexual maturity of whelk and to action the findings of the consultation.	New permits were issued on 13th August 2018.
		To create new permit Annexes (charts).	To reflect new spatial restrictions on the use of certain types of pots to protect otters and catch restrictions for spiny lobster.	
	To introduce further management measures for the Live Wrasse Fishery under the	To introduce a revised slot size for Corkwing wrasse.	To reflect the D&S IFCA's scientific research into the catches of Corkwing and to protect a larger proportion of the mature population.	New permits issued on 13th August 2018.
	Potting Permit Byelaw	To change the period of closure for the fishery.	To reflect the D&S IFCA's scientific research exploring the spawning season for wrasse and to prevent fishing during the peak spawning periods.	

Category	Task	Action	Why?	Progress Status
Management of Fishing Activities	To introduce further management measures for the Live Wrasse Fishery under the Potting Permit Byelaw	Introduce new voluntary measures for Wrasse Pot Fishery.	To restrict the extent of the fishery to assess, through on-going research, if the management measures introduced are effective, and whether the fishery is having a negative impact on the stock. The new areas closed better align to the existing wrasse fishery.	Notification provided of new voluntary measure by 1 <sup>st</sup> July 2018.
	To review management of Hand Working Fishing Activities (hand gathering, crab tiling and bait collection)	To produce the review of Hand Working planning document for D&S IFCA's Byelaw & Permit Sub- committee.	Hand Working in the District needs to be reviewed along with the legacy byelaws, as part of the Byelaw review process.	Plan completed and agreed at Sub- Committee meeting 11th October 2018.
		To produce three summary reports, on hand gathering, crab tiling and bait collection, for the D&S IFCA's Byelaw & Permitting Sub-committee.	To inform the Byelaw and Permitting Sub-committee's initial consideration of future management of Hand Working activities carried out in the District.	Phase 1 (Crab Tiles) undertaken in January 2019. Supplement report prepared for Sub- Committee meeting (26th Feb 2019) Remaining (phases) methods & reports incorporated into Annual Plan.
	To publish Byelaw development reports for Mobile Fishing, Potting and Potting for Live Wrasse.	To produce final Byelaw Development Reports that document the complete process associated with the amended permit conditions for Mobile Fishing, Potting and Potting for Live Wrasse.	D&S IFCA must be accountable and transparent in its decision-making process.	All three reports completed by 31 <sup>st</sup> August 2018 and published on the D&S IFCA website.
	To publish detailed minutes	To compile and publish detailed minutes from all Sub-Committee meetings.	D&S IFCA must be accountable and transparent in its decision-making process.	Draft minutes circulated one month after each meeting.

Category	Task	Action	Why?	Progress Status
Management of Fishing Activities	To investigate the possibility of a S.167 Agreement with Cornwall IFCA	To Identify evidence that the current joint management approach in the Plymouth Sound is not effective. The ACO will hold discussions with Cornwall IFCA regarding the development of a 167 Agreement in relation to the Plymouth Sound & IFCA boundaries and inform the D&S IFCA of the outcome of such discussions.	To explore whether the harmonisation of management in this area of the District would be more effective and appropriate than the status quo.	The Authority decided not to take any further action in investigating this matter in the June 2018 meeting.
	To develop Monitoring and Control Plans (M&CPs) for certain activities taking place with Marine Protected Areas (MPAs)	M&CPs will be produced for specific activities in four MPAs and will be sent to Natural England for formal advice. Monitoring programmes will be set up and results will inform any potential changes in management of the fishing activity assessed.	To ensure the best available evidence is being used in the IFCA's management decisions and fulfil the IFCA's duty to protect the marine environment from or promote its recovery from the effects of the exploitation of sea fisheries resources.	Original implementation expected by December 2018. M&CP developed with communication with NE and industry. Completed in December, January 2019 and February 2019. Monitoring of the activities for which the plans were developed will be included in the 2019-2020 Annual Plan.
Mariculture Strategy	Partner Organisation to EU Interreg Project - EUROHAB	The IFCA will engage with the mariculture sector in the Western Channel and Celtic sea. Officers will attend project meetings and organise workshops with industry members to enable discussions and development of a web alert system.	D&S IFCA is a partner in the EUROHAB project. The project will use satellite imagery to identify harmful algal blooms and develop a web alert system, which industry members can use to help manage their harvesting strategy and protect their markets.	Stakeholder meeting May 2018. Project steering group meetings May and November 2018. Reporting to Interreg August 2018 & February 2019.Meetings have been attended to schedule and reporting to Interreg has taken place.

(intentionally blank)

Table 1b Management of Fishing Activities (Incomplete/Ongoing Workstreams)

Category	Task	Action	Why?	Progress Status
Management of Fishing Activity	To continue with the consultation on new permit conditions for the Diving Permit Byelaw	D&S IFCA Byelaw & Permitting Sub- committee will review findings of the Phase 1 consultation and identify potential items for a Phase 2 consultation.	To fulfil the mandatory 3-year review of Diving Permit conditions, as stated in the Diving Permit Byelaw.	A significant delay in this work stream. Delay due to factors associated with the work of the Byelaw & Permitting Sub-Committee. Work stream included in 2019-20 Annual Plan.
	To implement new permit conditions for the Diving Permit Byelaw	D&S IFCA Byelaw Sub-committee to consider new management measures following formal consultation.	To introduce required management in a timely manner.	Delay in implementation is a direct result of the delay to create and then consult on amended Diving Permit Conditions. Byelaw Technical Working Group (BTWG) was tasked with formulating proposed and amended Diving Permit Conditions for consultation. Work stream included in 2019-20 Annual Plan.
	To implement a permanent Application Byelaw (which became the Exemptions Byelaw 2019)	To undertake formal consultation to develop the scope of the Exemptions Byelaw 2019.	The emergency Application Byelaw must be replaced by a permanent byelaw within twelve months of the in-force date of 9th May 2018 or an extension must be requested.	Delay due to factors associated with the work of the Byelaw & Permitting Sub -Committee and the BTWG. Work stream included in 2019-20 Annual Plan.
	To publish a development report for the new Application Byelaw	To produce a Byelaw Development Report to document the progress and findings of consultation regarding a new Application Byelaw.	D&S IFCA must be accountable and transparent in its decision-making process.	Task added to 2019-20 Annual Plan. Sub-Committee to discuss draft Exemptions Byelaw on 26th Feb 2019. Consultation & required reporting/documentation including Impact Assessment forms part of work stream.

Category	Task	Action	Why?	Progress Status
Management of Fishing Activity	To review the effectiveness of Skerries Bank and Berrow, Burnham and Brean Angling Zones	Analysis of the data collected will be undertaken and activity will be mapped using GIS. A report will be produced, and results will be disseminated to the different sectors.	D&S IFCA introduced angling zones as part of its Angling Strategy. The results will determine if the voluntary measures were enough to promote the development of the RSA sector or whether any more formal measures should be considered.	A draft report for the Skerries Bank is now complete which requires finalising and then publishing. The work stream will be included in the 2019-20 Annual Plan, along with a commitment to go back to the original stakeholder groups to review the findings and discuss possible options for future management.
Mariculture Strategy	Development of a Mariculture Strategy	A Mariculture Strategy will be developed throughout 2018, and in part be informed by consultation with the mariculture Industry and interested parties.	The strategy will highlight core areas where the IFCA may have the opportunity to work with the mariculture sector to evaluate and advance mariculture opportunities and provide information to those interested in entering this sector.	Intention was to present a Draft Strategy at the March 2019 Authority meeting. Whilst this work has begun and is being developed there is more work needed to input into the strategy. The work stream will be included in 2019-20 Annual Plan.

# Table 1c Management of Fishing Activities (Additional Workstreams)

Category	Task	Action	Why?	Comments
Management of Fishing Activity	Development of the Byelaw Technical Working Group	Group tasked to conduct re-drafting of Diving Permit Conditions and development of replacement of Emergency Application Byelaw	Due to the complexity involved in drafting, this task was set by Sub-Committee with the requirement to report back with outcomes of work	Formation of group will be beneficial in longer term. It has added a requirement for a separate meeting/s and the preparation of documentation specific for the tasks considered by the BTWG. Reporting the outcomes to the Byelaw & Permitting Sub-Committee within progress reports is a requirement of the Terms of Reference.

# Case Study 1: Introduction of Vessel Monitoring Systems on all towed gear vessels operating in the District.

Since 2012, D&S IFCA has recognised the value of remotely monitoring fishing vessel activity at sea. On 28<sup>th</sup> August 2018, D&S IFCA introduced a requirement, through new permit conditions created under the Mobile Fishing Permit Byelaw 2014, for all towed gear vessels between 6.99m and 15.25m operating at sea within the District to have a fully functioning Inshore Vessel Monitoring System (IVMS) on board. The introduction of this requirement was a milestone in the development of fisheries management and for the first time in the UK, D&S IFCA had created the means to develop a fully documented towed gear fishery.

There have been some significant challenges to overcome during the development process. D&S IFCA's project was recognised as the national pilot study and the lessons learnt helped inform the early stages of the development of the proposed national rollout of IVMS in England.

D&S IFCA's development of inshore vessel monitoring occurred at the same time that the European wide requirements for VMS included for the first-time vessels of 12m in overall length and above. Previous requirements for VMS on larger vessels of 15m or greater overall length had limited value to D&S IFCA as the maximum size of vessel that can operate in D&S IFCA's waters is 15.24m in overall length.

The significant difference between the requirements set out in European legislation and D&S IFCA's permit conditions relates to the required transmission rates of the VMS data. European requirements are that vessels should transmit data at two hourly intervals whereas the permit conditions require vessels to transmit VMS data every ten minutes whilst operating in D&S IFCA's District, and every three minutes when operating with any areas where the use of demersal towed gear is prohibited or restricted.

The increased reporting rates allow for the creation of much higher resolution plots of a towed gear vessel's activity and can improve significantly the ability to determine when fishing operations are being undertaken.

VMS data only provides a vessel's position, heading and speed, which is not, of itself, sufficient to prove to the criminal standard that a vessel was fishing. However, when used in conjunction with other available evidence, VMS data can provide strong supportive evidence in the identification of a greater number of offences.

VMS data can also be used to identify important fishing areas and should deliver better marine planning in the future improving the understanding of the potential impact on existing fishing interests from new developments. VMS allows vessels to be monitored more closely and supports effective spatial enforcement where needed. It also allows for consideration of greater access in and around Marine Protected Areas and could reduce displacement of vessels and the consequential increase in fishing effort elsewhere.

Table 2a Compliance (Completed Workstreams)

Category	Task	Action	Why?	Comments
Effective Enforcement	To monitor Mobile Fishing Vessels using IVMS	To interrogate IVMS to assess compliance with Permit conditions as an integral part of intelligence led enforcement work.	To provide the better evidence when investigating infringements to permit conditions. To seek to ensure the effective enforcement of legislation.	84 vessels fitted with units by 15 <sup>th</sup> August 2018.
	To take delivery of a new Patrol Vessel	To oversee the build of the new patrol vessel by attending presentations on completion of the hull and wheelhouse configuration. The IFCA, in conjunction with the manufacturer, will conduct sea trials.	This will ensure that the build meets the delivery timescale and build meets the agreed design and quality specifications.	The new vessel was delivered in January 2019.
	To submit an EMFF funding bid to purchase a Forward Looking Infra-Red (FLIR) camera	A bid will be submitted to EMFF. Once the bid is granted an infra-red camera will be purchased and the installation will take place during the build of the new patrol vessel.	The FLIR cameras will increase the capability of detecting illegal activity at low light intensity and increase officer safety.	FLIR camera was installed during build of patrol vessel.
Working Together	To secure agreement to use other vessels for enforcement	To develop a contract with Yealm Harbour D&S IFCA for IFCA officers to use the harbour launch for enforcement activities.	Reduces time to react to reported illegal activity by not towing enforcement RIB to location, reduces number of officers required.	Contract in place June 2018.
	To follow National Compliance Directives	To ensure IFCA Officers comply with and conduct their enforcement activities within the national frameworks.	This ensures a consistent approach in some areas of enforcement where both MMO and IFCAs have powers to enforce.	Compliance of: The Lobster and Crawfish Order 2017; Bass - Council Regulation 2019/124
	To Produce a Compliance and Enforcement Strategy	To identify and document the key components of the enforcement work the IFCA undertakes and the future delivery requirements, whilst developing joint working opportunities.	This strategy fulfils the IFCA's success criteria and provides guidance to fishers and officers on how the D&S IFCA will undertake its enforcement work.	Document published on D&S IFCA's website in July 2018.

Category	Task	Action	Why?	Comments
Working Together	Member of Tactical Co-ordination Group	To attend meetings held at IFCA enforcement team and regional level.	This allows the sharing of illegal activity intelligence reports and co-ordination enforcement action.	All meetings attended.
	To maintain a Duty Phone	To ensure the duty phone is carried by officers at out of office times. To document all reports of suspected illegal activity in intelligence reports.	Provide a communication option to report suspicious activity out of office hours and increases knowledge of suspected illegal activity in the District.	A roster for allocation of Duty Phone is now established.

# Table 2b Compliance (Incomplete/Ongoing Workstreams)

Category	Task	Action	Why?	Progress Status
Effective Enforcement	To support the roll out of the National IVMS Project	To prepare a submission to EMFF for 487 IVMS units to be installed on all licensed fishing vessel with an administration port within the District.	To gather more information on the activity of the inshore fleet and support the aim of sustainable exploitation of the UK's commercial fisheries.	IFCA funding model not pursued.
	To use lobster scrubbing test kit to identify infringements to local and National Legislation	To identify a certified laboratory to undertake the testing of lobsters suspected of being scrubbed of their eggs.  To inspect lobster and crawfish catches on fishing vessels and where scrubbing is suspected samples will be taken for testing.	Lobster scrubbing testing has been identified as a key factor to ensure the success of the investigations that the enforcement team undertake. By outsourcing the testing this will alleviate issues such as chemical storage.	Cefas could not support the project. Other organisations are being sought to undertake testing.
	To second officers and equipment	To develop a service agreement with Dewnan Advisory Group, a security company, to use the company's vessel and second their officers for enforcement purposes.	This will increase enforcement coverage and monitor compliance of fisheries legislation within Salcombe Estuary.	No budget to complete task.

	Category	Task	Action	Why?	Progress Status
I	Effective	To warrant	Warrants will be issued to four Environment	Maintain existing enforcement	Not progressed.
ı	Enforcement	Environment	Agency officers and training will be given where	coverage by issuing warrants to	
		Agency officers	necessary on D&S IFCA permit conditions.	qualified enforcement officer	
				based around the District.	

# Table 2c Compliance (Additional Workstreams)

Category	Task	Action	Why?	Comments
Effective Enforcement	Prosecutions	Preparation of two cases involving Vessel Monitoring system data	One case involved a four weeks trial, the other involved a three days trial.	Due to the historical nature of the cases 2015 and 2016, ACO was heavily involved in preparation and delivery of cases. Estimated that ACO spent 12 weeks on these cases
	To support the roll out of the National IVMS Project	To provide reports covering roll out of the DSIFCA pilot project and low power solutions for small vessels	To inform national IVMS roll out plans.	Two officers spent more time on these reports and projects than was envisaged
	Monitoring of IVMS	To monitor all vessels with remote monitoring systems on board	Remote monitoring of vessels provides significant information to inform D&S IFCA's intelligence lead enforcement strategy.	Officers spent more time than envisaged dealing with non-functioning units on board D&S IFCA permitted vessels especially with the over 12m sector.

### Case Study 2: New Patrol Vessel FPV David Rowe

In December 2017, the Authority approved the procurement of a new patrol vessel to improve our current patrol capabilities. Consideration was given to several designs to ensure the maximum improvement and best value for money taking in to account the high level of fishing activity spread over two separate coastlines and including all the estuaries within the District.

D&S IFCA District is the second largest of all IFCA's at 4522 km² and has 1314 km² of coastline, however due to funding constraints, D&S IFCA has four full time enforcement officers to conduct the enforcement work. D&S IFCA's enforcement strategy is based on an intelligence led targeted patrol approach that requires a high degree of flexibility and vessel mobility. With D&S IFCA's District containing two separate coasts, staff resource, logistics and practicality of transporting the vessel between the different coastlines weighed heavily in the decision-making process.

Opting for a 7.8m RIB allows spatial patrols to be conducted by two officers. The vessel can be transported on a trailer, which is significant as a vessel any larger or heavier would mean that towing would no longer be a realistic option and transportation would require the use of cranes and lorries. The implications would not only increase operational costs but limit the flexibility of any movements around the District. The vessel can be launched and recovered from multiple sites with ease. D&S IFCA also has a large number of estuaries within the District where fisheries restrictions apply, therefore vessel draught was also an important factor. RIB's offer a very low draught given the nature of their planing hull design, rather than a displacement type hull.

#### **Key Features**

A decision was made to order a 7.8 meter RIB from Ribcraft on the 18th April 2018 which would offer the following benefits;

- 3-sided safari style wheel house that would offer increased protection for the crew.
- New advanced navigational equipment
- Fully integrated Forward Looking Infra-Red camera to improve observations in conditions of reduced visibility
- Increased waterline to improve sea keeping ability
- Increased fuel capacity improving range
- · Additional seating allowing the carriage of an additional crew member
- Larger deck space allowing further operational abilities.

To assist with the purchase, D&S IFCA were successful in an application to the European Marine Fisheries Fund and were awarded grants to the value of £109,118.33.

#### Naming the Vessel

During the build consideration was given to the name of the new patrol vessel. Following a period of deliberation and consultation, a decision was made to name the vessel after the Chair of D&S IFCA Byelaw and Permitting Sub Committee, and long-standing Authority Member Mr David Rowe, who unfortunately died prior to delivery of the new vessel.

D&S IFCA received delivery in February 2019 and following a period of sea trials a naming ceremony was arranged in March 2019 which was attended by the majority of Authority Members. D&S IFCA were also privileged with the attendance of special guests - the close family of the late Mr David Rowe.

#### **Delivering D&S IFCA and Partnership Working**

Fisheries Protection Vessel DAVID ROWE now has a fully operational role within the Authority and features on the national vessel asset register. With FPV DAVID ROWE offering improved benefits including increased range, it has allowed D&S IFCA to enter into an agreement with the Marine Management Organisation (MMO) which will see joint working between the MMO and D&S IFCA undertaking patrols further offshore and outside the D&S District boundaries in the event of EU Exit.

Since receiving delivery of FPV DAVID ROWE she has undertaken 45 dedicated enforcement patrols, which identified 16 separate offences. In addition to that several platform testing trips have been made with officers from the MMO to highlight any limitations or problems with use of the vessel post EU Exit. D&S IFCA have also been involved with Applied Genomics Ltd by assisting with the deployment and recovery of water sampling equipment used as part of a study into the stock sustainability of inshore fish species.

Table 3a Evidence (Completed Workstreams)

Category	Task	Action	Why?	Progress Status
Ecosystem Based Fisheries Management	Pot Saturation Study - Wrasse Fishery	Officers will provide technical and practical support to a Master project by: supervising the MSc student from Plymouth University; training in survey methods and fish identification; assisting with survey planning, providing SV Black Jack as a supporting vessel for the initial survey; chartering a commercial fishing vessel involved in the fishery for the student to undertake 6 onboard surveys and loaning go-pro cameras to be placed on the pots, to film the use of the pots by wrasse.	In-order to provide a good indication on the health of the fishery and population of wrasse within the fishery area, a pot saturation study will determine when and at what point the pots stop catching fish. The catchability/efficiency of the pots, in terms of fish entering and exiting the pot, will be assessed. This will inform catch per unit effort calculations, which will help measure the sustainability of the fishery and the effectiveness of IFCA management measures.	Experimental work completed end of June 2018. Dissertation completed 20th September 2018 Task now completed.
	Wrasse On- board Surveys	Officers will undertake all on-board data gathering and collect fishermen's' data, transport documents and sales. Officers will analyse data, compare results with previous year's data and report to the D&S IFCA in November 2018.	To fulfil the D&S IFCA's objective to have a fully- monitored sustainable Live Wrasse Fishery in its District.	Surveys conducted May - Oct 2018. Report completed in November 2018 and used by Sub-Committee as part of formal review of the fishery. Additional analysis completed for Byelaw Sub-Committee meeting in February 2019. Continuing workstream included in 2019-20 Annual Plan
	To investigate and understand the nursery Function and Role of the Severn Estuary	IFCA officers will assist Plymouth University in the collection of monthly samples of fish, using a push net, at various locations in the Bristol Channel.	This will help the IFCA understand impacts to fish populations, which may prevent the function and use of the Severn's ecosystem by juvenile fish.	Monthly surveys undertaken between June 2018 and May 2019.

Category	Task	Action	Why?	Progress Status
	To identify the herring stock and spawning areas within the Bristol Channel	IFCA officers will work with researchers to design the project and survey work. Officers will liaise with fishing industry and stakeholders by arranging and attending meetings and steer the project once a lead partner is identified.	This project is part of the North Devon Pioneer Programme, as described in UK's 25 YEP. D&S IFCA will get a better understanding of the use of the Bristol Channel by herring and this will inform its management of this heritage fishery.	Attendance at four steering group meetings in 2018, and project development meetings when required. All meetings were attended.
Ecosystem Approach to Fisheries Management	To complete Bristol Channel Fisheries Research and Management Plans	IFCA officers will design the project and aid the submission and implementation of funding bid for the short-term employment of an officer to draft the plans. The IFCA will steer the project and host and supervise the employee delivering the plans.	This project aims to describe the current situation and identify future research requirements, which would enable a move towards regional, EBFM in the Bristol Channel. The resulting Fisheries Research and Management (FR&M) plans will form an important baseline for the North Devon Marine Pioneer Programme and will set the direction for future Pioneer project work, and steer D&S IFCA's future research work in the Bristol Channel.	Project design completed July 2018 Funding bid led by North Devon Biosphere Reserve near completion. IFCA officers provided all the necessary information to develop the funding proposal. This will be included in the 2019- 2020 Annual Plan as the FR&M Plans will be develop during this period.
	Sea Bass Conservation UK Project	IFCA Officers will help to engage local stakeholders in the project, participate in regional workshop, assist with survey design and potentially take part in survey work.	New EMFF funded project on Sea Bass conservation led by Cefas, which will coordinate a series of regional workshops to inform stakeholder-led data surveys using a variety of fishing vessels and gears. The results will provide information on local bass spawning areas and stock status and will help determine the regional and seasonal movements of bass. The project will establish local bass mark-ID tagging schemes, where anglers and commercial fishers will be trained in mark-recapture methodology, enhancing stakeholder involvement and improving our understanding of fish behaviour.	Project runs between 2018 and 2020 and is incorporated into 2019-20 Annual Plan. Project report 2020.Workshop attended. Survey design and work progressing.

Category	Task	Action	Why?	Progress Status
Ecosystem Approach to Fisheries Management	Use of Sabellaria by finfish and mapping the extent of Sabellaria in the Severn Estuary	The project will cover two areas of work:  1. D&S IFCA will source and purchased fyke, seine and tangle nets, to be deployed from the shore and from a vessel to collect the fish species where Sabellaria is present. Officers will be involved in this survey work.  2. Officers will be on board the survey vessel engaged in the mapping of Sabellaria reefs with Swansea University and Ocean Ecology Ltd, using a Defra-funded jointly owned IFCA ARIS sonar camera.	This will increase the evidence base for the function of the Severn Estuary as a fish nursery area and identify the adult finfish use of essential fish habitats.	Project area 1 - June 2018 - March 2019. D&S IFCA's involvement in project 1 has been completed but the project has now been extended in 2019  Project area 2 - June 2018 - December 2018. This part of the project was completed within the time allocated.
	Severn Estuary Ecological Research Forum (SEERF)	Officers will set up, lead and co-ordinate a new forum for active researchers on the Severn Estuary, known as SEERF.	SEERF will enable partnership working towards shared goals, which will support sustainable development and nature conservation and improve our understanding of the ecosystem of the Severn Estuary. SEERF is a group of stakeholders that meet on a non-commercial basis to discuss current or proposed research and monitoring to better understand the ecology of the Severn Estuary area.	A SEERF meeting was held in Bristol in January 2019 which was highly successful and very well attended. From an original eight or so members, over twenty research interests attended this meeting. The workstream will continue in the 2019-2020 Research Plan.
MPA Management	Bait Digging in Seagrass Area of Exe Estuary SPA	Officers will undertake surveys on the effort and location of the bait digging activity, along with quantities of bait removed in areas of seagrass. Data will be analysed data and a report produced.	Monitoring of this activity will assess the compliance with the Exe Estuary Voluntary Code and inform potential future management and development of the Hand Working Permit Byelaw. Seagrass is a feature of the SPA and these data will inform HRA assessment.	Surveys completed May 2018 to November 2018. Data analysis and draft report have been completed. These will feed into HRA and will be sent to NE in March 2019. Formal advice from NE will be received in time to feed into a report for the Byelaw & Permitting Sub-committee in May 2019.

Category	Task	Action	Why?	Progress Status
MPA Management	Bait Digging in Plymouth Sound EMS and Exe Estuary SPA	Officers will analyse the data from Bait digging surveys conducted in the Exe Estuary SPA and Plymouth Sound and Estuaries EMS in 2017	This forms part of the duty to manage fishing activities under Defra's revised approach. The data from this survey will inform the HRA assessment in these MPAs and will also be used in D&S IFCA's consideration of the management of this activity.	The bait digging reports have been completed and HRAs will be sent to NE in March 2019. Formal advice from NE will be received in time to feed into a report for the Byelaw & Permitting Sub-committee in May 2019.
	Cuttlefish Pot Interactions with Seagrass in Torbay MCZ	Officers will undertake survey work, which will include fitting of camera equipment, hauling pots and analysing data and reporting.	Filming of the interaction of pots on the designated sea grass habitat of the Torbay MCZ will help reduce the uncertainty and determine the impact of the activity on the feature, Seagrass has a recover to favourable condition conservation objective and the D&S IFCA has a statutory duty to further the conservation objectives of the MCZ.	Survey work completed May 2018 to July 2018. Stand-alone report including methodology will be submitted to NE with M&CP in March 2019.
	Habitat Mapping T2 MCZ	Officers will undertake up to ten days of grab and filming survey work within the MCZs, onboard the EA survey vessel.	As part of the MPA evidence-gathering programme, both Trance 2 MCZs in North Devon will be resurveyed in 2018 to gather further evidence of the location, extent and character of the designated habitats and features of the site. D&S IFCA and CIFCA have raised concerns over the incomplete evidence available on which to base MCZ assessments and future management.	The survey has been rescheduled for February / March 2019 and IFCA officers are available to assist with the survey when the dates are finalised.
	Monitoring and Control Plans (M&CP) for Shad in the Severn Estuary and Plymouth Sound and Estuaries EMS	Officers will design and implement Monitoring and Control Plans (M&CP) for shad, which will involve undertaking survey work, monitoring of catches and landings, and reporting.	Following D&S IFCA's Appropriate Assessments that found no 'Likely Significant Effect' for bycatch of Twaite shad (Severn Estuary) and Allis shad (Plymouth Sound) it was agreed with Natural England that netting efforts should be closely monitored, and more information should be collected on bycatch levels, where possible, as part of a M&CP for both EMSs.	M&CP for both sites are complete, pending advice from Natural England. Implementation of M&CPs will start and continue in 2019-2020.

Category	Task	Action	Why?	Progress Status
MPA Management	To create Monitoring & Control Plan from results of the BACI surveys in Torbay MCZ	Officers will design and plan sediment grab surveys to be undertaken by Ocean Ecology Consultants. Officer will monitor fishing activity through sightings and vessel track data supplied by fishers. Officers will collate all findings of this survey and those form the October 2017 initial survey, to produce a report and a M&CP.	A Defra and Natural England funded survey was undertaken in October 2017 to investigate the impact of otter trawling used for catching cuttlefish on the sub-tidal mud designated feature of the Torbay MCZ. This planned survey, will investigate further the impact of otter trawling and will determine if the recovery of the mud habitat has taken place after six months. The findings may lead to changes in management of trawling within the site.	Report from Ocean Ecology completed August 2018. Analysis of GoPro film footage attached to trawl gear completed February 2019. IFCA report and M&CP will be completed in March 2019.
	To analyse data collected from Handgathering surveys in the Torbay MCZ	Officers will analyse data gathered during the 2017 inter-tidal hand gathering activity survey conducted at various location in the Torbay MCZ. Officers will produce a report and MCZ assessment.	A survey of hand gathering activity was completed in 2017 for the Intertidal area of the Torbay MCZ to gather evidence to inform the MCZ assessment for this gear/feature interaction. The analysis of these data will inform the MCZ assessment and the Byelaw & Permitting Sub-Committee's review of Hand Working activities.	The data collected from the surveys have been analysed and an activity report has been produced. The MCZ assessment will be completed in March 2019 to be sent to NE for formal advice. A summary of the outcome will be inputted into a report for the Byelaw & Permitting Sub-committee in May 2019.
MPA Management	To complete EMS/MCZ Assessments	Officers will undertake literature reviews, survey work and complete MPA assessments using evidence gathered from activity and habitat surveys. Officers will complete twenty Habitat Regulation Assessments and fifteen MCZ assessments, and a further eighteen require checking before being sent to Natural England for formal advice.	All fishing activities that take place within MPAs need to be assessed for any likely significant effect, to fulfil the D&S IFCA's environmental duties and Defra's revised approach to managing commercial fishing activity. Those outstanding assessments for bait collection activities are awaiting the results of survey data analysis. The deadline for these has been extend by Defra to end of 2018.	Assessments continue to be completed within agreed timescales and sent to NE for formal advice. Outcomes from this advice inform any appropriate changes in management measures.

Category	Task	Action	Why?	Progress Status
MPA Management	To produce a Lundy SAC M&CP	Officers will monitor the trawling activity in the Lundy SAC by gathering information and data from the fishing industry and VMS. This together with past evidence will be used to develop a M&CP.	Advice from Natural England suggested that the trawling for squid in the Lundy SAC needs to be monitored to reduce uncertainties about the frequency, level of effort and the location of the trawling activity within the area where access to this activity is allowed under the Mobile Fishing Permit Byelaw. A M&CP will hold this information and any changes in activity can be monitored by setting activity level trigger points, exceedance of which may initiate a review of management measures.	A Monitoring and Control Plan was completed and sent to NE along with an amended HRA in December 2018.
	To monitor Spiny Lobster abundance in T1 & T2 MCZ / District wide	Officers will send out surveys forms to fishing industry and liaise with divers to collect data. Data from catches and sightings will be analysed and reported on. Officers will collect landings data from the MMO and investigate trends in the landings for the fishery.	Spiny lobster is a feature of three MCZs in the District and has a recover conservation objective. Spiny lobster fisheries existed in the past and were of significant value to the fishing industry. There appears to be a recovery of the populations across the District and there are increased landings into ports in the District. Monitoring of the fishery is important to provide vital information for future management considerations.	Data collection continued from June 2018 to March 2019. Initial Report by May 2019.
Species Knowledge & Management	To assist the Bass PhD - Tagging & Acoustic Monitoring & Steart Sampling	Officers have a formal supervisory role on the PhD panel, giving advice and input on survey design and management needs. Officers will help introduce the PhD student to relevant stakeholders, thereby supporting the PhD bass workplan. Officer will also be involved in the tagging of bass and fish surveys at Steart.	There are three key areas of work within the D&S IFCA funded Bass PhD, which will be undertaken this year and continue until 2020:  1. Small fish surveys of Steart Managed Realignment in Somerset;  2. The Immature Bass Acoustic Stock Surveillance (I-BASS) project' which involves acoustic tagging of bass in estuaries and deployment of arrays of acoustic receivers to investigate movement within and in and out of estuaries.  3. An investigation into bycatch rates of salmonids in coastal nets.	2018-2020 Survey work completed July to October 2018. PhD completion deadline is July 2020. Project 3 of the PhD will not be progressed.

Category	Task	Action	Why?	Progress Status
Species Knowledge & Management	To undertake a Cuttlefish Recruitment Trial	Officers will undertake all survey work, including chartering of a fishing vessel, setting and hauling pots. Officer will compile all the findings together with a detailed literature review and produce a report. Outputs will be shared with the members of the fishing industry.	Static pots appear to have become one of the preferred mediums for egg laying as well as natural habitats. The trial will test the plausibility of attaching detachable media (ropes and netting) to the inshore cuttlefish pots so the cuttlefish can lay their eggs on this media rather than directly on the pots. The media can then be removed from the pots at the end of the fishery season and left in the sea to allow eggs to hatch and aid recruitment of juveniles into the fishery.	Survey work was completed by October 2018. A summary report will be completed by the end of March 2019.
	To trial the flying array camera system to undertake Scallop Stock assessment	Officers will supply the equipment, oversee its use for the trial, participate in eight days of survey work on board the SV Endeavour and increase knowledge for future IFCA research.	D&S IFCA's flying array will be trialled from the Cefas SV Endeavour. Cefas currently use a drop-down video and stills camera to undertake research, so this survey is trialling the flying array as an alternative method. This trial will determine whether the array can be used in scallop stock assessment surveys.	Survey work completed in the summer of 2018. The survey not only included using the D&S IFCA flying array but D&S IFCA officer also became part of the survey vessel team and was involved in tagging scallops to inform stock assessments.
	To assess bycatch from the SW Crab and Lobster Fisheries - Fisheries Improvement Plan (FIP)	Officers will continue to sit on the steering group of the FIP. Officer will supervise the MSc and provide links to data access and the industry.	To assess the bycatch from the SW lobster and Celtic Sea and Western Channel Brown Crab Fisheries as part of the Marine Stewardship Council's Project UK FIP. This work is being undertaken by a MSc student from Plymouth University who is using fisheries data from the SW and comparing it to Irish Sea data.	Three meetings with project team April 2018 to September 2018. Monthly meetings with student. Thesis completed and submitted in September 2018. Steering group meetings are ongoing, and actions will be completed as and when required through outputs from the Steering Group meetings.

Category	Task	Action	Why?	Progress Status
Species Knowledge & Management	To assess mussel and cockle stocks in the Teign Estuary, Exe Estuary and Taw Torridge Estuary	Officers will plan and undertake all survey work, analyse data and report findings to the Byelaw and Permitting Sub-committee. Results will be used to amend MPA assessments where appropriate.	Mussel surveys on the Exe and Taw Torridge Estuaries, and cockle surveys on the Exe Estuary take place on annually to assess the stock levels. The data collected will be analysed to investigate the food availability to the bird populations that use the estuaries. Surveys of the mussel beds and cockle beds in the public fishery part of the Teign Estuary will be undertaken for the first time since 2012 to assess density and distribution of these shellfish resources. Results will inform the development of the Hand Working byelaw, as hand gathering of shellfish is known to taken place in these estuaries.	Survey work has been completed. Report on mussel stocks was produced by 15 <sup>th</sup> November 2018 for submission to sub-committee.

# Table 3b Evidence (Incomplete/Ongoing Workstreams)

Category	Task	Action	Why?	Progress Status
Ecosystem Approach to Fisheries Management	To complete Bristol Channel Fisheries Research and Management Plans	IFCA officers aiding the development and submission of a funding bid for the short-term employment of an officer to draft the plans. This project falls under the North Devon Marine Pioneer Programme.	Fisheries Research and Management Plans will help stakeholders to understand the current state of knowledge, management and value of key fish species. The plans will also highlight key research gaps and assess how appropriate/ possible local management of stocks might be at an IFCA or alternative local level. They will help D&S IFCA to prioritise and justify research and management decisions.	This project is on-going throughout the timescale of the Marine Pioneer. The funding bid has been made by the Marine Pioneer officer and once funding is in place an office can be employed to undertake the work.  Additional IFCA officer time is needed to get this work completed in the timeframe necessary to the North Devon Marine Pioneer.
Ecosystem Approach to Fisheries Management	Development of Position Statement on Direct Cooling for Nuclear	Officer will input into the Marine Technical Forum of Hinkley Point C and relevant consultations (closed and public). Responses will be submitted to appropriate national consultations and discussions. Develop a	The D&S IFCA has a non-statutory role on Hinkley C Marine Technical Forum. Using this position, the D&S IFCA believes that it can highlight its concerns over the	D&S IFCA has continued to input in the MTR and several other related Hinkley meetings and workstreams. Because of this and the likely scale of the consultation responses

Category	Task	Action	Why?	Progress Status
	Power at Hinkley point C	stand-alone position statement on Direct Cooling Nuclear Power Stations and Hinkley Point C.	development of such a significant project and the impact of on the Severn Estuary MPA.	required, the D&S IFCA nuclear Working Group agreed to focus on the formal processes, rather than developing a position statement to avoid duplicating effort.
MPA Management	To monitor Potting in Plymouth Sound in or close to Seagrass beds	Officers will conduct six patrols and data will be mapped and feed into amendments to HRA	As part of the on-going monitoring of fishing activity, information on the location of pots close to or located within the seagrass beds within the Plymouth Sound and Estuaries EMS will be gathered.	Location of pots was monitored on three occasions. This workstream will be included in the 2019-2020 Annual Plan and a planning regime will be put in place to ensure monitoring is achieved.
Species Research and Management	To undertake Salcombe Scallop Fishery Stock Assessment	Officers will plan the survey work, liaise with fishermen, undertake on-board surveys before during and after the fishery opening to collect data on all catches and location of the tows. Officers will report their findings.	A highly restricted scallop fishery exists with the Salcombe Estuary between mid-December and mid-March each year. Fishermen submit landings data. For the 2012/2013 fishery pre-, during and post-fishery on-board scallop stock surveys were undertaken to assess the stock levels. This was the baseline study and for 2018/2019 fishery a repeat of this survey will take place to compare the stock between this period and before and after this year's fishery.	The fishery took place between 15 <sup>th</sup> December 2018 and 15 <sup>th</sup> March 2019. Due to the Environment Team work load a decision was made not to undertake this assessment in the 2018/2019 fishery. This survey work will take be part of the 2019-2020 Annual and Research Plans
Species Research and Management	To assess mussel and cockle stocks in the Teign Estuary, Exe Estuary and Taw Torridge Estuary	Officers will plan and undertake all survey work, analyse data and report findings to the Byelaw and Permitting Sub-committee. Results will be used to amend MPA assessments where appropriate.	Mussel surveys on the Exe and Taw Torridge Estuaries, and cockle surveys on the Exe Estuary take place on annually to assess the stock levels. The data collected will be analysed to investigate the food availability to the bird populations that use the estuaries. Surveys of the mussel beds and cockle beds in the public fishery part of the Teign Estuary will be undertaken for the first time since 2012 to assess density and distribution of these shellfish resources. Results will inform the development of the Hand Working	Due to work load, full stock assessment reports were not completed but will be included in the 2019-2020 Annual Plan.

Category	Task	Action	Why?	Progress Status
			Byelaw, as hand gathering of shellfish is known to taken place in these estuaries.	
	To determine the Spawning Season for Whelks	Officer will carry out laboratory work to gather spawning and size of sexual maturity data, analyse results and submit a report to the Byelaw and Permitting Sub-Committee.	On request of the Byelaw and Permit Sub-Committee, further whelk samples were taken in December 2017 and January 2018 to fill a data gap to determine the whelk spawning season for the North and South coast fisheries.	Due to work load the report was not completed but will be included in the 2019-2020 Annual Plan.
Species Research and Management	Monitoring and Control Plans (M&CP) for Shad in the Severn Estuary and Plymouth Sound and Estuaries EMS	Officers will design and implement Monitoring and Control Plans (M&CP) for shad, which will involve undertaking survey work, monitoring of catches and landings, and reporting.	Following D&S IFCA's Appropriate Assessments that found no 'Likely Significant Effect' for bycatch of Twaite shad (Severn Estuary) and Allis shad (Plymouth Sound) it was agreed with Natural England that netting efforts should be closely monitored, and more information should be collected on bycatch levels, where possible, as part of a M&CP for both EMSs.	Implementation of M&CPs was not carried out due to the difficulty in engaging with the fishing industry and the lack of ring netting in the Plymouth Sound during the herring season. This will be included in the Annual Plan 2019-2020.

Table 3c Evidence (Additional Workstreams)

Category	Task	Action	Why?	Comments
Ecosystem Approach to Fisheries Management	Sustainable Fisheries and Ecosystem Approach Group	D&S IFCA officers were invited to participate in a Defra family working group contributing to the development of the Fisheries Bill and the delivery of the 25 Year Environment Plan. This has involved a series of face-to-face meetings in London, regular telecons and significant contributions in terms of research, review and expert input.	The Ecosystem Approach was highlighted in the D&S IFCA 2018-2019 Annual Plan as one of the key policy drivers determining the IFCAs approach to research and management. The inclusion of a local perspective in developing future legislation and policy is crucial.	Originally due to run until December 2018, the group is now due to continue its work into 2019. Ultimately it is a task-and-finish group that will operate whilst it is required by Defra.

Category	Task	Action	Why?	Comments
Ecosystem Approach to Fisheries Management	Pioneer Steering Group and Marine Working Group and Fisheries Group	In the 2018-2019 Research and Annual Plans included the individual fisheries projects. Involvement in the Pioneer programme has been much greater than just these projects, with officers in attendance at all steering group and marine working group meetings. A series of fisheries-focused meetings with fishermen and Pioneer partners have also taken place to plan additional fisheries-focused work.	The North Devon Marine Pioneer programme is a fantastic opportunity to test new concepts in marine management, as well as improving links between local and central policy. The high priority of this work to Defra and ministers means a high level of input from IFCA officers has been required.	Because of the increasingly high priority, the major focus on fisheries and the number of stakeholders involved, the Pioneer Programme has required, and will continue to require, significant time commitments.
	Fisheries White Paper and Fisheries Bill	An open consultation was responded to by D&S IFCA following the publication of the white paper in 2018. A large volume of additional meetings and responses have been required relating to Brexit and the development of the Fisheries Bill.	New legislation must be drafted to replace the Common Fisheries Policy prior to the UK leaving the EU in 2019. The inclusion of a local perspective on fisheries management and the utilisation of IFCA expertise of practical delivery of fisheries management is of crucial importance for the development of any new fisheries legislation. The progress made, and direction set by IFCAs must also be acknowledged and incorporated into any post-Brexit legislation or governance model.	This work tends to be highly reactive and difficult to plan. Often input is required with little warning and requires substantial research or review time. It is likely to continue well in to 2019. The time is warranted, given the relevance and importance of the future of fisheries management.
Ecosystem Approach to Fisheries Management	Nuclear Power additional actions	Several additional pieces of work have resulted from D&S IFCAs input into Hinkley Point C. These include:  1. Involvement in an Environment Agency project investigating the evidence base for permitting decisions  2. Involvement in a Defra Impact and Evidence Group project investigating the methodologies for assessing the impacts of early life history stages of fish through impingement  3. Inputting a consultation response to a consultation for the review of National Policy for the Siting of New Nuclear Power Stations.	The environmental impacts of nuclear power stations have been given greater attention in 2018 due in part to developments at Hinkley Point C, other sites in England and Wales and the review of the Government's National Policy for the Siting of New Nuclear Power Stations. This is a high-priority area for the D&S IFCA Nuclear Working Group. The actions detailed have required detailed technical input and regular attendance at workshops and telecons as well as document comment and review.	The EA project is now complete, but further work involving D&S IFCA is possible in 2019. The Impact and Evidence Group project is due for completion in March 2018 but again, may generate further project work which requires input from D&S IFCA.

Category	Task	Action	Why?	Comments
Ecosystem Approach to Fisheries Management	Licence Applications / Consultations	Review Licence applications received by the MMO that are logged on the Marine Case Management System (MCMS) and related to applications for proposals and developments within the D&S IFCA's District.	D&S IFCA has the knowledge to and expertise to input into the potential developments within its District. The IFCA is notified of applications and then officers will examine the applications (including power stations/tidal power, aquaculture, dredging, marine developments) and read through all documents included and make and submit comments.	For 2018 D&S IFCA was notified of over 30 licence applications in its District. These were examined, and comments were submitted where applicable.

(intentionally blank)

# Case Study 3: To Create a Monitoring and Control Plan from Results of a BACI Survey & other Research undertaken in the Torbay MCZ.

In 2017 D&S IFCA were granted £44,610 from Defra through the Defra Evidence Impact Group to investigate the impacts of otter trawling for cuttlefish on the designated sub-tidal mud feature of the Torbay MCZ. Under D&S IFCA Mobile Fishing Permit Byelaw 75% of the Torbay MCZ area is protected, which includes reef, seagrass and mud habitat. Mud is a feature of the MCZ and has a 'recover' conservation objective. The mud habitat is known to be diverse with over 250 different infaunal species. Currently there is 6.91km² of subtidal mud within the MCZ, of which 54% is protected from demersal fishing gear. Otter trawling for cuttlefish takes place for three months of the year, in the areas open to trawling. Following advice from Natural England, further information was needed on the spatial distribution of effort, level of effort, area of impact of the gear on the mud habitat, before and after impact studies, and technical modification of gear, some of which was gathered through survey work and other elements outlined in a Monitoring and Control Plan (M&CP) for the activity within the Torbay MCZ. The following survey work was undertaken to inform an MCZ assessment of the impact of otter trawling for cuttlefish and the development of the M&CP.

1. To undertake a Before-After-Control-Impact (BACI) Survey to investigate any significant impacts of the otter trawling carried out for the cuttlefish fishery, which takes place for three months a year, on the mud feature of the Torbay MCZ.

D&S IFCA commissioned Ocean Ecology Ltd to carry out the grab sampling, analysis and reporting. Two locations on the mud feature within the Torbay MCZ were identified to carry out the BACI study. Location A was fished using a "heavy" box trawl and Location B was fished using the "light" wing trawl, which is normally used for the cuttlefish fishery, and five trawl passes were undertaken with both gear types. Grab samples were taken at random within these areas before and after the trawling. Location A was also sampled six months after trawling, in April 2018, to investigate any long-term impacts or recovery. Whilst results from this survey showed that there was evidence of natural and temporal variation in traditional diversity indices and ecological quality indicators, as well as faunal assemblages and individual species, the detailed analysis showed no impact of trawling on any of these responses (Ocean Ecology Ltd, 2018). The results of this study suggest little detectable impact of either of the gear types used, on sediment composition or marcobenthic communities within the study area after five passes of a trawl.

2. To evaluate the area of impact of the fishing vessel's trawl doors and trawl net on the mud habitat of the MCZ.

This part of the project involved partnership working with Seafish and the fishing industry, Seafish gear technologists carried out a two-day trial to evaluate the footprint of single demersal trawls, using Scanmar underwater acoustic technology and an underwater camera, to assess the dynamics of the trawl on the mud habitats. A trial was carried out on a commercial fishing vessel involved in the cuttlefish

fishery using the light wing trawl used for the cuttlefish fishery and a heavier box trawl. Tows were undertaken in areas where the fishery has taken place in the past. Part of this work looked at modifications to the gear to reduce the direct impact of the gear on the mud habitat.

#### 3. To investigate the direct impact of the different trawl gear on the sediment using Go Pro cameras attached to the trawls.

D&S IFCA fitted Go Pros to the headline of the light trawl and heavy box trawl, during the surveys undertaken, to capture any visual impact on the seafloor during the tows of the different trawls. Footage was gathered and analysed. Whilst visibility was not overly clear, it was evident that the heavy trawl gear causes a large sediment plume as the footrope comes into contact with the seafloor. The light trawl used in the cuttlefish fishery has less of an impact.

From the outputs of this survey work, D&S IFCA undertook an MCZ Assessment on the interaction of the cuttlefish trawls on the subtidal mud feature of the Torbay MCZ. Considering the evidence detailed in this assessment, and the temporal and spatial management currently in place, D&S IFCA concluded that the activity is unlikely to have a significant impact on the mud feature of the site and therefore will not hinder the achievement of the conservation objectives. However, there is uncertainty surrounding the level of fishing effort of the cuttlefish fishery. This uncertainty has led to this M&C Plan being developed. The M&C Plan states that D&S IFCA will monitor the fishing activity within the site. In the first instance, D&S IFCA will monitor the number of Mobile Fishing Permit holders, which could potentially fish in the Torbay MCZ. This will give officers a list of vessels which will need to be monitored in the future. Monitoring of the actual fishing activity will be done using iVMS, which became operational on all mobile gear vessels greater than 6.99m operating at sea in the District, under the Category One Permit Conditions of the D&S IFCA Mobile Fishing Permit Byelaw, in August 2018. D&S IFCA can track vessels in real time, go back over a period of time for each vessel, and set up specific areas of interest to monitor vessel activity. This information will allow D&S IFCA to know exactly how often the site is used, and by how many vessels. D&S IFCA may then determine if the activity and effort is increasing and take appropriate management action if this is the case. Mobile Fishing Permit conditions are flexible and could be used to introduce further management measures, after consideration by Byelaw & Permitting Sub-Committee members and full consultation.

The fishing effort data gathered for the 2019 fishery will be analysed and used as a baseline. Once a baseline of effort is established, D&S IFCA will monitor if this level changes year on year and a trigger level of activity will be set using this baseline, as outlined in the M&CP. D&S IFCA has the ability, through its Mobile fishing Permit Byelaw, to review permit conditions should increases in effort levels cause concern and trigger a reassessment of the likely impact of the increase in effort on the sub tidal mud feature of the Torbay MCZ.

Table 4a Internal Process (Completed Workstreams)

Category	Task	Action	Why?	Progress Status
Information Management System	To populate the information management system	Officers will finalise the new filing system by checking the relevance of the existing folders and files and moving the appropriate documents into the new system.	D&S IFCA needs to ensure it has a modern system for data handling to deal with GDPR, FOI, EIR and publications and to ensure it is used effectively for the IFCA's needs.	A large volume of electronic information has now been relocated into the new file management system which has enabled secure handling of personal data and a greatly increased publications output. This is an on-going area of work and will be included in the 2019-2020 Annual Plan.
Communications	To launch a new website	Officers will finalise the structure of the new website before launching it.	D&S IFCA's primary communication tool is the website.	New website was launched on 31st August 2018, and content has been expanded since to meet demands of the Authority's Publication Scheme.
	Staff to contribute to the delivery of the Communications Plan	All officers to provide summaries of their day to day activities to be used to publicise the work of the D&S IFCA.	Due to the complexity of the work carried out by D&S IFCA and the in-depth knowledge of the subject matter, the responsibility for drafting articles fall on staff members. There is a reliance on officers, to identify stories draft information and produce articles that can be posted on the website and social media.	Officers provided 37 news items in the period 1st August 2018 to 28th February 2019.

Category	Task	Action	Why?	Progress Status
Communications	To review the content and display of website	Officers will maintain and update the Information Management System as this is reflected in the resource library of the website.	The content and display of the website must be reviewed every month to encourage greater use of the website as a resource.	Website was reviewed on a weekly basis.
Policy	To review Health & Safety Policy	Officers will review Health & Safety policies and draft new Standard Operating Procedures (SOP).	D&S IFCA must comply with regulatory requirements including making the working environment and practices as safe as possible for all members of staff	All Health & Safety Risk Assessments and SOPs completed in August 2018.
	To refine and publish all Data Protection Policy (and Standards)	Officers will collate contact lists and utilise these for communications. Officers will work with DP Assist to finalise a selection of data protection documentation in preparation for publication and importantly also the monitoring of compliance associated with the new requirements	D&S IFCA has a legal duty to comply with the introduction of GDPR and other regulatory requirements relating to data.	The core Policies have been created and implemented. A Data Protection Register has been created.
	Production of an Annual Report	Officers will produce an Annual Report	S.178 Marine and Coastal Act 2009 states that D&S IFCA must complete an Annual Report.	A draft internal Annual Report to be completed by end of March 2019 & Final Annual Report to Defra by November 2019.

Table 4b Internal Process (Incomplete/Ongoing Workstreams)

Category	Task	Action	Why?	Progress Status
Communications	To review and update the D&S IFCA's Communications Plan 2018/19	Officers will update the existing Communications plans.	On request of the full D&S IFCA, the Communications Plan will be reviewed so that timely announcements are made to publicise the project and work set out in the Annual plan. In addition, members favoured that communications are closely associated with the working of D&S IFCA	A Summary report providing an overview of communications being delivered by officers and outsourced services has now been produced for external assessment and verification. Following this work, the Communications strategy can be updated.
Policy	To refine and publish all Data Protection Policy (and Standards)	D&S IFCA will need to appoint a Data Protection Officer (DPO).	D&S IFCA has a legal duty to comply with the introduction of GDPR and other regulatory requirements relating to data.	In the interim period the ACO has acted as the Data Protection Officer. Outsourced support for the task is being sought.
	To review Health & Safety Policy	Officers will identify suitably trained external consultants to review the D&S IFCA's documentation and practices.	D&S IFCA must comply with regulatory requirements including making the working environment and practices as safe as possible for all members of staff	ACO had not identified a suitable external consultant to undertake the review
	To produce comprehensive minutes of D&S IFCA meetings	Officers to take comprehensive notes and produce the initial draft minutes for circulation among the D&S IFCA's members as soon as possible.	Minutes are taken at both full D&S IFCA and Sub-Committee Meetings. Content to be expanded in the interests of transparency to better demonstrate all decisionmaking.	Whilst minutes are taken, draft minutes have not always been completed and circulated within two weeks of each meeting.

Table 4c Internal Process (Additional Workstreams)

Category	Task	Action	Why?	Comments
Human Resources	Review working terms and conditions	To review common terms and conditions for all staff and review unsocial hours delivery	To ensure fairness and consistency across the whole organisation	ACO led the review and more matters were identified that required formal HR processes to be followed to resolve matters.

(intentionally blank)

#### Case Study 4: The Launch of the New D&S IFCA Website to Deliver Communication

The importance of developing and improving internal process and communication was cited in the 2018-19 D&S IFCA Annual Plan as being an increasingly important workstream. An overhaul of internal information management was not only needed to comply with General Data Protection Regulations (and multiple standards adopted) through the Data Protection Act 2018 but also to establish a firm basis to meet the requirements of the Freedom of Information Act 2000 and the Environment Information Regulations 2004. The planning, development and design of a new website was integral to achieving several goals and the build by Cloudberry Digital was commissioned by D&S IFCA with multiple aims as follows:

#### **Key Aims:**

- To be the central point for D&S IFCA communications and to provide a large range of information to stakeholders
- To inform stakeholders & members about our work using a mixture of display pages including those related to core working
- To have a scrolling news item area on the home page for the posting of regular updates associated with D&S IFCA working
- To provide an interactive publication scheme that provides transparency and demonstrates accountability
- To be effective and efficient in terms of cost and officer time spent managing communications and access to information

#### The D&S IFCA Website Resource Library

Although not a primary display area, and its value potentially overlooked by the uninitiated, this is the most important feature of the D&S IFCA website and serves multiple purposes; namely transparency with information, accountability of our actions and demonstrating, by way of documented information, the many achievements of D&S IFCA whilst operating within severe budgetary constraints. Divided into eight separate sections (A to H), it contains a vast number of D&S IFCA publications that are now freely accessible for stakeholders to examine instantly without the need to contact D&S IFCA and directly request information. It is effectively an "open" filing cabinet, with access to a complete range of documentation relevant to different categories of information with everything published becoming exempt from Freedom of Information and Environmental Information Regulations requests.

The filing structure within the website Content Management System (CMS) is mirrored to the D&S IFCA Information Management system that enables large volumes of information to be managed, appropriately stored, retained, and published accordingly. The highly organised and stable file approach in the CMS enables a range of information to be pieced together with the links functioning indefinitely, therefore preserving the accuracy and longevity of the information in a controlled manner. This is evident within the main website display pages, documents and reports created by officers and the regular information "news" items created by officers to highlight or report on different work streams.

Information linking via hyperlinks to information already posted on the website has become more prominent within different D&S IFCA publications. This is best showcased within D&S IFCA byelaw development work, where environmental evidence bases, findings from consultations, impact assessments and the decision-making processes of the Authority can be compiled into comprehensive Byelaw Development Reports. The links within these reports enable a multitude of information to be accessible within a single publication. Decision making relevant to the management of inshore fisheries and the introduction of regulation (Byelaws) will impact some stakeholders and whilst some will be opposed to the outcomes of a process, a comprehensive reporting and publication strategy reduces the risk to the Authority of a judicial review.

The key content of each section within the website Resource Library includes, but is not limited to the following:

- A: Annual Plans, Annual Reports, Annual Research Plans, Enforcement & Compliance Strategy, IFCA High Level Objectives
- B: Full Authority & Byelaw & Permitting Officer Meetings: Agendas, officer reports and an extensive collection of minutes
- C: Financial Information: Planned expenditure, metrics for D&S IFCA and other IFCAs, including comparison data
- D: Working Practice: Data Protection Policy, Privacy Policy, Freedom of Information Policy
- E: Legislation & Management: Byelaws, Permit Byelaws, Permit Conditions, Voluntary Codes of Conduct
- F: Byelaw Review: Byelaw Development Reports, Regulatory Impact Assessments, Consultation Output
- G: Communications: News/Information Items, Quarterly Newsletters, Guides to Fishers, Presentations
- H: Environment & Research: MPA Assessments, Stock Assessments, Marine Planning Consultations, Monitoring & Control Plans

#### **Website Display Pages**

The main display pages offer stakeholders quick and easy access to information divided under the main headers and drop-down menus. These fully editable pages can utilise the information stored in the website library, with photographic content adding visual appeal. Information on the display pages can either be fixed or updated dependent on the needs to amend it. Key pages include:

• About Us, Enforcement & Legislation, Environment & Research, Consultation, Latest News, Meetings & Apply for A Permit

As D&S IFCA continues its work managing inshore fisheries, and communicating its work, the content of the website will expand, and efforts will be made to maintain and potentially improve the site further. Readers of this Annual Report are encouraged to visit the site which can be found at: www.devonandsevernifca.gov.uk