

An Roinn Comhshaoil,
Aeráide agus Cumarsáide
Department of the Environment,
Climate and Communications



05 April 2022

Mr. Martin Hughes
Clerk to the Committee of Public Accounts
Leinster House
Dublin 2
D02 WR20

Dear Mr. Hughes,

As per part 8 of D/PER Circular 7/2015 (Timely production and submission of Accounts of Bodies and Funds audited by the Comptroller and Auditor General and the laying before the Houses of the Oireachtas Special Reports of the Comptroller and Auditor General), I am writing to notify you that the deadline for laying the Inland Fisheries Ireland's Accounts (Financial Statements) for 2020 before the Oireachtas was exceeded by just over one week.

Inland Fisheries Ireland was compliant with Circular 7/2015 by presenting the audited accounts to the Minister / Department within one month of audit certification. The short delay resulted from the noting to Government of the Accounts and Report and subsequent laying.

A copy of the Accounts as laid is attached for your information. If you have any queries don't hesitate to e-mail Pat Smyth - pat.smyth@decc.gov.ie

Regards,

Denis Maher,
Head of Inland Fisheries Division.

ANNUAL REPORT
and
FINANCIAL STATEMENTS

2020



**Iascach Iníre Éireann
Inland Fisheries Ireland**

Mission statement

‘To ensure that the valuable natural resources of inland fisheries and sea angling are conserved, managed, developed, and promoted in their own right to generate a positive return for the community and the environment.’

Principal functions of Inland Fisheries Ireland

Inland Fisheries Ireland is the statutory body responsible for inland fisheries in Ireland. It operates under the aegis of the Department of the Environment, Climate and Communications (DECC).

The principal function of Inland Fisheries Ireland is set out under Section 7 (2) of the Inland Fisheries Act of 2010. This is the protection, management and conservation of the inland fisheries resource. The general functions of Inland Fisheries Ireland are to:

- ▶ Promote, support, facilitate and advise the Minister on the conservation, protection, management, marketing, development and improvement of inland fisheries, including sea angling
- ▶ Develop and advise the Minister on policy and national strategies relating to inland fisheries including sea angling, and
- ▶ To ensure implementation and delivery of policy and strategies developed as agreed with the Minister.

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CHAIRMAN'S INTRODUCTION



It gives me great pleasure to present the 2020 Inland Fisheries Ireland Annual Report. A year which has presented new challenges during a pandemic, which Inland Fisheries Ireland has met with consolidated strength and resilience. This fortitude has been exemplified by the focus and teamwork of its entire staff grouping, for which I am immensely proud.

Inland Fisheries Ireland's Annual Report focuses on the principal functions of Inland Fisheries Ireland, as set out in the Inland Fisheries Act 2010, which are the protection, conservation, and management of the inland fisheries resource. A specific function of the Board is to advise the Minister on policies and strategies relating to inland fisheries including sea angling. The Act allows the Board to establish such sub-committees, as it considers prudent to assist the Board in the formulation of policies in specific areas.

The Board is accountable to the Minister for the Environment, Climate and Communications and is responsible for ensuring good governance and compliance with the provisions of the Code of Practice for the Governance of State Bodies. The Board takes strategic decisions on key business issues and deals with the reserved functions as outlined in the 2010 Act. The Board performs this statutory remit by setting out strategic plans and targets in its five-year corporate plan and in its annual business plan and accompanying budget. 2020 marks the final year of the 2016-2020 Corporate Plan and throughout this report, actions and performance indicators against this plan are highlighted.

The ordinary day-to-day management, direction and control of Inland Fisheries Ireland is the responsibility of the Chief Executive Officer (CEO) and the senior management team. The CEO and senior management team follow the broad strategic direction adopted by the Board, ensuring that all Board members are regularly apprised of progress on strategic policy implementation and any significant risks likely to arise. The Board is also responsible for the maintenance of adequate financial records, the safeguarding of its assets and for the taking of reasonable steps for the prevention and detection of fraud and other irregularities.

The CEO is an ex-officio member of the Board of Inland Fisheries Ireland and acts as a direct liaison between the Board and the management team.

Inland Fisheries Ireland's Corporate Plan reached its conclusion in 2020 and the Board worked arduously with the CEO and senior managers on the organisation's next 5 year Corporate Plan in ensuring a focus on the valuable natural resource that is Ireland's inland fisheries. Protection duties will continue to be promoted and enhanced by the addition of modern technologies and devices and in tandem with this the energies and limited resources of the organisation will be targeted at the natural resource, conservation of the species and habitat preservation and enhancement.

The five-year Corporate Plan and the annual business plans emanating from it will reflect, drive and direct this strategic priority. The Board is confident that this renewed focus on the resource will meet with stakeholder approval and it is hoped that angling groups will positively engage with Inland Fisheries Ireland and assist in its efforts to secure a significant and continuing funding stream to ensure the long-term sustainability of the resource.

During the period Inland Fisheries Ireland has progressed its carbon reduction strategy, on a path to meeting its emission targets by 2030. The organisation's Energy Performance Officer and Green Team, made up of dedicated and enthusiastic staff are leading the organisation in the delivery of its ambitious Climate Action Plan.

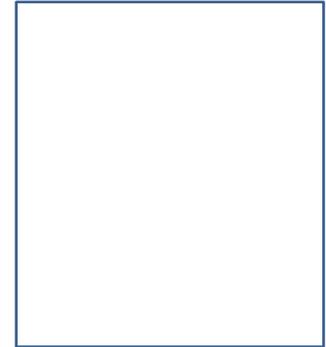
I wish to express my gratitude and the appreciation of the Board, to the Minister for the Environment, Climate and Communications, Eamon Ryan TD and to his courteous and dedicated officials for their unstinting support and commitment.

In conclusion I want to again express my appreciation and that of the entire Board to the dedicated and committed staff who continue to facilitate the delivery of an efficient and professional fishery service.



Chairman
April 2021

CHIEF EXECUTIVE OFFICER'S FOREWORD



I am delighted to have the opportunity to welcome you to the 2020 Annual Report of Inland Fisheries Ireland, which sets out at a high level the achievements of the organisation in an unprecedented year. From the outset I would like to thank all our staff for their immense contribution in making 2020 as successful as it was under the most challenging conditions of the COVID pandemic. In 2020, Inland Fisheries Ireland with the added challenge of modified working practices and remote working, continued on its path of improvement and modernisation.

During the period and since my appointment in November 2020, the Board and senior management team continued the development of the next five year Corporate Plan (2021-2025) which I look forward to delivering with the support of all.

As one of Ireland's core environmental agencies, Inland Fisheries Ireland is committed to delivery of its climate action targets and the ongoing process to implement the Government's Climate Action Plan (2020). Throughout 2020, we intensified our energy sustainability actions and succeeded in closing the 'gap to target' in our non-transport energy reduction as identified by the Sustainable Energy Authority of Ireland (SEAI). In total we saved 273,007 kWh TPER (Total Primary Energy Requirement) in 2020 compared to 2019, hugely exceeding our target of 17,974 kWh TPER. We acknowledge the assistance we received from SEAI's 'Advanced Energy Management Diagnostic' reporting system in helping us with our organisational energy management.

The conservation of valuable water resources and the protection and enhancement of biological diversity are core components of Inland Fisheries Ireland's legislative remit. Our Green Teams around the country are key to how we reach our energy reduction goals (33 per cent reduction on 2009 baseline) and reduce our environmental footprint.

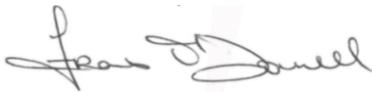
As the use of vehicles is one of the main sources of CO₂ emissions, in Inland Fisheries Ireland, we have taken a leadership role in the adoption of electric vehicles into our fleet and have also implemented a programme of installing charge points at all of our bases. In addition, a

network of local and national green teams has been established to identify and pilot a range of other initiatives which will help to reduce our environmental footprint.

The organisation progressed its move towards programme management as one of the sub-actions advocated in the Department of Public Expenditure and Reform's development and innovation plan, *Our Public Service 2020*. A number of staff were awarded Master of Science degrees in project management and a series of training seminars on project management were delivered to staff.

I would like to express my sincerest gratitude to the continued dedication and resilience of our staff during an extremely challenging year both professionally and personally. None of the wide range of work we undertook in 2020 could have been done without their focus and tenacity.

Finally, I would like to thank Minister Eamon Ryan TD and the Board of Inland Fisheries Ireland for the firm support they have given us throughout 2020, which has enabled the leadership team and staff to deliver on all of the activities outlined in this annual report. I also take this opportunity to renew our strong commitment to focusing all our efforts on our core role of protecting, managing and conserving Ireland's inland fisheries resource in the most efficient manner possible.



Chief Executive Officer
April 2021

INLAND FISHERIES IRELAND: BOARD MEMBERS

Fintan Gorman, Chairperson	(Appointed September 2013, reappointed September 2018)
Bernadette Orbinski Burke	(Appointed July 2016)
Michael McGreal	(Appointed March 2019)
Seamus Boland	(Appointed March 2019)
Marie Louise Heffernan	(Appointed May 2019)
Fiona Walsh	(Appointed July 2019)
Patrick Gibbons	(Appointed January 2016)
Seán Coady	(Appointed November 2015, reappointed December 2020)
Professor Frances Lucy,	(Appointed March 2015, reappointed December 2020)
Francis O'Donnell, CEO, (ex officio)	(Appointed November 2020)
Dr Greg Forde, Interim CEO, (ex officio)	(Appointed July 2020, ceased November 2020)
Dr Ciaran Byrne, CEO (ex officio)	(Appointed July 2010, ceased June 2020)

INLAND FISHERIES IRELAND: SENIOR LEADERSHIP TEAM

Francis O'Donnell, Chief Executive Officer (and ex officio Board member)

Mr Pat Doherty, Head of Finance & Energy Performance Officer

Ms Roisin Bradley, Head of Human Resources

Dr Greg Forde, Head of Operations

Dr Cathal Gallagher, Head of Research & ICT

Ms Suzanne Campion, Head of Business Development

Dr Ciaran Byrne, Head of Logistics

Mr Brian Beckett, IFI Dublin (Eastern River Basin District – ERBD)

Ms Lynda Connor, IFI Clonmel (South Eastern River Basin District – SERBD)

Mr Seán Long, IFI Macroom (South Western River Basin District – SWRBD)

Mr David McInerney, IFI Limerick (Shannon River Basin District – ShRBD)

Mr Pat Gorman, IFI Galway (Western River Basin District – WRBD)

Ms Mary Walsh, IFI Ballina (Western River Basin District – WRBD)

Dr Milton Matthews, IFI Ballyshannon (North Western River Basin District – NWRB)

1. PROTECTING AND CONSERVING IRELAND'S FISHERIES RESOURCE

Inland Fisheries Ireland is responsible for the protection, management and conservation of Ireland's fisheries resource, the fish and their habitats in all inland waterways and out to twelve miles offshore from baselines.

- ▶ We protect and safeguard fisheries directly through the work of our field staff located all around the country who enforce regulations and byelaws in relation to fish and fisheries
- ▶ We monitor water quality and ensure that those responsible for pollution or fish kills are prosecuted
- ▶ We ensure that environmental developments take account of the need to protect our fisheries and secure the future for fish.

Covid-19: impact on our operations

The year 2020 started fairly normally but quickly became very different following the arrival of Covid-19 on Irish shores. By 28 March Ireland was in full lockdown and the first lockdown lasted for 53 days until 18 May.

As Inland Fisheries Ireland was not initially deemed to be an essential service in early lockdown, a significant number of staff volunteered under the Temporary Assignment Scheme for the Civil and Public Service. As time progressed it became apparent that this scheme was very over-subscribed and many of those who had offered assistance were never called upon to help. Assistance was also directly offered to many local authorities in respect of the 'Community on Call' service. Many individuals also assisted in their local communities. The generosity of spirit displayed, and the significant efforts made by all Inland Fisheries Ireland staff throughout the pandemic are gratefully acknowledged and are very much appreciated.

Impact on our protection activities

The Covid-19 lockdowns had a significant impact on protection activities in 2020. During the first lockdown there was a perception that IFI staff were not 'out and about'. While this was the case initially, we put in place significant safety procedures to ensure that staff could safely patrol during the different levels of lockdown. Initially staff were permitted to operate at Level 5 on a single person per vehicle basis. Later, and as the level of lockdown was reduced, staff were permitted to operate in vehicles with safety screens in place and with no more than two people seated diagonally in a five-seater vehicle. This, at least, reduced the reliance on 'one person per vehicle' but it must be stressed that without the flexibility of being able to hire vehicles the mobility of staff on the ground would have been significantly curtailed.

Despite these significant constraints IFI had an extremely successful year in protecting the integrity of fisheries and the environment. Some of the more significant detections were as a consequence of the belief that we were not in the field. This led to some important captures in the early part of the year followed by more high-profile events in fairly remote areas as the year progressed.

One of the unexpected constraints in 2020 was the fact that we were unable to run our annual 'Training College' for temporary seasonal fishery officers; and instead of recruiting 34 staff to assist in the summer programme of activities we were limited to those who had previously completed the training. As a result, we hired just nine seasonal fishery officers. This left many teams around the country very tight on manpower and as a consequence sea patrols were restricted in some areas.

Furthermore, the protocols for working with Covid-19 led to additional restrictions on rigid inflatable boat (RIB) operations in the early part of the summer. It is vital that protection at sea is prioritised in 2021 to ensure that salmon reaching our shores get to run their native rivers. Inland Fisheries Ireland will be launching significant additional patrols for salmon using our Delta fleet in conjunction with other agencies, in particular along the West and South West coasts in 2021.

As the year progressed, we were cleared to operate and were better equipped to mount more normal patrols having modified vehicles for dual occupancy and put in place appropriate safety measures to protect operational staff.

Our protection patrols

Patrol activity in 2020

Despite the 96 days of Level 5 lockdown in 2020, our patrol staff dedicated a total of 142,007 hours to patrolling activities, as set out in Table 1.1. The number and breakdown of different types of patrol is shown in Table 1.2.

1.1 Implement a focused, coordinated and standardised fisheries protection service which utilises best international practice and available technologies

TABLE 1.1: Hours spent on anti-poaching patrols

Patrol type	2019	2020*
Lake patrols	33,730	28,845
River patrols	76,136	66,951
Sea patrols	7,186	4,879
Coastal/estuary patrols	30,737	28,770
Bass patrols	10,191	10,405
Blue fin tuna patrols	Not recorded	2,157
Total number of hours	157,980	142,007

* NOTE: Covid restrictions affected our ability to undertake certain patrols under Level 5 conditions.

TABLE 1.2: Number of patrols by type

Patrol type	2019	2020
Total vehicle and foot patrols	25,748	30,882

<i>Boat patrols</i>	917	573
<i>Kayak patrols</i>	154	129
<i>PWC patrols</i>	23	56
<i>Quad patrols</i>	28	46
<i>Bicycle patrols</i>	1,344	1,227
Air Corps patrols	4	2
Drone patrols	56	136
Total number of patrols	28,274	33,051

All in all, 2020 was a significant year for our patrols as many river systems saw an increase over recent years in the numbers of salmon returning to the coast and entering river systems. This brought with it an associated increase in illegal activity.

SALMON

As recently as the 1960s, wild salmon was Ireland's single biggest export. Salmon remains one of the key native Irish fish species with a very important historical and commercial value which requires constant protection from illegal activity as well as being vulnerable to habitat destruction and pollution. As a consequence, this is the primary focus of protection activities annually throughout the country.

The spring months of February – May sees the return to sea of the last of the previous year's surviving spawning fish and the arrival of spring salmon – now an increasingly rare component of the salmon stock. In late May through to the start of August the main run of grilse arrives off the coast and enters the rivers – this brings the greatest protection challenges as fresh salmon are extremely sought after and the black market is very tempting.

The year was also notable for the rebound in the survival rates of salmon arriving to our shores and as a consequence there was an associated increase in illegal drift netting for salmon. There were a number of captures and seizures related to this increase and in certain areas a substantial increase in sea patrols was required.

Arranmore Island seizure

On Tuesday 7 July, following reports of illegal netting activity at sea and ongoing surveillance of the area, Inland Fisheries Ireland officers intercepted a van coming off the ferry from Arranmore Island, Co. Donegal. On searching the vehicle IFI officers discovered 27 untagged wild salmon. The seized salmon were tail tagged and disposed of through an approved salmon dealer.



Salmon (27) seized by IFI officers from a vehicle leaving the Arranmore ferry on 7 July

Clonakilty seizures

On 13 July officers on patrol boarded a boat at Ring, Clonakilty, when it was tied up to the pier. On inspection of the boat officers seized three boxes of fish containing 31 illegally caught wild salmon. They also seized 256 metres of illegal drift net. While inspecting the boat the skipper threatened the officers by warning them that he had Covid-19, which caused significant concern among the team and later their family members.

Officers subsequently liaised with local Gardaí who interviewed the man and confirmed that he did not in fact have Covid-19. The salmon, weighing 98kg, were tagged and disposed of through a licensed dealer.

Incident at Belderrig Pier, Co. Mayo

On the evening of 15 July, fishery officers investigated a boat returning to land at Belderrig Pier. The boat had substantial amounts of illegal monofilament nets on board and three fish boxes containing in the region of 40–60 salmon were from the water.

Two senior officers were obstructed, threatened and assaulted while attempting to board the boat. Two officers who did manage to get on board were taken against their will out to sea where their captors repeatedly told them that they would be thrown into the sea.

The emergency services were alerted, the boat later returned to shore and the fishery officers were released. Several cars were seized by Gardaí, and in a follow up search of other piers, the boat involved was identified and seized by Inland Fisheries Ireland personnel and handed over to the Gardaí in Ballina.



Boat involved in Belderrig incident seized by IFI and brought to Gardaí

Slyne Head and Inishbofin Seizures

During the month of July, the Air Corps facilitated Inland Fisheries Ireland with a number of air patrols off the Galway, Mayo and Donegal coast. Because of their visibility and easy identification and the fact that they can cover large areas very quickly, the plane patrols are an excellent deterrent to would-be drift netters. The presence of such illegal nets can be quite easily spotted from the sky.

A series of these joint patrols in conjunction with the Air Corps and a Delta patrol vessel resulted in a number of net seizures: 1,200m of net and 10 salmon seized at Inishbofin on the 15 July and 100m of net and 28 salmon seized at Slyne Head on the 21 July.



Seizures at Slyne Head

Incident with shots fired on River Suir

On the evening of 29 July our officers were involved in a covert operation near Carrick-on-Suir when two shots were discharged over their heads from a shotgun. This happened in very close proximity to the officers, and it is something we regard as a matter of grave concern. Gardaí attended the scene after the incident and a definite line of enquiry is being followed. A boat, a net and nine salmon were seized.

Our staff fostered a number of very significant collaborative partnerships with An Garda Síochána in 2020. Joint patrols focused on achieving a high visibility policing presence in areas categorised as 'high risk' (following IFI Risk Assessment) in both Wicklow and South Dublin. Feedback received from the Gardaí has been very positive and it is planned to further develop this collaboration in 2021.



Salmon seized from the upper tidal river Suir

Bicycle Patrols

During 2020, Inland Fisheries Ireland staff undertook 1,227 bicycle patrols. These were particularly useful as they allowed patrolling along bridle paths and other suitable locations where considerable distances can be covered in a relatively short time. Furthermore, from a Covid-19 perspective, these are single person or two person activities in the fresh air and are safer than some other patrolling methods during a pandemic.

Drone patrols

IFI continued to train staff in the use of drones and the fleet of six drones was deployed around the country. An additional 18 staff

1.1 Increase the use of ICT in fisheries protection

undertook the necessary training and qualification to the standard required by the Irish Aviation Authority. In all, 136 drone patrols were completed in 2020.



A drone patrol of the Cong Canal in April 2020

Air Corps support for patrols

Each year Inland Fisheries Ireland seeks the support of the Air Corps in patrolling the inshore area for illegal drift net fishing, particularly in June and July. The Casa CN235 long-range maritime patrol craft is the most appropriate craft for fisheries patrols off the coast. It is acknowledged that the two planes available are required to patrol up to 200 miles from baselines and that they have been in service since 1994.

During 2020, the support of the Air Corps was instrumental in a number of seizures off the Mayo coast.

Our fisheries inspections and compliance checks

The Inland Fisheries Ireland teams of fishery officers carried out regular spot checks on recreational anglers, salmon and sea trout licence holders and on commercial salmon and oyster fishermen in 2020. The purpose of these inspections is to ensure that anglers and licence holders are in compliance with each of the terms of their permit or licence, including those relating to method, equipment, bag and size limits. In 2020, we carried out 32,075 such inspections despite the restrictions posed by Covid-19 – see Table 1.3 for details of these inspections.

Fishery Officers' Enforcement Handbook

2020 marked the first full year since the roll out of the Fishery Officers' Enforcement Handbook. This is now the 'go to' reference document for all protection staff and is consulted in the first instance where certain queries are raised. It is intended to be a dynamic document and will be updated regularly as required.

1.1 Implement Standard Operating Procedures (SOP) for fisheries protection to ensure consistency of service delivery

TABLE 1.3: Number of inspections of licence holders and anglers

Inspections of licence holders and anglers	2019	2020
Inspections of commercial salmon and sea trout licence holders	881	629
Inspections of recreational anglers for licence and/or permit	15,437	13,487
Inspections of other anglers	15,375	16,247
Number of bass anglers checked for compliance with fisheries legislation and regulations	2,614	1,712
Total number of fisheries inspections	34,307	32,075

Where anglers are in minor breach of regulations or perhaps just unaware of the regulations pertaining to a particular area, warnings are issued. These are also issued to juvenile anglers who may be in breach of the regulations or anglers who may not be in breach of any regulation but are deemed to be about to engage in such activity – in 2020 we issued 756 such warnings. At 240, the number of fixed charge penalty notices issued in 2020 was 66 per cent greater than in 2019. It should be noted that these are fines issued in lieu of a prosecution; however, if the fine remains outstanding at the end of a given period, Inland Fisheries Ireland undertakes a prosecution for the original offence.

TABLE 1.4: Number of cautions and fixed charge penalty notices issued

Cautions and fixed charge penalty notices	2019	2020
Warnings issued to anglers	425	756
Fixed charge penalty notices issued	158	240

The number of fixed charge penalty notices issued is consistent and increasing. However, where an offence involves the use of a net, the matter is taken very seriously and proceeds directly to court without the option of a fixed charge penalty notice option being offered.

There was a significant increase in the number of warnings issued in 2020. This was in part associated with the change in angler habits in 2020 associated with Covid-19. It should be noted that if an angler is warned once it is unlikely that he or she will be shown such leniency on a subsequent occasion. It is also worth noting that authorised fisheries officers were not given the powers assigned to the Gardaí in respect of the Covid-19 travel arrangements.

In 2020 most anglers encountered were resident in the Republic of Ireland with a considerable number from Northern Ireland. There were almost no international anglers – due to the restrictions around Covid-19.

Compliance checks

We also carry out spot checks of fish dealers and restaurants/hotels/guesthouses to ensure that no illegally caught fish are being made available for sale or consumption. In 2020, we carried out 180 checks – see Table 1.5 for details of these.

TABLE 1.5: Number of compliance checks

Compliance checks	2019	2020
Fish dealers checked	427	147
Restaurants/hotels/guesthouses checked	380	33
Total number of compliance checks	807	180

Illegal items seized in 2020

In the course of our patrols and inspections, we come across and seize a wide variety of illegal items and legal items used illegally. In 2020 we seized 1,287 illegal fishing items including fishing rods, dinghies, spears, engines, traps, nets and boats. The total length of the 250 nets seized was in excess of 13km. The number of items seized was greater than in 2019 with an increase in the length of nets seized.

TABLE 1.6: Illegal items seized

Seized items	2019	2020
Nets seized (total length in 2020 was 13,158m)	192	250
<i>Seized at sea</i>	40	45
<i>Seized in freshwater</i>	95	81
<i>Seized in estuaries</i>	57	124
Fish seized	423	761
Rods seized	152	238
Other items seized	21	38
Total number of items seized	788	1,287

Spawning

The months of October, November and December 2020 saw good numbers of salmon and trout moving into a number of the tributaries of the prime salmon spawning rivers in the country. Many of these rivers saw an increase in the abundance of redds where fish spawned over recent years. The rebound in salmon numbers was not consistent nationally but was also reflected in the salmon counter numbers as verified by Inland Fisheries Ireland staff.

Increases in spawning activity also leads to an increase in interest from members of the public. This can be unwelcome if spawning fish are disturbed or in certain areas taken by poachers. This led to an increase in demand for patrols of spawning rivers in the later months of the year.

Coarse fish

The onset of Covid-19 restrictions brought people from both sides of the border out angling in the North Dublin area, and this increased angling effort was reflected in increased non-compliance. A number of incidents resulted in fixed charge penalty notices being issued from around mid-March as the lockdown intensified and a steady pattern of non-compliance continued throughout the year.

The boat pond at Virginia Harbour on Lough Ramor and a number of locations in the Dundalk and Dublin Districts proved to be particular hotspots. Assistance from local Gardaí was required on a number of occasions. Different rules on either side of the border throughout the year meant ensuring compliance with travel restrictions became very difficult.



Fish and rod seized at Priestfield Lake (Co. Monaghan)

Eels protection

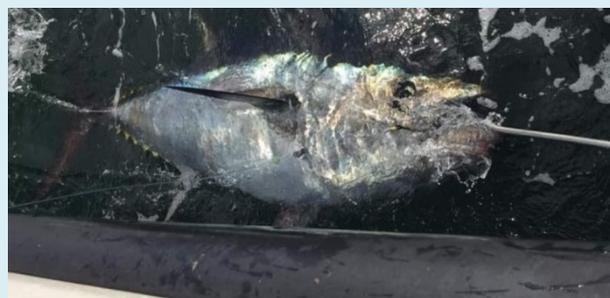
Following a routine boat patrol in early August, Inland Fisheries Ireland fishery officers seized two large double-ended fyke nets in the eastern area of Lough Ree. Twelve eels, three pike, one perch and four roach were all released alive. Six dead pike were also found in the nets. These type of illegally bottom-set eel nets generally result in bycatch of fish which die in the process. Our staff have seized over 100 nets (valued at approximately €20,000) in this area over the past number of years.

Bluefin tuna protection

The second year of the bluefin tuna CHART (Catch and Release Tagging) programme was initiated in July 2020. Under the programme, fishing for bluefin tuna was permitted under special authorisation and strict conditions, with 22 sea angling boats licensed to operate in the programme. Skippers are authorised to target tuna strictly on a catch, tag and release basis.

We carried out bluefin tuna patrols along the entire West coast from July to November. In addition to the usual 'hot spot' of Donegal bay our staff sighted bluefin tuna off the Kerry and West Cork coasts, and within 500m of the coast at the Old Head of Kinsale and Seven Heads.

There were a number of vessels identified targeting bluefin tuna in 2020 that were not part of the CHART programme and the presence of our vessels in these areas was a deterrent to illegal activity.



On 27 August, the *Clare Dragoon* fishing off Co. Clare tagged her first tuna of the season. This monster weighed in at approximately 300lbs.

Fish disease case study

Inland Fisheries Ireland maintained a watching brief in respect of the unidentified 'red skin disease' experienced in some east coast fisheries in 2019. An 8lb hen salmon showing signs of red skin disease was captured at Marry's Fishery (River Boyne) in July 2020. The fish died shortly after capture, but thanks to the prompt action of trained IFI staff, histological sampling was completed within two hours of the death. A comprehensive range of tissue samples was taken and sent to the Marine Institute Fish Health Unit in Galway for processing. Results did not indicate the presence of any new or novel infection.



Tissue sampling of diseased fish from Oldbridge area (river Boyne)

IFI staff saving lives at sea and on land

Inland Fisheries Ireland's staff are all trained to a high level in boat handling and water safety, and they also maintain the high level of physical fitness required to work in all weathers and all terrains. On a few occasions in 2020, officers were called upon to use their excellent field skills, expertise and ability to remain calm under stress to come to the rescue of people who found themselves in life-threatening situations. Three such incidents are outlined here.

Incident at Slieve Alp

At the end of May two officers came upon an illegal fishing operation on the upper Owenduff River (Co. Mayo). One man fled the scene on a quad bike. The bike overturned and he was trapped with the handlebar and the brake causing him significant injury. The officers gave first aid assistance and helped coordinate the work of the emergency services and the rescue helicopter.

Rescue at Bundoran

On the afternoon of 25 June, two officers on a scheduled RIB patrol became aware that four young people were in difficulty in the water off the main beach at Bundoran. The two boys (aged 15) and two girls (aged 9) were caught in a serious tidal rip heading out to sea and were 200m from the beach, one alone and three clinging to a small body board.

All four were hypothermic and in shock and had swallowed water when the officers picked them up. They comforted the children, put hypothermic blankets around them and quickly made their way to Bundoran quay where they were handed over to Royal National Lifeboat Institution (RNLI) volunteers and from there to Sligo University Hospital. The four children all made a full recovery.

Rescue on Erne Estuary

On the afternoon of 20 December off-duty Inland Fisheries Ireland officers received a call from Bundoran RNLI asking for help for a man whose boat had run aground in the Erne estuary. The RNLI volunteers had determined that sea conditions made it unsafe to use the lifeboat and attempt to cross the bar at the end of the Erne Estuary.

The two officers met with the RNLI crew at the Mall Quay and then launched their 4.7m Avon RIB. They made their way to the stranded man and safely brought him to shore where he was assessed by crew from the National Ambulance Service. Gardaí and the rescue helicopter also participated in the operation.



Photo sequence of rescue on the Erne estuary

Prosecutions initiated and concluded in 2020

For more serious offences under fisheries and environmental legislation, Inland Fisheries Ireland initiates prosecutions, and in 2020 we initiated 136 such prosecutions, a substantial increase from the 2019 figure of 47 prosecutions.

1.1 Increases in the number of prosecutions and fines leading to a decrease in the incidence of illegal fishing (PI 1)

As it takes some months to process a case to a court hearing, the prosecutions we take usually relate to incidents that occurred in the previous year. So, in 2020 we concluded 52 cases for fisheries offences and commenced a further 119 cases. We also concluded eight for environmental offences and commenced a further 17 cases. Furthermore, due to Covid-19 safety concerns, some courts have deferred cases until a lower level of risk is achieved.

TABLE 1.7: Number of prosecutions initiated and concluded

Prosecutions	2019	2020
Prosecutions initiated for fisheries offences	67	119
Prosecutions initiated for environmental offences	22	17
Prosecutions concluded for fisheries offences	54	52
Prosecutions concluded for environmental offences	23	8

Prosecution at Limerick District Court, October 2020

Two defendants pleaded guilty to obstruction contrary to Section 301 (7) of the Fisheries Act 1959 to 2017.

Judge Brian O'Shea took a serious view of the case and sentenced both defendants to four months imprisonment which was suspended for 24 months on their own bond of €100 to keep the peace and be of good behaviour. Both men signed the bond and were released. They were also ordered to pay €469 costs and expenses.

Prosecution at Swords District Court, July 2020

Two defendants appeared at Swords District Court (DC) in respect of breaches of fisheries legislation at Broadmeadow Estuary, Malahide in August 2019. On the night in question surveillance was carried out by Dublin District staff on a net that had been staked on the estuary. In the hours of darkness, they observed two individuals retrieving and servicing the net and placing it in a vehicle. Officers carried out a search and seized a 68m net which contained mullet and flounder - the men were cautioned.

Judge Bernadette Owens convicted the two men under Section 102 of the Fisheries Amendment Act and imposed fines totalling €1,000 and awarded costs to Inland Fisheries Ireland of €1,814.

Prosecution at Waterford District Court, July 2020

On the 27 July 2020, a man pleaded guilty to possession of 29 sea bass contrary to Regulation 4(3) of the Sea Fisheries (Quota) Regulations 2019 (S.I. No 71 of 2019).

In court it was represented that the defendant was an enthusiastic recreation fisherman who while fishing at Saleen Beach with rod and line had run into a shoal of sea bass and had yielded to the temptation to retain more fish than he was entitled to. He was very embarrassed about the entire matter and wished to express his respect for the fisheries officers involved.

Judge Staunton stated that he would not direct forfeiture of the defendant's fishing gear on the basis that he is otherwise a decent law-abiding person, that he was not fishing on a commercial basis, that he had no previous convictions and that he cooperated with fisheries officers. He did not wish to deprive him of his recreation. The Judge imposed a fine of €1,000, allowing the defendant six months to pay.

Prosecution at Navan District Court, July 2020

At a sitting of Navan DC, a man pleaded guilty to an offence under Section 171 (1) (b) of the Fisheries Consolidation Acts 1959 (as amended). The offence related to the discharge of agricultural effluent to the Ryewater on 1 July 2019. In mitigation, solicitors for the defendant stated that he spent considerable money in construction of a new pit and tank.

Judge Malone imposed a fine of €150 and awarded €2,300 towards costs and expenses.

Incidences of aggression

Inland Fisheries Ireland continues to be concerned at the increasing levels of hostility and aggression exhibited towards fisheries officers in the line of their duty. Staff safety is paramount, but it is clear that not all citizens give these officers of the State the respect deserved. In 2020 our staff encountered a total of 61 incidents of hostility/aggression directed towards them in the course of their duties.

Protection of water quality

2.1 IFI will enforce the Fisheries and Water Pollution Acts and support other agencies to improve water quality

Inland Fisheries Ireland carries out routine water quality inspections to assess levels of pollution in different habitats, and it is our policy to prosecute organisations and individuals in relation to environmental offences where significant habitat damage, pollution, or fish kills occur.

January 2020 was an important month for vigilance for water quality breaches, as high rains compounded problems from slurry spreading and winter (stock) poaching. A number of farm visits were carried out throughout the country, and warning letters were issued in cases where there were particular concerns in relation to fisheries. A large resource allocation goes into checks along watercourses for impact from agricultural practice, and this continues to be a significant threat to water quality.

Table 1.8 summarises the different types of environmental inspections we carried out in 2020.

TABLE 1.8: Number of water quality and habitat inspections

Type of Inspection	2019	2020
Agricultural inspections	1,623	1,379
Industrial inspections	1,131	873
Wastewater and Water Treatment Plant inspections	2,361	1,571
Civil engineering / infrastructure project inspections	2,189	1,895
Forestry inspections	834	412
Habitat inspections	16,926	19,873
Total inspections	25,064	26,003

Environmental protection

Inland fisheries Ireland undertakes a very significant environmental protection role throughout the country. We monitor all relevant planning applications to assess the potential effects that such developments might have on the natural water resources and associated fish habitat. We also assess all Environmental Protection Agency (EPA) wastewater discharge licence applications and where necessary make submissions on these to ensure that water quality will not be compromised by any resulting activities.

2.2 IFI will promote the management and maintenance of our fish habitats to improve conservation status and increase recreational angling opportunities

One such assessment was undertaken by Inland Fisheries Ireland environmental officers for the Ara River (tributary of the river Suir) in the vicinity of Tipperary Town. The river was walked downstream from the bridge on the Galbally Road. An EPA biological assessment of the Ara River upstream and downstream of the discharge location confirmed that the river had deteriorated significantly in recent years from Q3-Q4 (slightly polluted) status to Q1/0 (seriously polluted).

Inland Fisheries Ireland made several submissions to the EPA regarding a proposed licence amendment of an existing facility which discharges to the Ara River. The submissions highlighted serious water quality issues documented by both Inland Fisheries Ireland and the EPA. An electrofishing survey highlighted the collapse of fish stocks downstream of the site and reinforced IFI's objection to the proposed licence review. A number of deficiencies in the information available need to be addressed before we are satisfied with any changes proposed in the licence. Our submissions highlighted serious concerns relating to flow measurements and insisted that biological sampling of the receiving waters must be central to any review of this licence.

Diffagher River landslide, Environmental case study

Late on Sunday 28 June 2020, a landslide occurred about 0.5km above the Dawn of Hope Bridge on the Diffagher River close to its source in Greaghnaglogh, Drumkeerin, Co. Leitrim. The Diffagher River is a salmonid watercourse – its upper reaches are traditionally important for wild brown trout spawning and its lower reaches are trout nursery areas.

Inland Fisheries Ireland officers attended the scene of the landslide and were liaising closely with Leitrim County Council on the matter. Water samples were taken in both impacted and un-impacted reaches of the Diffagher as far as its confluence with Owengar River and where the Owengar reaches Lough Allen. The impact of this landslide can clearly be seen along this stretch. For comparison purposes, we also electrofished a number of tributaries that had not been impacted by the landslide.

A number of roads downstream were impassable following the landslide and the river had burst its banks downstream in the Greyfield area flooding a large area of land. Along the length of the impacted watercourses thick peat deposits were evident for a considerable distance along the banks. There were also vast amounts of mud slurry on the banks and the impact could be seen in the Blackwater all the way to Lough Allen.

We continued to assess the situation over the months in which the landslide moved downstream, and we coordinated our response with Leitrim County Council and with other relevant authorities.



The source of the Diffagher River Landslide, upstream of the Dawn of Hope Bridge, Co. Leitrim

Mount Eagle landslide, Environmental case study

On 16 November 2020, local fisheries officers learned that a section report of bog and forestry had slipped on Mount Eagle (East Kerry), with the potential to damage the Clydagh River, an important salmon spawning river in the Feale system.

Over the following days and in difficult conditions, the officers investigated the event on-site and with a drone survey. Representatives of Kerry County Council, the National Parks and Wildlife Service (NPWS) and Coillte were also involved.

At the end of the year, there was an expectation that Kerry County Council would secure funding to enable a survey on the potential impact of the slide.



Drone photo of the landslide at Mount Eagle

Fish Kills

Investigating and reporting on fish kills

In 2020 IFI recorded a total of 15 fish kills throughout the country. While this represents a decrease on the number identified in 2019, we would be concerned that, because of significantly curtailed movements in the long periods of lockdown, some discharges and events might not have come to the notice of Inland Fisheries Ireland staff or the public. Table 1.9 summarises the origin of the 15 fish kills reported in 2020.

TABLE 1.9: Fish kills by origin

Fish kills	2019	2020
Total of reported fish kills	20	15
<i>caused by agricultural practice</i>	4	5
<i>caused by industrial operations</i>	2	1
<i>caused by municipal works</i>	5	0
<i>other causes (disease, natural causes)</i>	3	7
<i>cause unconfirmed</i>	6	2
Estimated number of fish casualties	7,000	8,000

On 24 April, a report to the Hotline in relation to a fish kill at Tracton Wood Stream near Carrigaline Co. Cork was investigated. It was found that the fish kill actually occurred on 22 April. A conservative estimate suggests that 5,000 brown trout died, the majority ranging in size from 3–20cms. Mortalities were recorded over a distance greater than 2km. The cause of the fish kill was identified as an agricultural source and a prosecution file has been prepared.



Dead brown trout at Tracton Wood Stream,
24 April 2020

Inland Fisheries Ireland staff were notified on 21 May of a fish kill on the Butlerstown River, a tributary of the Glashaboy River, near Knockraha, Glanmire, Co. Cork. Further investigation suggested that the fish kill actually occurred on 20 May. A conservative estimate suggested 1,750 fish died over approximately 1.5 km. of river channel. Salmon and brown trout accounted for the majority of the mortalities in an approximate ratio of 7:1 brown trout to salmon. All age classes were represented for brown trout while salmon casualties were limited to parr and fry. While a suspected cause of the fish kill has been identified, the inability to obtain samples due to Covid-19 restrictions limited the chance of proceeding with a prosecution on this occasion.



Dead fish at Butlerstown River, Co. Cork,
21 May

Flood relief schemes we were involved with in 2020

Inland Fisheries Ireland has been part of consultations in relation to flood relief schemes in counties Meath, Cork and Donegal.

At Ashbourne, Co. Meath, the works involved upgrading culverts, improving channels and the construction of a flood defence embankment. The work involved a mix of pre-cast concrete U-channels and some in-situ concrete work. The works involved 'overpumping' from the upstream to the downstream area, and all discharges were via a silt bag to minimise the amount of suspended solids re-entering the watercourse. The U-channel work was completed in January 2020.

The Office of Public Works (OPW) has submitted two flood relief schemes in the Cork City area to the Department of Public Expenditure and Reform (DPER).

- ▶ At Glanmire / Sallybrook (Cork City), works on the river Glashaboy include the replacement of a number of existing culverts and bridges, a new flood channel, as well as the replacement of existing flood defence walls.
- ▶ At Blackpool in Cork City, the river Bride scheme involves the construction of new and replacement bridges, culverts, flood walls, and earthen embankments. Also included is the construction of a new pumping station and other works to prevent flooding.



Bride River, Blackpool, Co. Cork

Also, in Cork City, works are ongoing on Douglas Flood Relief Scheme, the most recently completed phase of which involved the return of a section of the Ballybrack Stream to a newly formed channel which is wider and deeper than the pre-works channel. The section of stream under consideration was depopulated of fish prior to commencement of the spawning season and is located immediately above tidal waters. The new channel has significant sinuosity and inbuilt pool/riffle/glide habitat as a result of design stage consultation with Inland Fisheries Ireland.

In Donegal, Inland Fisheries Ireland staff met with the County Council on proposed interim flood relief works on the river Eske in Donegal Town. These works have been costed at €410,000 with a final full project costed at €8.5 million. The initial programme will consist of a number of elements, all of which will be supervised by the OPW and an ecologist.

Inland Fisheries Ireland: Climate Action Framework

Climate change is one of the principal threats to biodiversity and to the structure and functioning of ecosystems. Ireland has declared a climate and biodiversity emergency and recognises that taking ambitious climate action is necessary to ensure a sustainable future. By 2030, the Government aims to cut greenhouse gas emissions by at least 30 per cent (against 2005 levels), to improve energy efficiency by 32.5 per cent, and to deliver at least 70 per cent of our electricity requirements from renewable sources.

As one of Ireland's core environmental agencies, Inland Fisheries Ireland is committed to helping Ireland achieve these targets, and we have now moved to a *climate mandate* approach as required of public bodies by the Government. Our ambition is to exceed stated national objectives and to lead by example in sustainable practice, climate and biodiversity action. Following correspondence with Minister Eamon Ryan we have made two submissions in relation to the forthcoming new *National Climate Plan 2021*.

During 2020, we continued to work to minimise any negative impact of our activities on the environment. Some of our achievements are outlined below.

Sustainability in IFI

The conservation of valuable water resources and the protection and enhancement of biological diversity are core components of Inland Fisheries Ireland's legislative remit. Our Green Teams around the country are key to how we reach our energy reduction goals (33 per cent reduction on 2009 baseline) and reduce our environmental footprint. In 2020, the Green Teams led operational sustainability initiatives focused on targeted actions on water conservation, biodiversity enhancement and waste reduction. We also explored a circular approach to waste handling and led initiatives to recycle discarded nets and to reuse work wear.

Our Green Team network consists of one local team per RBD, a cross-divisional Citywest team and a national team representing all local teams. Other Green Team initiatives in 2020 included installation of building fabric upgrades, energy monitoring / smart building systems, rainwater harvesting as well as planting and pollinator initiatives at our properties.

IFI 'gap to target' and 2020 energy savings

Throughout 2020, we intensified our energy sustainability actions and succeeded in closing the 'gap to target' in our non-transport energy reduction as identified by the Sustainable Energy Authority of Ireland (SEAI). In total we saved 273,007 kWh TPER in 2020 compared to 2019, hugely exceeding our target of 17,974 kWh TPER. We acknowledge the assistance we received from SEAI's 'Advanced Energy Management Diagnostic' reporting system in helping us with our organisational energy management.

Carbon reduction

Inland Fisheries Ireland is obliged to meet national carbon reduction targets of 33 per cent by 2020 and 50 per cent by 2030 and to achieving carbon neutrality by 2050. Trends in respect of IFI's energy consumption profile (transport, thermal and electricity) are analysed by the Sustainable Energy Association of Ireland.

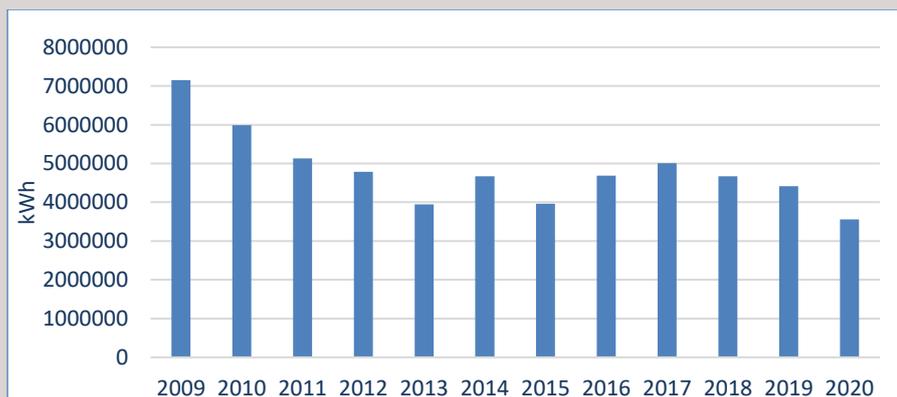
We have reduced our carbon emissions from 2.4million kg CO₂ eq in 2009 to 1.5million kg CO₂ eq in 2019, and our target is to reach 0.87million kg CO₂ eq by 2030.

Case study: transport

Our Challenge: we have a mobile workforce who travel daily to carry out their work, and this is reflected in the high percentage (70 per cent) our energy costs accounted for by travel.

Our Target: to reduce our total primary energy requirement (TPER)* for transport by 33 per cent (from a 2009 baseline) by the end of 2020.

Our Achievement: by the end of 2019 we had already achieved a reduction in TPER of 38 per cent from 2009. In 2020 we achieved a further 19.5 per cent reduction (from 2019), which was largely due to the Covid-19 restrictions on travel.



IFI transport fuel profile: total primary energy requirement (TPER) kWh (2009 – 2020)

* Total Primary Energy Requirement is a measure of your energy consumption that also accounts for the energy that is consumed and/or lost beyond the boundary of your organisation, notably in generating and distributing the electricity that you use.

In 2020 we continued our fleet decarbonisation programme including the replacement of end-of life vehicles with low or zero-emission alternatives, and to expand the national network of electric vehicle charging points.

Next Steps

Inland Fisheries Ireland remains committed to optimising the sustainability and efficiency of our property, fleet, waste, water management and green procurement regimes. Measures for 2021 include:

- ▶ Ongoing development and support of national and local IFI Green Teams
- ▶ Development of circular economy initiatives
- ▶ Adoption of measures which will yield carbon abatement at no (overall lifetime) cost

- ▶ Reporting of emissions and sustainability / resource efficiency / biodiversity activities
- ▶ Developing a green procurement approach – carbon pricing and climate criteria in public tenders
- ▶ Facilitating employees in adopting lower carbon lifestyles (workplace travel planning), seeking collaboration with sister agencies, suppliers and service providers in joint decarbonisation initiatives
- ▶ Ongoing digitisation of paper-based processes
- ▶ Ensuring policies and practices do not lock us into ‘high carbon pathways’, carbon-proofing of major decisions and programmes on a systematic basis, and moving over time to a near-zero carbon investment strategy (property procurement programme)
- ▶ Cultivating and actively participating in partnerships with stakeholder groups who have as their goal the protection and conservation of biological diversity, improvement in use of resources and reduced climate impact.

Making a contribution to the UN’s 2030 Agenda

In September 2015, UN Member States adopted the [2030 Agenda for Sustainable Development \(Transforming our World\)](#). The 2030 Agenda is a plan of action for people, planet and prosperity and applies to both developed and developing countries. At the centre of the 2030 Agenda are the 17 sustainable development goals, which cover economic, social and environmental dimensions of sustainable development.

Inland Fisheries Ireland is committed to maximising our contribution to achievement of the UN’s 2030 Agenda.

Inland Fisheries Ireland's NET ZERO ROADMAP

Baseline data and the journey to 2030 and 2050

Problem solving starts with problem identification. In 2009, IFI emitted 2.4 million kg of greenhouse gas (CO₂eq). Evidence-based monitoring and reporting is in place through SEAI's M&R system for each year since then.

'Business as usual' is not an option as we face the climate and biodiversity emergency.

IFI has developed a suite of measures and data collection and analysis systems with a primary focus on the sustainable delivery of our legislative remit (sustainable management of the national fisheries resource).

EMISSIONS DATA

2019 - 1.5 M kg CO₂eq

2030 - 0.87 M kg CO₂eq

2050 - 0 M kg CO₂eq

Delivering 'Deeper' Energy Savings

IFI has been working since 2017 on consolidation of its Environmental Management Systems (EMS) to help minimise the impact on the environment resulting from IFI activities and facilities. IFI has ambition to align with international standard ISO14001 (Environmental Management System) and International Standards Organisation (ISO) 50001 energy management standard over the period of its current climate action framework and mandate. IFI's Climate Action Mandate (2021 onwards) will set out IFI's approach to reducing the environmental impact of its activities through ongoing development of IFI's Environmental Management System (EMS) activities in order to deliver:



- Improved energy efficiency through energy auditing and subsequent action.
- Reduced generation and improved management of wastes, emissions, effluents.
- Conservation of natural resources.
- Efficient sustainable agency operation with associated cost savings.
- Environmental / climate action initiatives that are aligned with the legislative remit and strategic aims of IFI.

IFI practices the following 5 basic structured energy management steps:

Commit: IFI signed up to a partnership agreement with SEAI in 2017. IFI have appointed a key senior manager in IFI (Pat Doherty – Head of Finance and Energy Performance Officer) to provide leadership and accountability in the area of energy management IFI has allocated significant resourcing (empowered IFI staff to act via programme management restructuring and the formation of a national Green Teams network in addition to appointment of local energy champions) and has chosen appropriate pathways to energy transition management / certification.

Identify: work to identify actions and projects based on IFI energy performance data

Plan: IFI has availed of strategic planning assistance through IFI's partnership agreement with SEAI and is building energy management capacity through integration of facilities management, finance and human resource functions in IFI's energy management planning. IFI sets annual energy saving goals.

Take Action: IFI has shown significant ambition and intent through positive action and project implementation. IFI has availed of project design, development and supervision support and has committed significant time and resources to a suite of energy related projects from design through to implementation and monitoring.

Review: IFI is thoroughly committed to an evidence-based energy management programme. IFI is measuring energy improvement results using in-house digital systems in addition to the SEAI's energy portal monthly returns. Regular review is undertaken with a view to continually improving IFI's energy performance.

Achieving our Goals

KEY MILESTONES

- Fleet Decarbonisation
- Property Energy Upgrade Delivery
- Progressive Water / Wastewater / Waste Reduction
- Progressive stakeholder engagement levels (measured by staff surveys, project activity etc.)
- Development of full Circular Economy Programme

By 2050 IFI will be
CARBON NEUTRAL

2009

2020

2030

2050

2. RESEARCH: DEVELOPING KNOWLEDGE TO INFORM ACTION

Inland Fisheries Ireland's research teams provide the scientific advice that supports and informs our efforts to protect and conserve Ireland's fisheries resources. Their work ensures that we have a thorough understanding of the challenges we face and that we can develop appropriate responses, whether these are operational guidelines, infrastructural works, or measures to mitigate known environmental pressures. They also continue to develop knowledge and expertise relating to our fisheries and the habitats that support them. Our researchers are *scientists* who use proven methodologies and rigorous scholarship, but also combine these with a strong commitment to the welfare of our fisheries and the environment and habitats that sustain them.

Our research covers the following areas of work in 2020, each of which is described below:

- ▶ **National Research Survey Programme – Lakes and Rivers (NRSP-L&R)** – covering individual fish species, habitats, invasive plants, surveys of individual lakes and rivers, and also meeting some of Ireland's obligations under the Water Framework Directive (WFD).
- ▶ **Marine sport fish research** – including studies on particular species such as bass and bluefin tuna
- ▶ **Salmonid research** – a range of research and advisory projects relating to wild salmon and sea trout
- ▶ **Work focused on habitats** – particularly in relation to the EU's Habitats Directive, and also including a specific project on diadromous fish
- ▶ **Hydromorphology projects** – projects that consider the relationships between communities of fish species and their physical habitats
- ▶ **National eel monitoring** – ongoing research and monitoring of Ireland's eel population.

Impact of Covid on our research effort

The arrival of Covid-19 meant that we had to risk-assess our field practices and where necessary to adapt them in line with safety guidelines. For example, some research work that requires very close teamwork had to be modified; while work that requires more extensive travel had to be curtailed. In many cases, however, we were able to change some work practices so that we could continue to achieve our research and data collection objectives – some such innovations are described under the various projects below.

National Research Survey Programme (NRSP)

1.2 Enhanced understanding of the conservation status of fish populations, and use this information to support better fisheries management

The main functions of the NRSP team are to provide expertise in sampling methodologies and field support to a number of research programmes and also to carry out specific applied research projects. The team's work includes:

- ▶ Meeting Ireland's fish monitoring obligations under the EU Water Framework Directive (WFD), including conducting river and lake surveys for various research programmes and providing support to the marine/transitional water team
- ▶ Adding to our knowledge about coarse fish species and pike so that we can protect, manage and conserve stocks and develop a clearer understanding of their interactions with other species.
- ▶ Promoting the recovery of salmonid populations in the Owenriff catchment
- ▶ Building an evidence base in relation to the impact of climate change on freshwater and estuarine fish species in Ireland
- ▶ Learning more about invasive species and how to control them.

Water Framework Directive Fish Monitoring Programmes

In 2007, Inland Fisheries Ireland began a fish monitoring programme to assess the health of Ireland's rivers, lakes and estuaries/lagoons. This work is necessary to fulfil the requirements of the EU's Water Framework Directive (WFD), which was transposed into Irish legislation under S.I. No. 722 of 2003. The surveys are conducted using a suite of European standard methods. The comprehensive three-year rolling fish monitoring programme encompasses over 300 water bodies, (river, lakes and transitional water bodies (estuaries and lagoons)). Information collected in each survey is used to assign an 'ecological status' to each water body, ranging from high status to bad status. Since 2015 the NRSP team have had responsibility for WFD fish monitoring in lakes and rivers only, but also provides support in the form of staff and expertise to the WFD fish in transitional water (TRaC) survey programme.

Improving communications with other bodies

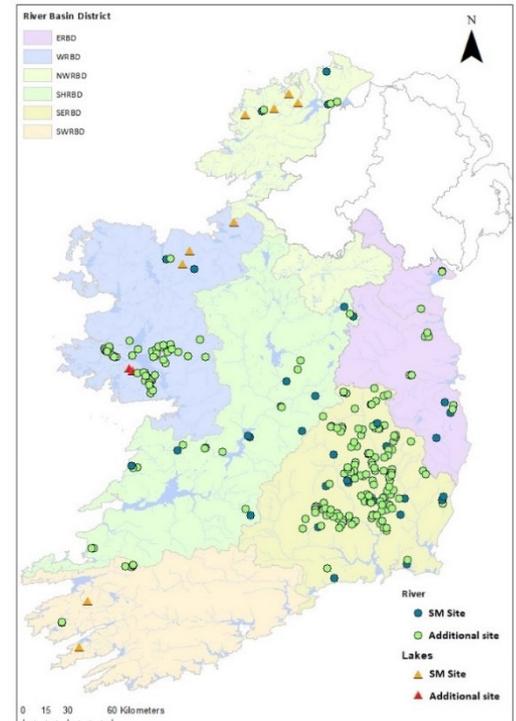
In December 2019, Inland Fisheries Ireland agreed a memorandum of understanding with the Department of Housing, Planning and Local Government (DHPLG) and its parent department to provide support to fulfil the requirements of the WFD fish monitoring programme and to deliver river basin management plan measures. As part of this programme, we have set up a new virtual WFD project office to deal with both internal and external queries and provide more consistent and streamlined advice related to fish and the WFD. This should make communication between Inland Fisheries Ireland and external bodies, including the Local Authorities Water Programme much smoother and more efficient in the future. Close communication with the EPA will also be important over the next few years and regular meetings will take place between teams from both organisations.

Fish monitoring

Despite Covid-19 restrictions WFD fish monitoring was able to go ahead in 2020, but with certain restrictions in place – for example, large lake surveys were cancelled and overnight stays were not permitted during June and July. A number of risk assessments were prepared to ensure that all survey work was as safe as possible for staff.

In line with social distancing requirements, the size of teams was limited, so no boat-based surveys were conducted on rivers in the summer of 2020 and surveying was limited to smaller channels with teams of no more than two. Lake survey teams were limited to teams of no more than three and only small salmonid lakes were surveyed.

- ▶ A total of 9 lakes, 34 river sites and 9 transitional waters were surveyed under the WFD fish monitoring programme in 2020 (see map).
- ▶ An additional 231 catchment-based river sites and two lakes were surveyed for a number of purposes – for example, creating a baseline for river restoration projects *and* providing added information to support WFD fish status assignments.
- ▶ Fish samples were also taken from nine lakes for priority substance analysis for WFD purposes.
- ▶ Reports for all water bodies surveyed in 2020 are under way and will be published on the IFI and WFD fish website (www.wfdfish.ie) in due course.



River and lakes surveyed by the NRSP team during 2020

(SM=surveillance monitoring site – these are surveyed every three years for Water Framework Directive purposes)

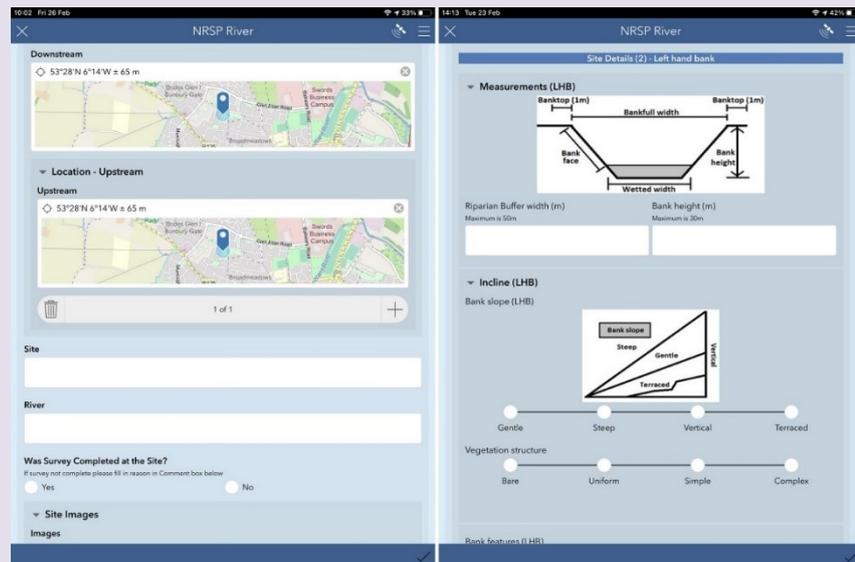
- ▶ A new WFD index catchment and site selection project was initiated during late 2020 – this new catchment-based river monitoring programme will be rolled out during 2021.

New ways of working

The NRSP team began developing two new survey applications (for river and lake surveys) during 2020 with assistance from the Inland Fisheries Ireland's data management team. The purpose of these apps is to help us move away from paper-based formats to more modern efficient digital data collection during river and lake surveys. This should help to reduce the time spent entering data and should also bring with it improved data quality.

The two applications have been developed using Arc GIS, Arc Survey 123 and Arc Collector and benefit from features such as geo-referencing and automatic/remote upload to cloud-based storage. The rivers app is quite advanced at this stage and has undergone some preliminary testing.

The lakes application is still in the early stages of development.



Example of screen views of pages from the new electronic form for river electrofishing

National Coarse Fish and Pike Research Programme (NCFP)

The broad objective of the research programme is to increase our understanding of important coarse fish and pike species and their interactions with their environment and other resident species. The NCFP team works within the overall NRSP team to deliver joint surveys of coarse fish and pike populations in Ireland's rivers and lakes and draws upon existing data sets to fill knowledge gaps. Specific research projects are also carried out as part of the programme.

Point abundance sampling by electrofishing was carried out on three lakes in 2020: on Belhavel Lough in Co. Leitrim, White Lough in Co. Monaghan and Upper Lough Skeagh in Co. Cavan. These surveys targeted areas close to shore and aimed to identify the habitats of juvenile cyprinids, particularly bream.



Point abundance sampling for fry on White Lough, Co. Monaghan

Covid-19 restrictions impacted normal field operations as the habitats (lakes and larger rivers) and ecology of coarse fish and pike require close teamwork. Adaptations of existing procedures enabled safe investigations to be conducted. Backpack electrofishing with modified electrodes was used for the first time to successfully sample coarse fish fry habitats (specifically chub) in the river Inny and can be used elsewhere.

Research staff confirmed the presence of the invasive chub (*Squalius cephalus*) in the river Inny in June 2020. A combination of point sampling from the bank and qualitative boat electrofishing confirmed the presence of chub at different life stages at several locations in the main channel.

No chub were recorded during quantitative electrofishing at locations on the upper Inny and the River Tang. Investigations into the status and distribution of the species will be used to inform possible management options



Electrofishing for chub fry on the bank of the Inny (September 2020)

Promoting the recovery of salmonid populations in the Owenriff Catchment

A fish population rehabilitation plan was initiated for the Owenriff Catchment, a sub-catchment of Lough Corrib in 2018. The purpose of the plan is to develop a series of projects to promote the recovery of the brown trout (both resident and migratory) and salmon populations in both lakes and rivers. Baseline surveys of the fish stocks in the catchment were undertaken in 2017 and 2018 and will continue every three years to monitor change. In 2020 our ongoing work on this project included:

- ▶ Surveying two lakes (Bofin and Agraffard) as part of the ongoing effectiveness monitoring in the Owenriff catchment
- ▶ Logging water temperatures at both main channel river and lake sites in the catchment.

Other work (including radiotracking which had continued into early 2020) was curtailed in Spring 2020 as a consequence of Covid-19 restrictions. Results to date should inform ongoing management of pike within the system.

A new telemetry and photovoltaic solar panel system connected to radiotracking data receivers was set up in the catchment for remote data recovery. This installation eliminates the requirement to carry heavy batteries over wet boggy ground. This work was funded through the [Public Service Innovation Fund](#) (Our Public Service 2020) and will allow significant savings in staff time. The stations can be relocated to other catchments when required.

Climate Change Mitigation Research Programme (CCMRP)

A Climate Change Mitigation Research Programme (CCMRP) was initiated in 2019 with a view to building an evidence-based programme to assess the impact of climate change on Ireland's fish species in both freshwater and estuarine environments, and also to inform and build capacity for fisheries conservation. The CCMRP uses advanced mapping tools to model stream temperature and other variables and to identify waterbodies at risk from climate change impacts.



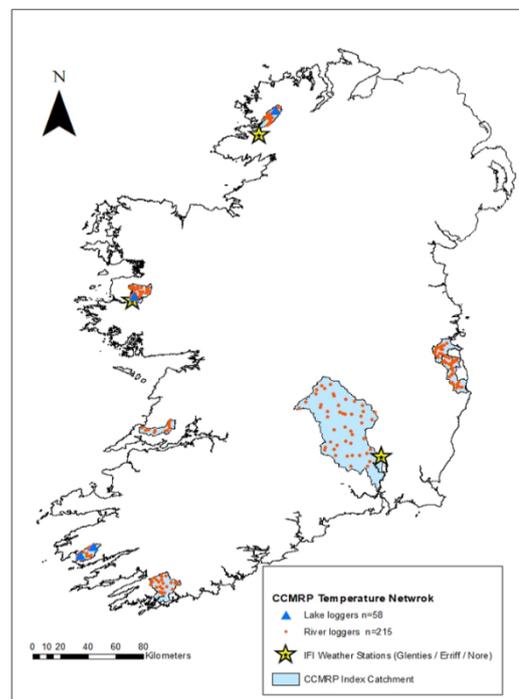
CCMRP team deploying lake temperature loggers



CCMRP team member calibrating lake temperature loggers

The CCMRP monitoring network enables detailed monitoring of climate change effects across the nine index catchments; it now comprises:

- ▶ River temperature data loggers (215) in nine catchments; and lake temperature loggers (58)
- ▶ Lake level loggers are installed in Lough Currane and Lough Derriana (in the Cumberagh / Currane catchment) – there are 38 of these in total, and they are spaced at regular 2m intervals from the lake surface to the lake bed.
- ▶ Automatic weather stations were installed at the IFI Glenties base in February and in the Lower Nore catchment in June 2020, adding to the Erriff station.



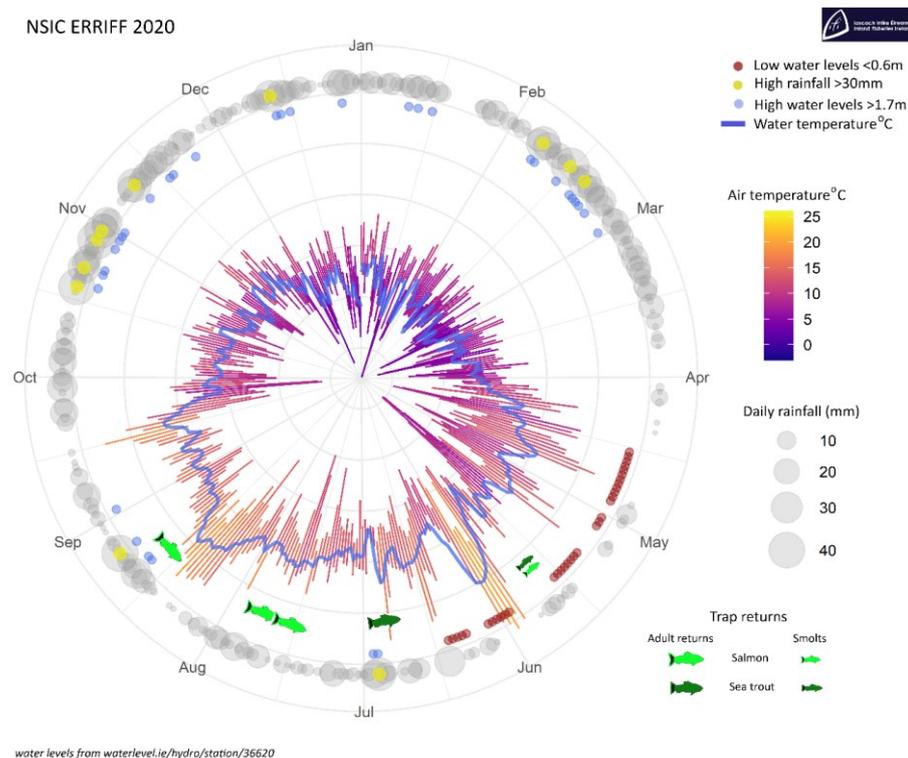
The CCMRP monitoring network

New project to assess climate resilience

A service level agreement was signed in 2020 between Inland Fisheries Ireland and the Office of Public Works (OPW) for a new project to assess climate resilience in three drained catchments. Recruitment of a computational limnologist to the project was completed in late 2020. This project will examine the impact of climate change on fish species in modified and drained catchments. A clear objective of this work is to help guide the management and maintenance of fish habitats in drained catchments and flood relief schemes.

Innovations in data capture and analysis

The CCMRP team continually looks at novel methods to summarise and analyse the large data sets that it captures, and so help us understand better the effects of higher temperatures on stream habitats and fish communities, and identify areas of high risk. For example, we currently have in development a ‘dashboard’ to track the deployment, rotation and calibration of water temperature data loggers.



Summary infographic showing air and water temperature, rainfall, water levels and fish returns on the River Erriff NSIC during 2020. Data sources: IFI weather station, IFI water temperature network data, OPW water level data and IFI NSIC fish data.

Lagarosiphon research on Lough Corrib (LARC)

Lagarosiphon major (*L. major* (or curly waterweed)) is an invasive aquatic plant, first recorded in Lough Corrib in 2005. In 2020 Inland Fisheries Ireland completed the Lagarosiphon Research Lough Corrib (LARC) project, which had begun in 2018. The aims of the project were to:

- ▶ Provide up-to-date information on the distribution and extent of *L. major* in the lake.
- ▶ Review national and international advancements in aquatic weed control
- ▶ Determine the influence of habitat and environmental factors on the establishment and persistence of *L. major* in Lough Corrib.
- ▶ Develop and trial innovative approaches to surveying and monitoring activities.

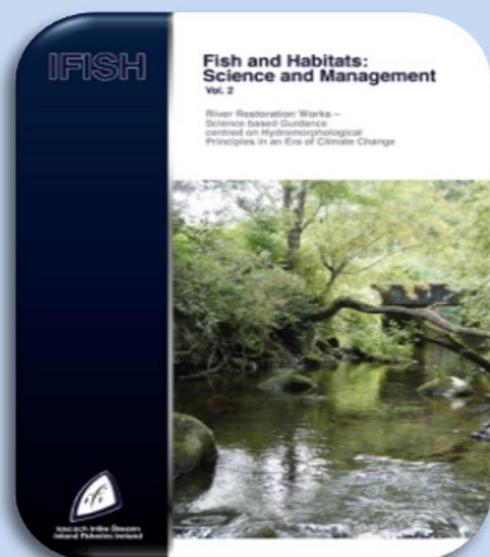
In the course of the project, lake-wide distribution of *L. major* was completed and we also gathered data on a wide range of habitat metrics and environmental variables such as water depth and temperature, light and nutrients.

The project gave us the opportunity to work with and develop novel technologies such as low-cost sonar, unmanned aerial vehicles (UAVs), satellite mapping and hydroacoustics. We also collaborated with the Irish Centre for High-End Computing (ICHEC) on a pilot project to investigate the use of multi-spectral satellite data for mapping *L. major* at the lake-wide scale. The benefits of these innovations included:

- ▶ More efficient mapping of the lake with much less staff travel time and associated carbon footprint
- ▶ Significantly lower health and safety risks associated with conventional methods such as snorkelling and scuba-diving
- ▶ Reduction in the office time required to transcribe data from paper (through use of digital data collection).

River Restoration Works – Science based guidance centred on hydromorphological principles in an era of climate change, 2020

Members of the R&D team, including the NRSP team contributed to the development of this guidance document, which describes an evidence-based assessment process for undertaking river restoration works. It covers best-practice riparian and in-stream measures as well as measures to address channel connectivity and invasive species.



Marine Sport Fish Programme

Inland Fisheries Ireland is responsible for advising on policy and national strategies relating to sea angling in Ireland. The Marine Sport Fish Programme includes studies on particular species, including bass and bluefin tuna, and also covers recreational and estuarine surveys.

National Bass Conservation Programme

With the collapse of bass stocks, commercial fishing for bass in Irish waters was prohibited in 1990, and since that time bass has been managed solely for angling. Since 2013, our National Bass Conservation Programme has combined fisheries research and citizen science to further understanding of the European sea bass found in Irish coastal waters. Four important bass nursery estuaries are surveyed annually to monitor recruitment of the juvenile life stages (age 0-4 years). Citizen scientists contribute to bass conservation by collecting bass scale samples of all size bass (usually 4+), keeping logs of their bass angling activity and also tagging bass on behalf of Inland Fisheries Ireland.



Bass caught, tagged and released by Shane Wickham, bass angler and citizen scientist

Bass nursery seine netting surveys

Bass nursery seine netting surveys indicated that bass recruitment of fry in 2020 was poor across three out of four main bass nurseries (Slaney, Barrow, Munster Blackwater). The densities of fry encountered on the Lee at Tralee were higher than usual, and they were also the largest population recorded. As length is an indication of future survival through the 2020/21 winter season, this suggests that the west coast may be a refuge for the 2020 year-class along the Irish coast.

In response to the Covid-19 pandemic, the net used in the seine netting surveys was changed to a lighter, larger meshed net. This facilitated a reduction in the number of staff required to undertake seine netting surveys.

Trawling surveys

Trawling surveys of the three south coast bass nurseries provide information on the 1–4 age classes and suggest that those bass recruited to the Barrow in 2018 continue to thrive in good numbers as two-year-olds – these were also picked up in the 2019 data set as one-year-olds. On the Barrow, one-year-olds were also encountered in good numbers. The hot outflow at the power station below the confluence of the Nore–Suir–Barrow continues to be an important location for pre-adult bass. As with 2019, densities of one to four-year-old bass were low in the Slaney and Munster Blackwater in 2020. No one-year-olds were encountered in the Slaney at all in the 2020 trawling surveys. The Munster Blackwater recorded one-year-old bass in better numbers than other age classes, but bass numbers were low overall.

Scale samples and tagging data

In 2020 citizen scientists submitted data on 308 bass through scale samples and tagging data. Few large bass were reported by anglers in 2020, with 70 per cent being reported at between 34 and 49cm long. The oldest bass recorded in 2020 was 18 years old and 65cm long.

Tagging data indicates that bass return annually to their summer feeding grounds, and regularly to within a few hundred meters of their tagging location in previous years. Monitoring of year classes indicate that there is strong regional variation and that 2020 was not a strong year for recruitment.

Atlantic Bluefin Tuna Programme (Tuna CHART)

Atlantic bluefin tuna are the largest tuna in the world; they can reach lengths of over 4m and weigh up to 1,500lbs. They are highly sought-after fish by sea anglers due to their power and speed.

The Tuna CHART (Catch And Release Tagging) programme involved multi-agency collaboration between Inland Fisheries Ireland, the Marine Institute, the Sea Fisheries Protection Authority (SFPA) and the parent government departments (Department of the Environment, Climate and



Atlantic bluefin tuna (163cm), caught, tagged and released 2020 by Adrian Nowotynski, Cork, authorised Tuna CHART charter skipper

Communications, and Department of Agriculture, Food and the Marine (DAFM). The main objective of the programme is to learn about the spatial and temporal distribution of the Atlantic bluefin tuna visiting Ireland's coast annually on a post-spawning migration route. Additionally, we aim to understand the potential socio-economic benefits of bluefin tuna angling to Ireland's coastal communities.

Under the programme, licenses are granted to experienced charter skippers to fish for bluefin tuna on a strictly catch, release and tag survey programme. The skippers are required to have the highest-rated equipment – this is in order to minimise fight times and to maximise good outcomes for this powerful but sensitive fish. Data on the location, length and condition of every tuna encountered was recorded. A number of changes were made in 2020 based on the experiences of 2019 – the number of authorised skippers increased from 15 to 22, the season was extended for an additional month, tags and tagging applicators were adapted and improvements were made to the data collection app.

Tuna CHART 2020: Summary	
Bluefin tuna tagged	685, 227% increase on 2019
Average length and weight	220cm / 360lbs
Largest bluefin encountered	275cm / 872lbs
Mortalities	none
Tagging location	>75% off Donegal coast >25% off south coast <1% off west coast

Impact of Covid-19

The advent of the Covid-19 pandemic influenced many aspects of this programme:

- ▶ The skipper training course moved to an online format – incorporating videos, presentations and a live session
- ▶ Equipment and technology which previously was provided to authorised skippers upon attendance at the training course was instead delivered by courier
- ▶ The opening date of the season, 13 July, was delayed by two weeks in response to Covid-19 restrictions.
- ▶ From 15 October Donegal-based skippers were not permitted to take anglers onboard bluefin tuna angling trips due to county restrictions. From 21 October this restriction was extended to all skippers nationwide due to increased restrictions until the end of the season.

Socio-economic surveys reflect the 2020 international situation, with 90 per cent of participating anglers being from the island of Ireland, and holiday spend per person was at 40 per cent of that of 2019. The impact on the hospitality industry was reflected in the number of overnight stays, which dropped to 23 per cent of 2019 levels.

Positive effects on bluefin tuna stock

The success of the 2020 Tuna CHART programme suggests that the International Commission for the Conservation of Atlantic Tunas (ICCAT) Atlantic Bluefin Tuna Management Plan has had positive effects on the bluefin tuna stock. With future easing of travel restrictions, there is potential for bluefin tuna angling to attract additional international tourism to Ireland's coastal communities. A paper by IFI staff on the socio-economic potential of bluefin tuna angling to Ireland's coastal communities is in preparation.

Irish Marine Recreational Angling Survey (IMREC)

In 2019, Inland Fisheries Ireland established the Irish Marine Recreational Angling Survey (IMREC) programme to meet an EU requirement (under Council Regulation EU 1004/2017 and Commission Decision EU 1251/2016) to report annual volumes of catches and releases of a number of marine angling species within Irish waters. The legal framework for the collection

of recreational fisheries data by EU member states is set out in the EU Data Collection Framework).

Marine recreational fishing in Ireland is made up mostly of shore angling, private/rental boat angling and charter angling. As there is no licensing system or requirement to report marine recreational activity, surveys are essential to estimate catch rates and angling effort. Our survey staff travel around the coast and interview anglers on-site about their current fishing trip. All data is collected and stored safely in compliance with data protection legislation in real time via tablets connected to a geodatabase. We also engage with charter skippers around the country who provide us with their catch data.

Due to Covid-19 restrictions in 2020, on-site surveys were progressed intermittently; and to complement these, our staff developed off-site methods to characterise recreational sea angling in Ireland. This included an online survey that we used to collect a range of information on the behaviour and attitudes of the sea angling community in Ireland. As well as allowing sea anglers to express their opinions regarding the current state of Irish sea angling, the survey enabled us to collect data on when and where angling takes place. We had a strong response, with over 1,200 anglers providing their thoughts and opinions. As well as promoting angler engagement, this provided information which researchers could use to refine their survey programmes for 2021. We also developed an online angling diary which participating anglers will be able to use to record catch data on their devices – this is due for roll-out in April 2021.

The information gathered through IMREC will help all stakeholders to manage the fisheries resource and recreational sea angling. It will support the protection of the resource for sea anglers and those that provide the services to them, thereby providing employment in communities around the coast.

Estuarine fish surveys

Estuaries are highly variable and complex systems where fresh water from the land mixes with salt water from the sea, and they are renowned for their high production of fish and other organisms. They provide important nursery habitat for juvenile fish until they are available to recruit to adult stocks. Surveying and monitoring the distribution and abundance of marine fish species in estuaries is within Inland Fisheries Ireland's sea angling brief and it addresses a requirement for sampling and reporting fish status in listed transitional waters for the Water Framework Directive (WFD).

Water bodies surveyed

Argideen estuary
 Avoca estuary
 Bridgetown estuary
 Broad Lough
 Broadmeadow Water
 Castletown estuary
 Colligan estuary
 Ferta estuary
 Lower Bandon estuary
 Upper Bandon estuary

In the autumn of 2020, Inland Fisheries Ireland surveyed ten estuarine water bodies, in the course of which we took 178 samplings using nets (seine, trawl and fyke netting). A total of

8,310 individual fish were captured, counted and identified to species level prior to release. We encountered 46 different fish species over the course of the sampling programme.

Of the sites surveyed, species richness was lowest in the Upper Bandon estuary, with contributing factors being the lack of habitat diversity, the small size of the Upper Bandon and poor water quality. Conversely the Broad Lough and Lower Bandon estuary had the highest species richness with 23 species recorded. These estuaries contain complex habitats and variability which plays a significant role in promoting abundance, diversity, and persistence of species.



Sea bass captured in the Broad Lough survey, October 2020

Covid-19 restrictions slightly reduced the sampling effort with fyke nets, one of the three elements for composite sampling.

Traditionally a chain of three nets is set at each sampling location. Due to social distancing and manual handling requirements, this was reduced to two nets a set per sampling site.

Salmonid Projects

Inland Fisheries Ireland's researchers are involved in a number of different projects relating to salmon and sea trout. Our work centres on adding to our knowledge about salmon and trout, so that we can protect and conserve stocks. In 2020, our work involved:

- ▶ Providing the information on which annual salmon management advice is based
- ▶ Managing Ireland's National Salmonid Index Catchment (NSIC) on the river Erriff
- ▶ Investigating the migration, distribution, habitat usage and survival of sea trout and salmon smolts on the west coast – Salmonid West Project, including [SMOLTRACK](#)
- ▶ Implementing the Sea Trout Assessment Monitoring Programme ([STAMP](#)) at Lough Currane in Co. Kerry
- ▶ Building capacity for environmental monitoring and management of marine protected areas – [COMPASS](#)¹ project
- ▶ Studying the effects of land-use change and human activity on sea trout – [CHASES](#) project.

National salmon management advice

The annual scientific advice on the status of salmon stocks and associated documentation is produced by the independent Technical Expert Group on Salmon (TEGOS). To support the scientific advice for the 2020 salmon season, Inland Fisheries Ireland carried out catchment-wide electro-fishing (CWEF) of 39 catchments or sub-catchments to assess abundance and distribution of salmon fry. This index acts as a proxy for adult salmon presence in rivers, and in many systems these results provide the only data on salmon spawning available. A total of 751

¹ COMPASS: Collaborative Oceanography and Monitoring for Protected Areas and Species

sites were visited in 2020. In the first fourteen years of this programme (2007–2020) a total of 510 catchment surveys in 148 catchments or sub-catchments have been undertaken comprising 11,293 individual site surveys.

Based on the CWF data for 2020, 11 rivers were predicted to be under their conservation limit, but with a high average catchment-wide salmon fry index (≥ 17 fish/5-min over the 2007–2020 period); the recommendation was to open these for catch and release angling. A comprehensive series of reports on our salmon management programme is available [here](#).

Based on the scientific advice provided by the Technical Expert Group on Salmon, it was determined that during 2020 of 144 rivers nationally, 39 rivers would be open for a harvest fishery, 42 rivers would open for catch and release angling and 63 rivers would be closed. Of the 16 spring salmon rivers, 10 were open, and 6 were open for catch and release angling in 2020.

The National Salmonid Index Catchment– the river Erriff catchment

The Erriff is the National Salmonid Index Catchment (NSIC) for salmon and sea trout populations in Ireland. The topography of the Erriff catchment, which combines a riverine and a lake-fed tributary sub-catchment, is representative of typical migratory salmonid habitat in Ireland. A long-term sea trout monitoring programme has operated on the Tawnyard Lake sub-catchment of the NSIC since 1985.

The NSIC is critically important in monitoring the Erriff sea trout population currently and into the future and will allow assessment of the impact of environmental factors, including sea lice levels, on the sea trout stock. In 2014 investment was made to enhance its research and monitoring capacities. As part of this investment an array of hydro acoustic receivers was installed in Killary Harbour to monitor sea trout and salmon movement and residency in the marine environment. This array is central to a five-year programme to investigate the marine phase of salmonids – see Salmonid West and SMOLTRACK on page 46.

A new project using PIT (Passive Integrated Transponder) tag technology began in spring 2016 to determine sea trout and salmon marine survival back to the Erriff. Salmon smolts have been PIT tagged annually over the 2016-2020 period and marine survival of these tagged cohorts has ranged from 2.0 to 3.8 per cent. To date, the vast majority of returning tagged fish are as one-sea-winter (1SW) grilse, which reflects the predominance of this stock component in the river. Table 2.1 summarises the PIT tagging of salmon and sea trout from 2016 to 2020.

TABLE 2.1: Salmon and sea trout smolts PIT tagged in the NSIC since 2016

Tagging year	Species	No. of fish tagged	Mean (cm)	SD (cm)	Min. (cm)	Max. (cm)
2016	Salmon	1022	12.5	1.5	8.7	18.0
	Sea trout	667	20.2	1.9	14.0	26.2
2017	Salmon	553	12.8	1.6	10.0	21.6
	Sea trout	590	19.9	1.9	15.0	26.0
2018	Salmon	893	12.8	1.3	10.0	18.2
	Sea trout	548	19.8	1.9	13.5	25.9
2019	Salmon	912	12.3	1.1	10.0	19.2
	Sea trout	699	18.7	1.9	10.9	23.9
2020	Salmon	410	14.0	1.2	11.2	18.7
	Sea trout	621	19.6	1.4	13.7	24.0

The marine survival of Erriff sea trout based on PIT tagging ranges from 2.9 to 24.1 per cent over the 2016–2020 period. Fish predominantly return as finnock (i.e. in the same year that they migrated as smolts) with previous spawners and 1SW maidens only a minor stock component in the time series to date (< 8.4 per cent and < 2.3 per cent respectively). Sea trout marine survival is strongly influenced by salmon farming activity in Killary harbour with much reduced survival when large grower fish are present.

Table 2.2 summarises PIT tag detections from returning adult salmon and sea trout tagged in the Erriff (NSIC catchment).

Table 2.2: PIT tag detections from returning adult salmon and sea trout tagged in the NSIC

Tagging Year	Species	No. of fish tagged	Total nos. returned	% marine survival	% OSW*	% 1SW*	% 2SW*	% repeat spawners
2016	Salmon	1022	36	3.5	0	83.3	16.7	2.7
	Sea trout	667	115	17.2	100	0	0	3.5
2017	Salmon	553	11	2.0	0	100	0	0
	Sea trout	590	29	4.9	100	0	0	6.9
2018	Salmon	893	34	3.8	0	94.1	5.9	0
	Sea trout	548	132	24.1	96.96	2.27	0.757	8.3
2019	Salmon	912	26	2.9	0	100	n/a†	n/a†
	Sea trout	699	20	2.9	90	10	n/a†	30

*OSW, 1SW 2SW: number of sea winters † potential to return from 2021 onwards

The Erriff weather station continued its operation throughout 2020. The station was first installed in late 2019 as part of Inland Fisheries Ireland's Climate Change Mitigation Research

Programme (CCMRP) – see page 35. In addition, a catchment-wide temperature monitoring network was expanded and maintained to further support this research initiative.

Salmonid West and SMOLTRACK

The Salmonid West Project (SWP) investigates the migration, distribution, habitat usage and survival of sea trout and salmon smolts in the marine environment on the west coast of Ireland. Primarily focused on a long-term smolt study on the river Erriff (the National Salmonid Index Catchment), Killary Harbour and the surrounding coastal waters, the study mainly uses telemetry technology to track fish movement. Outputs from this study are helping us to understand salmonid ecology in the early marine phase and the impact that sea lice have on them.

This research will provide us with information that will help improve assessments of the impact of developments such as wind farms, harbour development and finfish aquaculture on wild salmonids, and will also provide information for robust environmental impact assessment and spatial planning.

SMOLTRACK

SMOLTRACK is an EU-wide project funded by the North Atlantic Salmon Conservation Organization (NASCO) that also uses the infrastructure of the Salmonid West Project. It focuses entirely on salmon.

Due to Covid-19 restrictions, no field work was carried out in 2020 for either the SWP or SMOLTRACK projects. Project staff were in lockdown during the smolt migration window and no fish were tagged. Activities focused mainly on data analysis and two manuscripts, one on sea trout smolts migrations and another on salmon smolt predation in fresh water, are in the final stages of preparation for submission to peer-reviewed journals.

SMOLTRACK held several zoom meetings with European colleagues from Denmark, Northern Ireland, England, Sweden, Finland, Spain, and Portugal to plan future studies. The group was successful in securing funding for additional studies in 2021 and beyond. Other outputs from the SMOLTRACK dataset include a contribution to a publication on ‘the Atlantic salmon smolts that never reached the sea: lessons learnt from a pan-European project’ which has been submitted to the *ICES Journal of Marine Science*.

Currane STAMP Project

The Currane Sea Trout Assessment and Monitoring Programme (STAMP) is a comprehensive research project implemented by Inland Fisheries Ireland in 2019 to evaluate the current status of sea trout and salmon in the Waterville area of Co. Kerry. The key objectives of the STAMP project are to establish current and historical population trends across the various life

stages of sea trout and determine spatial strategies and survivorship rates exhibited by sea trout smolts as they migrate to sea.

Supporting these outputs are various additional study elements introduced in 2020 with the aim of identifying potential ecological and anthropogenic threats facing sea trout in the Currane catchment and the adjoining Ballinskelligs Bay.

Electrofishing surveys

Electrofishing surveys were conducted at 35 regular Inland Fisheries Ireland monitoring sites in the catchment in 2019 and 2020. Results from the surveys in 2020 indicate slight improvements in average trout fry and parr densities compared to surveys completed in 2019. Salmon fry densities remained relatively stable in 2020 compared to 2019 while notable increases in salmon parr densities were observed in 2020.

Additional electrofishing surveys planned in 2021 will produce three consecutive years of juvenile salmonid monitoring, which will help to determine recruitment trends in areas critical for trout and salmon development.

Acoustic telemetry

In spring 2020 tagging data was downloaded from the freshwater acoustic receiver array which had been deployed throughout the Currane catchment for a full year to monitor survival and movement of returned sea trout finnock. Marine receivers were redeployed in Ballinskelligs Bay in spring to capture smolt movement data from the time when they enter the sea to their return to fresh water. In autumn, additional acoustic receivers were deployed along the mouths of Lough Derriana and Lough Cloonaughlin, Co. Kerry and these will serve to increase existing detection coverage and help to refine dispersal ranges of sea trout in various stretches of the Currane system.



An acoustic Receiver in a Currane system lake

Despite severe travel and working restrictions related to Covid-19, acoustic tags were implanted in 59 sea trout and one salmon smolt in May 2020. Preliminary data has shown similar rates of seaward migration in 2020 smolts compared to those tagged in 2019, with approximately 50 per cent of fish tagged in both years confirmed at sea. The number of trout returning to the Currane system from Ballinskelligs Bay was higher in 2020 with 45 per cent of fish completing a full migration compared to 2019 when just 25 per cent returned.

In Autumn of 2020, 17 sea trout finnock were tagged to provide spatial management data for sea trout in the Currane system. To date, 13 finnock have been detected in the Currane

system; receiver downloads in April 2021 will provide information on patterns in winter behaviour, survival and marine migration strategies in older sea trout.

Planned tagging of smolts in April 2021 will contribute further data on marine survivorship rates in Currane sea trout and will help us to identify and mitigate potential risks they undergo in migration to sea.

Logging water temperature

Temperature loggers were deployed in rivers and streams throughout the Currane in conjunction with Inland Fisheries Ireland's Climate Change Mitigation Research Programme (see page 35). Data from the temperature loggers will keep us informed of any rise in water temperatures that might present a threat to salmonids. Trout in particular might become vulnerable if the streams they use for spawning become warmer because of climate change. In that case it may be possible to put in place habitat management practices to mitigate the impact of the higher water temperatures.

From historical water temperature data over seven decades, we know that average autumn and winter temperatures in the Currane River have risen by 0.8 and 1.3 degrees Celsius respectively between 1953 and 2019. Smaller temperature increases were observed in spring and summer (+0.1 and + 0.4 degrees Celsius respectively) over the same period.

Avian predation

In summer of 2020 a game camera with a time-lapse setting was installed to determine the level of avian predation on migrating salmonids at the seaward side of Butlers Pool, the only marine migratory corridor linking the Currane to Ballinskelligs Bay. This produced time-lapse surveys for 40 days between May and August, and it showed that grey heron, cormorant and herring gull were the dominant bird species aggregating where Butlers Pool runs to sea.

Similarities were observed in the activity of all three of these birds, with a peak presence occurring in morning hours between 05.00 and 07.00 and lowered presence at midday between 11.00 and 13.00. Data from the spring period (to cover the smolt migration window) will be required to determine if avian predation is an issue for migrating smolts.

Sea lice monitoring

Sea lice data from nearby salmon farms in Kenmare Bay over a 20-year period is being analysed to determine monthly and annual trends in *Caligus elongatus* and *Lepeophtheirus salmonis*, parasitic species that pose various health risks to wild salmonid populations. This work will aim to analyse potential sea lice risks facing sea trout residing in Ballinskelligs Bay and the surrounding coastal area.

This data has been complemented by environmental DNA sampling for the presence of sea lice in coastal waters adjacent to Ballinskelligs Bay. This sampling took place in March and July of 2020 and confirmed the presence of *C. elongatus* in July. Repeated environmental DNA

sampling in 2021 will help to provide empirical data on comparative sea lice abundance between years.

COMPASS project

COMPASS (Collaborative Oceanography and Monitoring for Protected Areas and Species) is a transnational project focusing on the coastal seas between Ireland and western Scotland. Inland Fisheries Ireland is working with Northern Ireland's Agri Food and Biosciences Institute (AFBI) on the salmonid work package. To date over 450 sea trout and salmon, mainly at smolt stage, have been tagged with acoustic transmitters under the project. The main objectives of this work are to understand habitat utilisation and migration behaviour of salmonids in the near shore marine environment and to identify important habitats for sea trout. This work also aims to identify routes or pathways of salmon smolts as they migrate from fresh water into the marine environment.

Acoustic tagging

Despite COVID-19 restrictions, which commenced during the typical smolt migration window, a late salmon smolt run in the River Boyne in late May facilitated tagging of 30 fish by Inland Fisheries Ireland staff. Acoustic receiver arrays in the lower reaches and estuary of the Boyne tracked the movement of smolt to sea entry. Further detections of these fish from an extensive temporary offshore array of 22 receivers, deployed by our partners AFBI in March 2020, across the North Channel (extending from Islandmagee off the Antrim coast to the Mull of Galloway in Scotland), in depths of up to 120m, confirmed the northerly trajectory of salmon smolts once they leave the Boyne. This 'bonus' line, installed with excellent efficiency and at minimal cost, added substantial tagged fish monitoring capacity for COMPASS.

With the assistance of anglers from the Dundalk and District Brown Trout Anglers Association, Inland Fisheries Ireland staff tagged 49 sea trout finnock in the Castletown river with acoustic tags in summer / autumn 2020. Finnock movement within and out of the system was monitored by multiple fixed location receivers in the catchment and by manual tracking in the winter of 2020, which captured many different fish behaviours including early migration from the system. We also deployed data loggers on the Castletown River to monitor changes in water temperatures and water levels so that we can relate these to sea trout movement patterns.

Data collection and findings

Over the course of the project to date data has been collected from most receivers in the inshore arrays, and this is providing new insights into fish behaviour and their utilisation of the coastal and marine environment. Detailed analyses are ongoing but preliminary results have shown that sea trout, for example, appear to be mainly confined to inshore habitats, often in discrete areas.

With the numbers of salmon declining and their reduced survival in the marine phase, more information on their oceanic migration, the routes they take and early post-smolt survival is vital to the conservation of this iconic species. Salmon smolts were tagged and tracked as they migrated to oceanic feeding grounds. Early findings indicate that they take the shortest route to the deep waters of the central Irish Sea –possibly so that they can use prevailing currents to assist their journey northwards to the feeding grounds in the north-east Atlantic.



Sampling as part of the COMPASS project

CHASES Project

Inland Fisheries Ireland completed its collaboration with researchers from the Norwegian University of Science and Technology (and other international partners) as part of the externally funded CHASES project. The overall aim of the project was to examine the consequences of land-use change and human activity on sea trout in view of the large declines in populations in recent decades. An LA-ICPMS²-based scale analysis was designed by Inland Fisheries Ireland researchers to discriminate the freshwater and marine phases of individual fish and so support life history interpretation and a quantitative assessment of marine growth. Scale samples from several sea trout systems in Norway and Ireland were analysed using this method. The study detected a relationship between the presence of salmon farms and reduced marine growth of sea trout.³

Habitats work

Inland Fisheries Ireland's Habitats team is focused primarily on meeting Ireland's obligations to monitor and report on the status of the fish species listed under the EU's Habitats Directive. The team also contributes to international projects including DiaDES.

Habitats, species and Directives: Studies supporting Habitats Directive (fish species) and Water Framework Directive (Hydromorphology)

² LA-ICPMS: Laser ablation – inductively coupled plasma – mass spectrometry

³ Sindre Håvarstein Eldøy, D Ryan, W K Roche, E B Thorstad, T F Næsje, A D Sjørnsen, P G Gargan, J G Davidsen, Changes in growth and migration patterns of sea trout before and after the introduction of Atlantic salmon farming, *ICES Journal of Marine Science*, Volume 77, Issue 7–8, December 2020, 2623–2634, <https://doi.org/10.1093/icesjms/fsaa125>

The Habitats Directive and Red Data Book (RDB) fish programme

Inland Fisheries Ireland's work in monitoring of Annex II/V fish species continued in 2020 as part of the six-year (2019 –2024) reporting cycle required under Article 17 of the EU's Habitats Directive.

The conservation status of river lamprey was assessed as unknown in the previous reporting period and dedicated surveys for this species are a priority in the current cycle. Covid-19 restrictions precluded sampling for adult river lamprey, but the Nore catchment was targeted for juvenile lamprey in 2020. The roll-out of the revised larval lamprey programme continued and a range of index sites on both SAC (special area of conservation) and non-SAC rivers were surveyed to assess trends in the population size of brook lamprey.

Sea lamprey redd counts were carried out at spawning hotspots on SAC rivers to investigate spawning effort and inter-annual variation while the main channels of the rivers Suir and Munster Blackwater were targeted for walk-over surveys.

Habitats Directive project personnel assisted colleagues on the National Bass Conservation Programme (see page 38) in netting and trawling surveys of transitional waters to obtain data on juvenile smelt and twaite shad.

DiaDES

Begun in 2019, DiadES is an EU-funded Atlantic Area project that looks at migratory (diadromous) fish in the context of ecological goods and services. The project is led by the French research institute ([INRAE](#)), and as well as Inland Fisheries Ireland there are partners from Spain, Portugal, France and the UK. The project is scheduled to run until 2022.

The Inland Fisheries Ireland DiaDES team includes Waterford Harbour / Three Sisters estuaries as its case study and is focusing on twaite shad and on the thin-lipped mullet. There are clear synergies between the work of the Habitats team and that of the Marine Sport Fish team. Surveying involves sampling waters for evidence of environmental DNA, harvesting of scales and otoliths for microchemistry and telemetry. To date samples of shad and thin lipped mullet have been sent for ICP-MS analysis to compare elemental signatures among the different case study locations.

A shad hybridisation study is examining the genetics of the shad collected in Waterford Harbour and seeking to identify the proportion of hybrids between allis and twaite shad in our local population. The programme will look at the presence of environmental DNA for four species: sea lamprey, shad, smelt and thin lipped mullet in water samples taken within Waterford Harbour, coastal waters and neighbouring estuaries. The laboratory analysis of these samples is ongoing with results expected in Q2 2021.

The annual reports of the Habitats Directive and Red Data Book team's surveys and investigations are available [here](#).

Hydromorphology – linking habitats and species

The Water Framework Directive (WFD) has identified connectivity as a key factor in regard to the natural functioning of rivers. Connectivity is one component of river hydromorphology, a composite topic that deals with the physical habitat factors that underpin ecology – the quantity of water, the condition of the instream and riparian habitat and the connectivity of the channels both laterally and longitudinally. The themes in hydromorphology are consistent with Inland Fisheries Ireland’s overall aims to conserve species and their habitats, as well as the aims of the Habitats Directive with regard to the various life stages of migratory fish species travelling between the sea and fresh water, listed in [Annex II](#) of the Directive.

Four significant hydromorphology projects, all with shared strands, were continued during 2020:

- ▶ The Environmental Riverine Enhancement Programme ([EREP](#)) study with OPW
- ▶ The EU-funded Adaptive Management of Barriers in European Rivers ([AMBER](#)) project
- ▶ The National Barriers Programme, funded by the Department of Housing, Local Government and Heritage
- ▶ The [INTERREG](#) cross-border Catchment CARE project.

EREP study

The EREP study is a long-term multi-faceted project with the Office of Public Works Drainage Division. It applies the Water Framework Directive criteria to drained rivers in order to examine the status of the fish community and hydromorphology (physical habitat and connectivity), and to implement appropriate management strategies to retain and improve physical habitat in drained channels.

During 2020, the programme conducted a catchment-wide survey examining the fish community, physical habitat and potential barriers to fish migration in the Glyde catchment in counties Cavan, Monaghan and Louth. The EREP also re-visits channels where studies were undertaken previously in order to build up a long-term database on fish and habitat. A repeat survey was conducted on the Stonyford River in the Boyne catchment, where capital works had been undertaken in 2014, comprising fencing to exclude livestock and instream vegetation removal. Engagement with the OPW is key to the successful delivery of the programme. Various opportunities were used during 2020 to promote EREP objectives with both the OPW Environment and Drainage Divisions. Activities included disseminating results of scientific studies, consulting on barrier mitigation workshops and walkovers in the field to promote instream and riparian management measures consistent with best practice. The work plan for 2020 was impacted by the Covid-19 restrictions and adaptations were made.

AMBER project

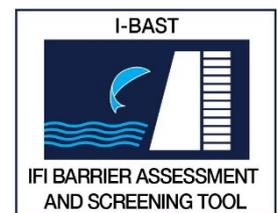
Inland Fisheries Ireland is one of 20 European partners in the AMBER project. This is an EU Horizon 2020 project which was completed in September 2020.

The project resulted in a number of publications; the latest was a paper in *Nature* which looked at all the data collected under the AMBER project covering more than 2,700 kilometres of rivers in 36 countries.⁴ The study concluded that European rivers are fragmented by more than one million barriers, such as dams – however, the majority of these are structures that are less than 2 metres in height and are often overlooked.

National Barriers Programme

The National Barriers Programme, funded by the Department of Housing, Local Government and Heritage, is in its concluding year. Completed project tasks include:

- ▶ Delivery of a national geo-database of potential barriers to fish passage (73,065 structures)
- ▶ Roll-out of I-BAST, IFI's barrier assessment and screening tool, which collects on-site data and immediately uploads to a cloud-based server (eliminating paper recording),
- ▶ Initial prioritisation of barriers for management in the third WFD cycle
- ▶ Partnering with the OPW in the delivery of mitigation guidelines for small barriers to connectivity.



The National Barriers Programme continually integrates barrier data from our River Basin District (RBD) colleagues, from the AMBER project, the EREP and the Eel Monitoring Programme. During 2020 the project team continued to roll out a programme of training, facilitating the involvement of RBD teams in barrier surveys. These RBD teams have undertaken extensive barrier assessment programmes evaluating 3,752 instream structures. By January 2021, we had surveyed 21,391 instream structures using the I-BAST application and remote surveying; and of these, 5,482 were identified as barriers to fish passage.

Catchment CARE project

The Catchment CARE project (2017–2022) was commenced in late 2017, with a focus on improving water quality in three cross-border catchments; the Finn, the Arney and the Blackwater. The project has a series of catchment actions to examine and improve water quality (as defined by the WFD) and these include point source enrichment, diffuse source

⁴ Belletti, B., Garcia de Leaniz, C., Jones, J. *et al.* More than one million barriers fragment Europe's rivers. *Nature* 588, 436–441 (2020). <https://doi.org/10.1038/s41586-020-3005-2>

enrichment, hydromorphology measures (instream and riparian) and groundwater issues. There is a strong scientific component and a community engagement component.

The Inland Fisheries Ireland team consists of a Research Officer for the Arney and some projects in the Blackwater, a Catchment Project Officer for the Arney and an Administrative Assistant. Within the project IFI took the lead in work package scoping. A report is available on the [Catchment Care](#) website detailing the status of the three catchments, highlighting the existing pressures and recommendations on remediation.



Glass eel sampling

IFI are tasked with delivering instream and riparian works in the Arney catchment. The team has created plans for water quality improvement in selected waterbodies through the exclusion of livestock from water courses and the creation of buffer zones. There are currently three projects for riparian actions that have been subject to procurement. Detailed plans are in place to monitor the effects of the restoration works on the habitat and fish species present. Work is continuing to progress barrier easement projects in both the Arney and the Blackwater. There are several community incentive schemes being developed by the Catchment Project Officer in the Arney, including clean-up initiatives along the river and a study that uses specialised dyes to learn about the movement of water through the extensive cave network underlying the Arney catchment.

For more information on this project, see <http://www.catchmentcare.eu/>.

National Eel Monitoring Programme

In 2020 the National Eel Monitoring Programme ([EMP](#)) contributed to the national report on the implementation of the National Eel Management plan. The next reporting cycle to the EU is due in June 2021 and covers the period 2018 –2020.

The EMP programme monitors the different life stages of the eel in key eel index catchments around the country. The recruitment of juvenile eels from the ocean into rivers was very poor for 2020; however, monitoring of the traps in the early part of the season was impacted by Covid-19 restrictions. The Corrib trap caught 53kg, the Inagh trap caught 5.3kg, and there were poor catches in the Maigue and the Feale traps (220g and 920g respectively). The Ballysadare trap was not operated in 2020 as this is a citizen science operated trap. The poor recruitment in Ireland was matched with a similar pattern across Europe. The latest [ICES](#) advice reports recruitment at 6.5 per cent (provisional) for the 'elsewhere in Europe' series and 0.5 per cent (provisional) for the North Sea series in 2020.

Glass eels pilot study

A pilot study looking at glass eels in the Boyne estuary commenced in 2018 and continued in 2020. However, this was impacted by Covid-19 restrictions as the weeks where the high

recruitment occurred coincided with the Level 5 restrictions. The 2020 catch was 61 glass eels for the first two months of the glass eel season and was tracking on target with previous years. A total catch of 783 glass eels was captured in 2019, down from 2,189 recorded in 2018.

Assessment of barriers to eel migration

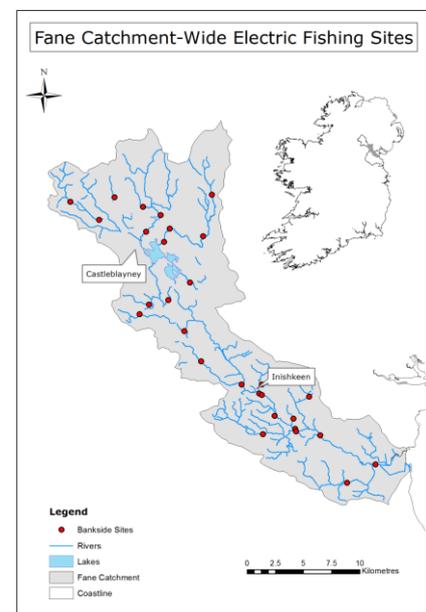
In collaboration with colleagues in the National Barriers Programme (see page 53) the EMP team carried out an assessment of potential barriers to eel migration in the Kells Blackwater catchment in 2020. A total of 612 sites were assessed, of which 48 were recorded as barriers to be further assessed. A number of fyke netting surveys and electrofishing surveys have taken place in the Kells Blackwater catchment over the years and it will be very useful to assess the population presence in relation to these barriers.

Electrofishing in the Fane catchment

A repeat electrofishing survey was undertaken in the Fane Eel Index catchment in 2020. Twenty-nine sites were fished: yielding just two eels, each at a different site. This compares with 36 eels caught in 11 of the 29 sites back in 2013. Research carried out by the team in previous years shows a good population of eels in Lough Muckno in the Fane catchment but this study shows the absence of eels in riverine habitat.

Silver eel fishing

Silver eel fishing was carried out in the river Barrow and in the Fane catchment in 2020. A total catch of 465 kg was caught over 27 nights on the Fane with 238 kg caught on the Barrow over 29 nights. Funding supplied by the Department of the Environment, Climate and Communications enabled the team to undertake an environmental DNA study at our silver eel sites. The aim is to link the abundance of eel DNA in the water column with the catches in the silver eel nets. It is hoped that this technique will enable the monitoring of other rivers around the country for silver eel escapement.



Electrofishing locations in the Fane catchment 2020

3. SUSTAINABLY DEVELOPING OUR ANGLING RESOURCE

The Business Development division is responsible for the sustainable development and promotion of Ireland's precious inland fisheries and sea angling resource. The division is made up of a number of teams: Angling Promotion and Marketing, Education and Outreach, Communications, Salmon and Sea Trout Management and the Project Management Office. Staff are based throughout Ireland ensuring excellent interaction and communication with all our stakeholders.

The year 2020 was pivotal for business development, as our staff had to diversify and adapt to new work practices during a global pandemic. The division worked collaboratively with their colleagues across all functions to carry out the organisation's necessary work.

Covid-19: impact and innovation

The Covid-19 pandemic has forced us to adapt and change both the way we work and how we provide the services we can offer to our stakeholders. Some annual programmes were unable to proceed safely in 2020 and had to be cancelled –including the Inland Fisheries Sponsorship Programme which received over 100 applications from angling stakeholders.

In most situations, however, we were able to see the Covid 19 pandemic as an opportunity to innovate. With this positive attitude under difficult circumstances, we explored how and where we work, while still offering the same, or an improved, level of service. At its most basic level, this meant carrying out our functions effectively while working from home. Some other examples of Covid-19 innovation in 2020 are described below.

E- Licensing

In 2020, we progressed our e-licensing to enable salmon and sea trout anglers to purchase a licence online. They could then instantly download the licence and logbook and begin to fish straight away on a catch-and-release basis only on all open rivers and within the permitted angling season. Using the e-licence method to obtain a licence, tags are posted/collected within a few days of the licence being ordered, so enabling anglers to harvest fish if they wish to do so on rivers with a harvestable quota.

Permit sales and other e-shop offerings

The Inland Fisheries Ireland online permit shop was completely redesigned and updated over April, May and June and went live on 29 June 2020. IFI now offers 54 new permits for 13 fisheries around the country. These include seven salmon fisheries across Donegal (all beat based), two salmon fisheries in Kerry, one salmon, trout and coarse fishery in Galway, Inland Fisheries Ireland's four 'put and take' lakes in Cork and Kerry, as well as permits for Inniscarra and Carrigdrohid which we sell on behalf of ESB.

In late July boat permits were added for Lough Eske and then Lough Beagh (Co. Donegal) as Covid-19 guidelines were developed to facilitate these fisheries. Gift cards were added in December to allow the general public purchase a present for an angler.

Daily reports on bookings in Donegal and Galway are issued to relevant protection staff to assist in planning patrols. The permit shop continues to sell the Midland Fisheries Group permits, measuring mats and IFI-published books. Additional items can be added to the shop at short notice.

Website redevelopment

Inland Fisheries Ireland also commenced the redevelopment of the fishinginireland.info website (funded by Ireland's Hidden Heartlands). This was an enormous undertaking. The existing site comprises over 800 pages and 14,000 angling reports and receives in the region of 2,750,000 views annually. The updated website is expected to go live in early summer 2021.

Angling coach training

Inland Fisheries Ireland worked with the National Coarse Fishing Federation of Ireland (NCFI) on the development of a blended learning course to train angling coaches. This was the first course of its kind in Ireland and the online delivery of Sports Ireland approved coaching training is a huge achievement for a sport that is often relegated to minority status. Training was rolled out to two groups in November and December.

Other online innovations

Other areas where Inland Fisheries Ireland staff had to innovate to provide an effective service included:

- ▶ Attending online angling trade shows to promote Irish angling
- ▶ Increasing the levels of online promotion via our website and social media networks
- ▶ Developing a digital map of State-owned fisheries which can be used on any smartphone
- ▶ Development of the Education and Outreach 'Go Fishing' online coaching programme.

Development projects and funding schemes

The Projects Management Office (PMO) is responsible for the oversight of IFI development projects along with the promotion and administration of a number of funding schemes operated by Inland Fisheries Ireland. The PMO is also charged with supporting IFI staff in their development and implementation of projects. The PMO utilises experience in fisheries management, research, development, engineering, administration and environmental assessment to ensure that projects are delivered in compliance with relevant legislation and IFI procedures. Some highlights of the work undertaken by the PMO in 2020 are set out below.

- ▶ We carried out a range of activities covered by the National Habitats and Conservation Programme – this included instream maintenance and rehabilitation work, fish passage improvement, invasive species control and stock management
- ▶ We engaged closely with applicants for funding and other stakeholders to clarify funding requirements and processes
- ▶ We carried out extensive angling infrastructure works – including angling stands, stiles, access roads and car parks
- ▶ We developed our own expertise, knowledge across a range of areas, including design, appropriate assessment, standard operating procedures (SOP).

National Habitats and Conservation Programme

During 2020 the PMO became more actively involved in the monitoring of the **National Habitats and Conservation Programme**. This programme includes all habitat conservation works undertaken by Inland Fisheries Ireland throughout the country. In 2020 the PMO consulted regularly with RBD staff to monitor the progress of the various projects as they were carried out. Through this process the PMO were able to share experiences and examples of best practice from other parts of the country and identify where frameworks or technical experts could help staff to complete their projects. It also helped to identify efficiencies in procurement where similar materials or work were required in different River Basin Districts.

2.2 IFI will promote the management and maintenance of our fish habitats to improve conservation status and increase recreational angling opportunities.

One example of this was in the NWRBD where a state fishery had become infested with alien Invasive plant species. The PMO and the NWRBD worked together to develop a template specification for the preparation of an Alien Invasive Species Management Plan (AISMP) based on current best practice. This template has since been shared with other divisions of Inland Fisheries Ireland where it can be used to speed up the process of engaging specialist contractors to treat the alien invasive species.

During 2020, Inland Fisheries Ireland carried out the following habitat and conservation works:

- ▶ 49 environmental reports
- ▶ 23km of instream maintenance

- ▶ 104 surveys / design plans
- ▶ 21 km spawning habitat opened up
- ▶ 34km instream rehabilitation

While Covid-19 impacted delivery of our habitat and conservation projects in 2020, we did make some progress in instream maintenance and rehabilitation works, fish passage improvement, invasive species control and stock management – some examples are described briefly below.

Instream maintenance works

For 2020, we planned 66.88km of instream works, of which 18.65km of de-tunnelling, 4.58km of gravel and 2.23km of fencing. By the end of the year, half of that target had been completed. In 2020, 50% or 33.76km has been completed inclusive of 6.58km (de-tunnelling, 1.06km (23%), gravel and .2km(9%) of fencing. Among the most notable of these projects were:

- ▶ General maintenance of spawning streams in the Corrib, including cleaning of spawning gravel and weed removal.
- ▶ Decommissioning of Dalligan Weir (Co. Waterford) – preplanning was carried out on this work, whose aim is to increase spawning potential for 15km upstream and downstream
- ▶ Arklow riverwalk habitat, including restoration of reedbeds, removal of invasive species and riverbank clearance (project completed).

Instream rehabilitation works

Instream rehabilitation works to 125.59km was planned for completion in 2020, of which 18 per cent were completed, including 1.86km of bank protection and 6.9km of instream works. The most notable of these included:

- ▶ The Abbert River project (Co. Galway) aims to develop the instream salmonid habitat including spawning and nursery improvements. The work was 85 per cent complete at year end.
- ▶ Boycetown (Co. Kildare) and Trimblestown (Co. Meath) project (Boyne catchment) – preplanning was completed on this project which will promote the recovery of wild Atlantic salmon and sea trout stocks and habitats.
- ▶ The Corrib catchment pilot project involves Instream and riparian habitat enhancement works, bank stabilisation and prevention of erosion. It is part of a larger plan that includes works such as the introduction of spawning gravels, creation of pools and deflectors, placement of random boulders, tree pruning, fencing, planting and bank protection works. Most of the work has been deferred to 2021.
- ▶ Riverine restoration and enhancement at Lough Sheelin (Millford, Derrylea) involving 5km of instream works.

Fish passage improvement

Fifteen fish passage works were planned for 2020, including the opening up of 461km of habitat. Most of the work in 2020 was at preplanning stage as works were deferred to 2021. The most notable of these projects include:

- ▶ Restoration of Glore River (river Moy) aims to increase spawning success and juvenile numbers; preplanning 80 per cent complete, works deferred to 2021.
- ▶ Enhancement of river Francis , Castlerea to provide enhanced salmonid production – one fish passage (20km opened).
- ▶ Removal of known barrier to important salmonid spawning system at Brett’s Weir, Kilkenny; preplanning 85 per cent complete, works deferred to 2021.
- ▶ Clohamon Weir on the river Slaney in Co. Wexford – 80 per cent of design work completed on a screening barrier to prevent fish entering the tailrace on the river Slaney; the works element is to follow.

Invasive species control and stock management

The control of 6.25ha of invasive species was targeted in 2020, with 4.13ha now complete. For 2020, the targeted number of fish for stock management was 11,605 fish, 77 per cent of which has been achieved. The most notable of these projects include:

- ▶ Weed Control on Lough Corrib: work was completed on 4.1ha of the planned 6.25ha (66 per cent).
- ▶ Stock management on Lough Sheelin – 541 fish removed (against target of 5,000). The Spring programme element was lost because of Covid 19 restrictions.
- ▶ Stock management, Galway – gill netting and electrofishing completed, with 2,102 fish removed (against target of 3,110). Three environmental reports completed.
- ▶ Stock management, Owenriff River – 254 fish removed (against target of 720); one environmental report completed. Start delayed to second quarter due to Covid 19 restrictions.
- ▶ Stock management, Ballina – gill netting completed, electrofishing delayed due to temporary staff shortage; 1,526 fish removed (against target of 2,775); two environmental reports completed.

Facilitating project work**(PANEL)**

In 2020, the PMO made a significant effort to ensure that the assessment and award of funding to projects in the Salmon and Sea Trout Rehabilitation and Conservation and the Midland Fisheries Funds (MFF) were made to facilitate the delivery of projects in the summer works season.

With the onset of Covid 19 restrictions this meant holding the panel assessments remotely utilising the full functionality of the Grant Management Portal, SmartSimple and Zoom. The online assessment of these applications proved to be more efficient than having the panels meeting in person. The funding was awarded before the start of the summer works season, giving the applicants the opportunity to complete their projects in the same year in which the funding was awarded.

One such project was the Yellow River Phase 2 project (Co. Westmeath) which fenced off a 1km reach of river from access by livestock and to encourage natural riparian regeneration. Electrofishing carried out in advance of the works found one solitary juvenile trout to be present in the river. It is hoped that the measures will allow the river to naturally rehabilitate itself over time with an emphasis on the softer tasks of managing riparian environments and become a more suitable ecosystem for trout.



Yellow River Phase 2 fencing work 1

Engagement with applicants for funding

Ongoing engagement with applicants and IFI staff in respect of potential Salmon and Sea Trout Rehabilitation and Conservation projects during 2020 led to a significant increase in the number and value of applications for funding for the 2021 works season. Applications worth €946,000 were received in response to the 2021 funding call. This is a 630 per cent increase on applications received for 2020.

2.2 Fund and deliver the National Strategy for Angling Development (PI 1)
2.2 Enhance other available funds such as the Salmon Conservation Fund and Midlands Fisheries Fund (PI 2)

Summary of grant funding, 2020

Over €371,000 of IFI grant funding was awarded to 21 agreed projects in 2020. A total in excess of €514,000 was paid out to 29 grant awarded projects.

In response to poor engagement with the Midland Fisheries funding (MFF) calls, the PMO engaged in consultation with permit holders to determine how they felt the fund could work best for them. In response to the information provided by stakeholders, the funding rules were revised. The engagement and consultation increased the amount of interest in this fund which led to a 50 per cent increase in the funding awarded in this scheme, along with several other applications in the pipeline for development.

Working with stakeholders

Early in 2020 the PMO held a **funding workshop** to support applicants who were interested in progressing their Expression of Interest (EOI) into a full application and completing their projects. The workshop covered:

- ▶ Discussion on projects and the processes involved in progressing them
- ▶ A demonstration on how SmartSimple (the grants management system) works from the applicant's perspective
- ▶ The general and environmental governance required on projects
- ▶ The role of the Inland Fisheries Ireland project officer.

Queries from applicants in the course of the workshop mainly related to insurances, match funding (Capital Grant Scheme), SmartSimple queries (Overview of system processes) and how much funding could be attained from the two funding streams for their projects.



New angling stands installed at Doorley Park, Co. Sligo – one of the projects completed in 2020
(Photograph courtesy of Sligo County Council)

Memoranda of understanding

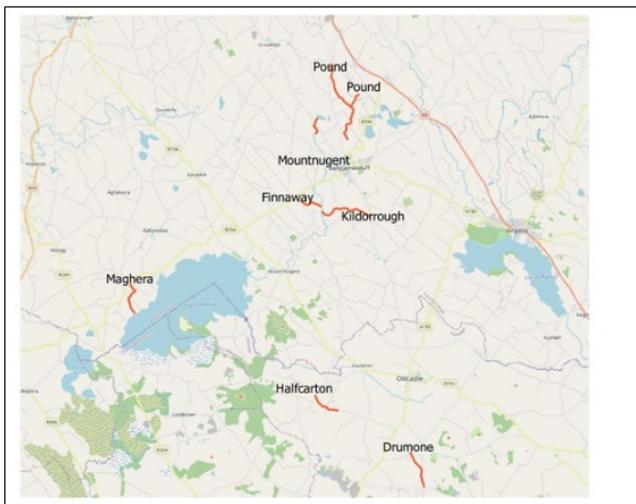
In 2020 Inland Fisheries Ireland entered into memoranda of understanding (MOU) with a number of angling stakeholder groups. The purpose of each MOU is to achieve the common goals of the groups and Inland Fisheries Ireland – the conservation and development of salmonids and their habitats in particular areas. The MOU gives us and the stakeholders the opportunity to meet, share ideas and prepare plans for mutual benefit. The angling stakeholders share their local knowledge

1.2 Develop memoranda of understanding (MOUs) with other national and international partners

and the close ties they have with the local communities and landowners while Inland Fisheries Ireland shares its experience in habitat restoration, environmental assessment, engineering, project management – to devise plans and get them shovel-ready. Furthermore, we can use our relationships with other State Bodies to facilitate preparations for the proposed works.



Through the **Cairde na Chláir** MOU, extensive fish population surveys were carried out in the Clare catchment. Fifteen sites were identified for survey to determine if habitat restoration was merited, development plans were prepared for five sites and works were carried out on the Nanny River in Tuam and on the Abbert River near Monivea (Co. Galway).



The **Lough Sheelin MOU** was agreed with the Lough Sheelin Trout Preservation Society (LSTP) (counties Cavan, Meath and Westmeath); through it, development plans were prepared for seven sites identified as suitable for habitat restoration and were screened for appropriate assessment – these are marked on the map. Consultations took place with National Parks and Wildlife Service (NPWS), the Office of Public Works (OPW) and landowners, and works are scheduled on the first site in the summer of 2021.

Angling infrastructure works

In 2020, IFI continued to manage the existing stock of angling infrastructure, ensuring that our stakeholders have recreational angling opportunities. In 2020 over 2,521 angling assets were audited. A summary of angling access structures work in 2020 is presented below with reference to some notable projects.

Stands, stiles, footbridges etc.

For 2020, 48 new stands/boardwalks were completed (76 planned). Ten stands/boardwalks have been removed (11 planned) and 17 have been repaired (23 planned). Eleven new footbridges were completed (24 planned). Fourteen footbridges were repaired (28 planned), and 15 footbridges were replaced (18 planned). Notable projects included:

- ▶ Lisgillan, White Lake (Co. Monaghan): improved car park and road/trail access (0.6km)
- ▶ Owenea Bridges (Co. Donegal): angling structures assessed; plan now in place for Phase 2
- ▶ River Easkey Angling Association Development (Co. Sligo): 16 new gates/ladders and one angling stand installed – project now complete.

Structure audits and signage

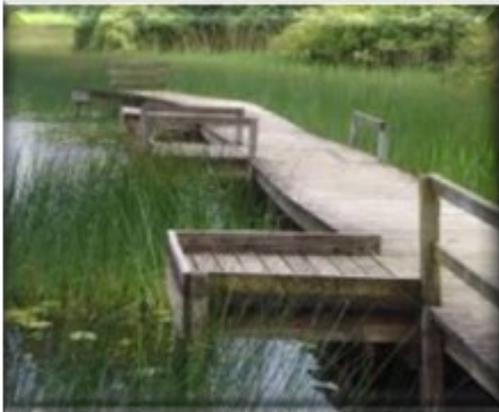
For 2020, audits and assessments were planned for 2,799 structures, of which 2,521 were carried out. Notable projects included:

- ▶ Erection of 62 signs (exceeding the 50 planned) to promote adherence to bye-laws, safety and good practice (Co. Cavan)
- ▶ General repairs and maintenance on 20 structures (stands, stiles and footbridges) on river Suck, Cross River and Hind River (Co. Roscommon)
- ▶ Audit, maintenance, repair and maintenance of angling structures in Galway: two new angling stands, one replacement stand, and five new stiles completed; remainder of project (one replacement stand and seven footbridges) deferred to 2021
- ▶ Audit of 600 angling structures completed in Eastern RBD.

Outdoor Recreation Infrastructure Scheme

2.2 Identify a sustainable fund for ongoing fisheries development (PI 4)

In 2020, Inland Fisheries Ireland was awarded €479,000 by the Department of Rural and Community Development's **Outdoor Recreation Infrastructure Scheme** for the maintenance and repair of angling access assets throughout the country. The roll out of these works was curtailed by COVID 19 restrictions but over 70 structures were maintained during 2020 with the remainder scheduled for action in 2021. On the back of the successful application for funding, another application was made to the Scheme for funding in 2020. This was for €500,000 for four strategic angling access projects at various locations around the country.



Angling stands

Enhancing work practices and developing expertise

Development of work breakdown structure (WBS) for riverine restoration

2.2 Provide advice on riverine conservation and restoration to a wider range of stakeholders (PI 3)

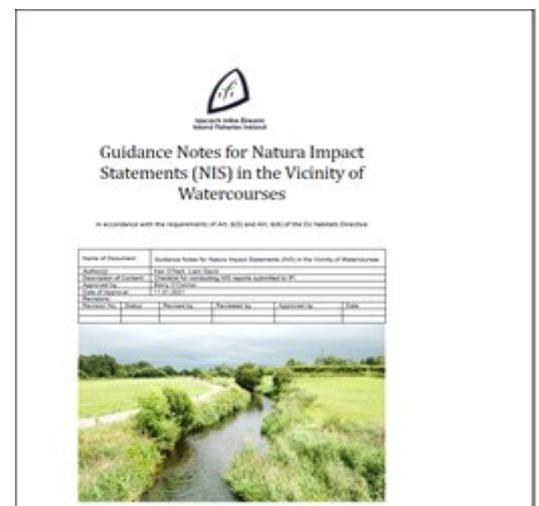
In 2020, the PMO developed a generic Work Breakdown Structure (WBS) for riverine restoration projects, and then applied this structure to a number of projects around the country. The WBS was developed following consultation with Inland Fisheries Ireland staff around the country, and is based on the collective experience of PMO staff and on sound project management principles. It follows a step-by-step approach to take a project from initiation through execution to completion.

Tasks are outlined in the order in which they have to be carried out, and all dependent actions are linked and include details of who is responsible and the associated timeline. The WBS also helps to identify resource requirements and where framework consultants can be used; in doing so, it helps to manage the budget, track progress and determine the key tasks on the project’s critical path. By following this WBS approach, we were able to deliver the River Nanny riverine restoration project in Tuam within seven months of the first walkover survey.

Guidance Notes on Natura Impact Statements

In order to ensure that the environmental assessments carried out for Inland Fisheries Ireland funded projects are fit for purpose, the PMO developed *Guidance Notes* for the preparation of **Natura Impact Statements (NIS)**, as required under the Habitats Directive in relation to proposed works.

The *Guidance Notes* are based on lessons learned and feedback from external reviewers; they set out minimum criteria to be addressed in the preparation and subsequent evaluation of an NIS. This ensures that the



assessments received from consultants include enough information and the correct kind of assessment that will allow IFI to determine if the proposed works can be permitted. This guidance will inform our consultants as to what is required in their deliverables and will allow them to prepare competitive tenders for this work.

Development of standard operating procedures for development works

2.2 Develop SOPs for development works and digitise the key processes (PI 6)

In 2020 the PMO coordinated groups of Inland Fisheries Ireland staff to develop **Standard Operating Procedures** for thirteen different kinds of development works including, for example, angling structures. The groups discussed how specific works were carried out in their areas, and then agreed on a consistent best practice and procedure that should be adopted as standard for the organisation.

The lessons shared by the groups will ensure that some of our staff's tacit knowledge of development works is recorded and made available across the organisation, so that we can learn more effectively from past successes and mistakes. The SOP documents have been developed in such a way that they can be updated regularly as necessary based on our working experience and research and to meet any requirements mandated by legislation.

Updated SmartSimple platform

3.1 Increase the governance and professionalism of the sector (PI 5)

In 2020, the PMO updated Inland Fisheries Ireland's **SmartSimple** grant management system with a new white space interface design making the platform more accessible, user friendly and efficient for users. Simple icons and an uncluttered workbench enable users to clearly identify any immediate actions they are required to take. The update was completed on foot of a survey of internal and external SmartSimple users, whose feedback provided a rich source of information and insight that was used to develop the improved workbenches and user-friendly interface.

Training on the duties of designers

Inland Fisheries Ireland staff regularly prepare designs for fisheries enhancement and other fisheries related construction works. These works are classified as construction work by the Health Safety and Welfare at Work (Construction) Regulations 2013 and as such, the designers involved in these projects have certain duties as set out in the regulations. The PMO organised specific training from suitably qualified providers to deliver training in the duties of designers to Inland Fisheries Ireland Staff at four regional locations.

In addition, a template *Designer's Risk Assessment and Mitigation Sheet* was prepared – this is intended to be used in assessing risk in future fisheries related construction.

Appropriate assessment (AA) training

Under the Habitats Directive, any plan or project that might impinge on a Natura 2000 site must go through a process of Appropriate Assessment and this applies to fisheries plans and

projects. The AA process is subject to periodic legal challenge and as a result, legal judgments regularly change the way that Appropriate Assessment is interpreted and carried out. For this reason, people in Inland Fisheries Ireland working in protected environments need to be kept up to date with recent developments.

In 2020, online training in appropriate assessment was delivered to over 50 Inland Fisheries Ireland personnel involved in delivering fisheries plans and projects.

Salmon and sea trout management

In 2020, 82 rivers were open for salmon and sea trout angling, 41 on a 'catch and release' only basis, and 65 rivers were closed. The list of rivers and their associated catch options including harvest quota were set out in the Conservation of Salmon and Sea Trout Bye-laws including the Wild Salmon and Sea Trout Tagging Scheme Regulations. This legislation went to public consultation in advance of ministerial consideration with 27 written submissions received from stakeholders.

Prior to the issuing of 2021 catch options, public consultation and appropriate assessment screenings were carried out at the end of 2020 to assess the effects of angling on the special areas of conservation within the proposed catchments. Commercial salmon catch for 2020 was 6,179 salmon, an increase of 456 over 2019. Commercial sea trout catch for 2020 was 63 sea trout (over 40cm), an increase of 18 on 2019.

Overall salmon angling licence sales were down by approximately 3,000 licences to just over 14,000. Despite the overall decrease in licence sales, sales from resident anglers were up by 1,000. The decrease related to tourist anglers mainly from Great Britain (down by 78 per cent), France (down by 91 per cent), Germany (down by 85 per cent), USA (down by 98 per cent) and Northern Ireland (down by 8 per cent) which can be attributed to Covid-19 restrictions on travel.

Marketing and promotion of angling

Angling tourism is an important contributor to the Irish economy, and it provides employment to numerous small businesses in all areas of the country. One of the key elements of our Corporate Plan is to ensure that the demand for Irish angling tourism remains strong and so the marketing and promotion of our angling product is a critical facet of what we do. Inland Fisheries Ireland has a dedicated team of angling advisors who are themselves experienced anglers and so are well placed to understand Ireland's strengths as an angling destination and how to match those strengths to the requirements of anglers.

Several marketing and promotion methods below outline the nature of Irish angling and some of IFIs work in 2020, including attendance at angling trade shows, development of promotional literature, and management of media visits. Also in 2020, socioeconomic research on angling was conducted in collaboration with the ESRI.

Angling trade shows

One way that we promote angling in Ireland is to attend specialist angling trade shows in the countries we have identified as our key target markets. In 2020, Inland Fisheries Ireland staff attended a total of eight (from a planned 19) trade shows spread across the USA, Germany, France, Italy, the UK and Ireland. We attended all shows under the Angling Ireland brand, and the shows were selected for their proven track record in providing effective access to both customers and media.

3.1 Develop the recreational angling sector to maximise its potential
3.1 Increase in the number of visiting anglers from key markets (outcome 2)



Engaging the public at the Angling Ireland Stand during the Edison Fly Fishing Show, New Jersey, USA

Each trade show provided a slightly different mix of angling products and target markets. Most of them were general angling fairs covering all the main disciplines including game, pike, coarse and sea angling. However, the more specialised fly shows held in the USA and the UK focused mainly on game anglers, but there is a clear trend that fly anglers are also targeting a variety of species such as pike, sea bass and other saltwater species.

Attending trade shows gives us a chance to talk directly with anglers who are interested in fishing in Ireland and to help them to make the right choices so that they get the most out of their visit. Inland Fisheries Ireland staff provide relevant product and market knowledge and also have the language skills appropriate to each venue. As well as engaging with people who come to our stand, we often give presentations on various aspects of angling in Ireland to stimulate additional interest. In addition, these events give us opportunities to talk to key influencers in the angling world, to learn of any new developments or areas of interest that we can tap into, and to liaise with journalists from the main angling magazines – all of which help us to plan media visits for the coming year.

In some cases, trade partners were invited onto the Inland Fisheries Ireland stand to provide better and more effective marketing opportunities. Having a good mix of trade at events improves the dynamic and visibility at the event and it also gives our trade partners an easy way to sell their product, and this has helped many of them to grow their business over

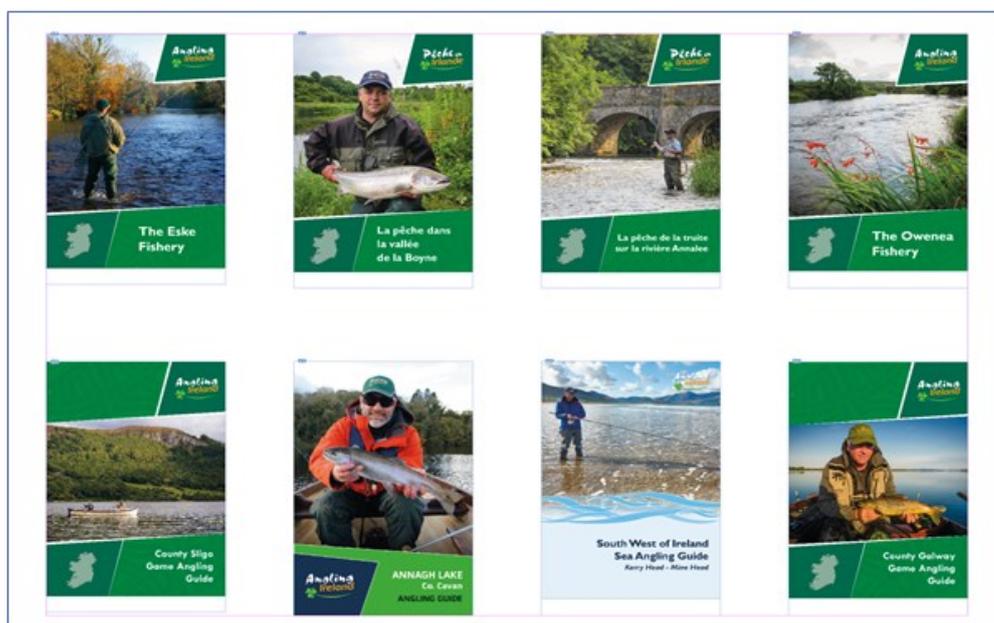
several years. In total, Inland Fisheries Ireland supported ten members of the Irish angling industry at venues in Germany, France, Italy and the USA.

Overall, feedback from staff and members of the trade attending the shows was very positive and the shows were judged a success. However, with widespread restrictions on travel it is difficult to determine if the 2020 shows will have an impact on bookings. In addition, Inland Fisheries Ireland gave a total of four talks at shows in 2020 attracting an audience of approximately 200 people. A number of leads were generated that led to four planned media visits which have now been postponed due to COVID-19 restrictions.

In addition to the traditional trade shows that staff attended in 2020, the angling advisors also attended a 'virtual fly-fishing showcase' in mid-June, where a live stream was broadcast in high definition (HD) to fly-fishing showcase attendees in the USA. Wild brown trout angling on the River Boyne was the feature and show attendees were transported in HD to the lush greenery of the Boyne valley, without ever having to leave their living rooms. Feedback from the showcase organisers was very positive, attendees were enthralled by the vivid Irish scenery, accompanied by the soundtrack of live birdsong constantly echoing through the valley above the subtle murmur of running water.

Promotional literature

Another way that we provide information to anglers is through promotional brochures and maps. Anglers love to look at brochures and they are particularly attracted to maps, so it is important to have good and up-to-date information that we can give to them in this format. Having bright and colourful brochures also supports our activities at trade shows, where anglers like to take something away with them to peruse in their own time. In 2020 the angling advisors produced a number of new angling brochures.

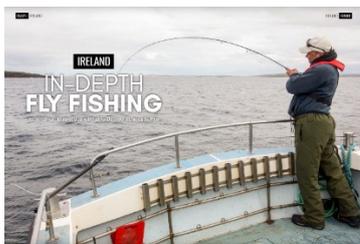


New angling brochures designed in 2020

Media Visits

It is important to keep Ireland visible and to the forefront of anglers' minds so that they naturally associate Ireland with good fishing and consider it a destination worth visiting. One way that we do this is to work with journalists and media across a range of online and print publications to highlight some of the best of what Ireland has to offer.

Where possible we try to work with members of the angling trade (guides, charter skippers, angling guesthouses etc.) on these trips so that they can get direct exposure from any resulting articles. We expect each trip to produce at least one article but if the fishing goes well, three or even four articles is a possibility and this helps to ensure that Ireland remains well represented in all the main angling publications. In 2020, all ten of the planned media visits were postponed. However, some 18 articles covering 139 pages with an estimated advertising value well in excess of €210,000 were published in angling magazines and online journals resulting from media visits during 2019 and 2018.



Socioeconomic research

3.1 Increase the use of socioeconomic data in policy formulation and regulation (PI 3)

Throughout 2020, Inland Fisheries Ireland has worked collaboratively with the Economic and Social Research Institute (ESRI) on the Research Programme of Inland Fisheries. Key outputs from 2020 include the ongoing collection of angling related data through the Monthly Angler Panel survey and an Omnibus survey conducted in consultation with IPSOS/MRBI. This Omnibus survey indicates that more Irish people go fishing than ever previously recorded, with an estimated 327,000 Irish adults (aged 15+) considering themselves to be recreational anglers. A DHR⁵ Amárach⁶ survey on hobbies and interests reports that 5 per cent of Irish adults have started sea swimming or fishing.

This increase in domestic angling tourism will have helped to offset the drop in overseas tourism in line with the overall decrease in inbound flights of 78 per cent over the course of 2020. Salmon licence sales also reflected this, with an increase in domestic sales in the region of 1,000, but an overall decrease of 4,000 in sales to out of State visitors.

⁵ DHR Communications – PR/Communications

⁶ Amárach Research – Market research and data specialist

Other research carried out during 2020 saw over 1,230 anglers respond to the pilot Irish Marine Recreational Fishing Survey. Under EU fisheries policy, member states are obliged to report on the numbers of certain species landed by recreational anglers and this data will, in turn, feed into the formulation of the Common Fisheries Policy. By gathering data on sea angling participation, behaviour and attitudes of Irish anglers, species of fish targeted and catches of those species; Inland Fisheries Ireland will be able to estimate the levels of harvest for individual species and will also gain a better understanding of the value of sea angling to the Irish economy.

Angling Tourism Strategic Marketing Plan

3.1 Develop and implement an angling tourism marketing strategy (PI 4)

The Angling Tourism Strategic Marketing Plan was finalised in 2020 and presented to the Board of Inland Fisheries Ireland. The strategy was developed collaboratively with a number of angling stakeholders and tourism agencies including Fáilte Ireland; Tourism Ireland; Waterways Ireland; The Loughs Agency; the Department of Agriculture, Environment and Rural Affairs, Northern Ireland; Tourism Northern Ireland; and other interested parties.

The objective of the strategy is to develop and improve ways to promote and grow sustainable angling tourism in Ireland. The strategy will ultimately build an understanding among key partners of the potential of collective efforts to deliver more visitors and revenue to Ireland, while at the same time keeping the protection and conservation of the fisheries resource in mind.

Corporate communications

As part of its corporate communications outreach, Inland Fisheries Ireland implements a communications strategy in line with the Corporate Plan to carry out its objectives.

3.2 Increase the awareness of the inland fisheries and sea angling sectors

During 2020, there were 43 national media releases and a total of 185 national and regional media releases issued. As a result of this outreach, there were 769 print media clippings, 581 online clippings and 248 broadcast features. This coverage gave a reach of 10.2 million and is valued at €3.18 million.

The Women's 'Try Fishing' Initiative PR campaign resulted in 70 items of free editorial coverage, 7 of which were national coverage and 63 were regional coverage. Eleven pieces of coverage were online only, 25 items were in regional newspapers and one piece was in a national newspaper. Thirty-one items were broadcast on regional radio and 3 pieces were broadcast on national radio.

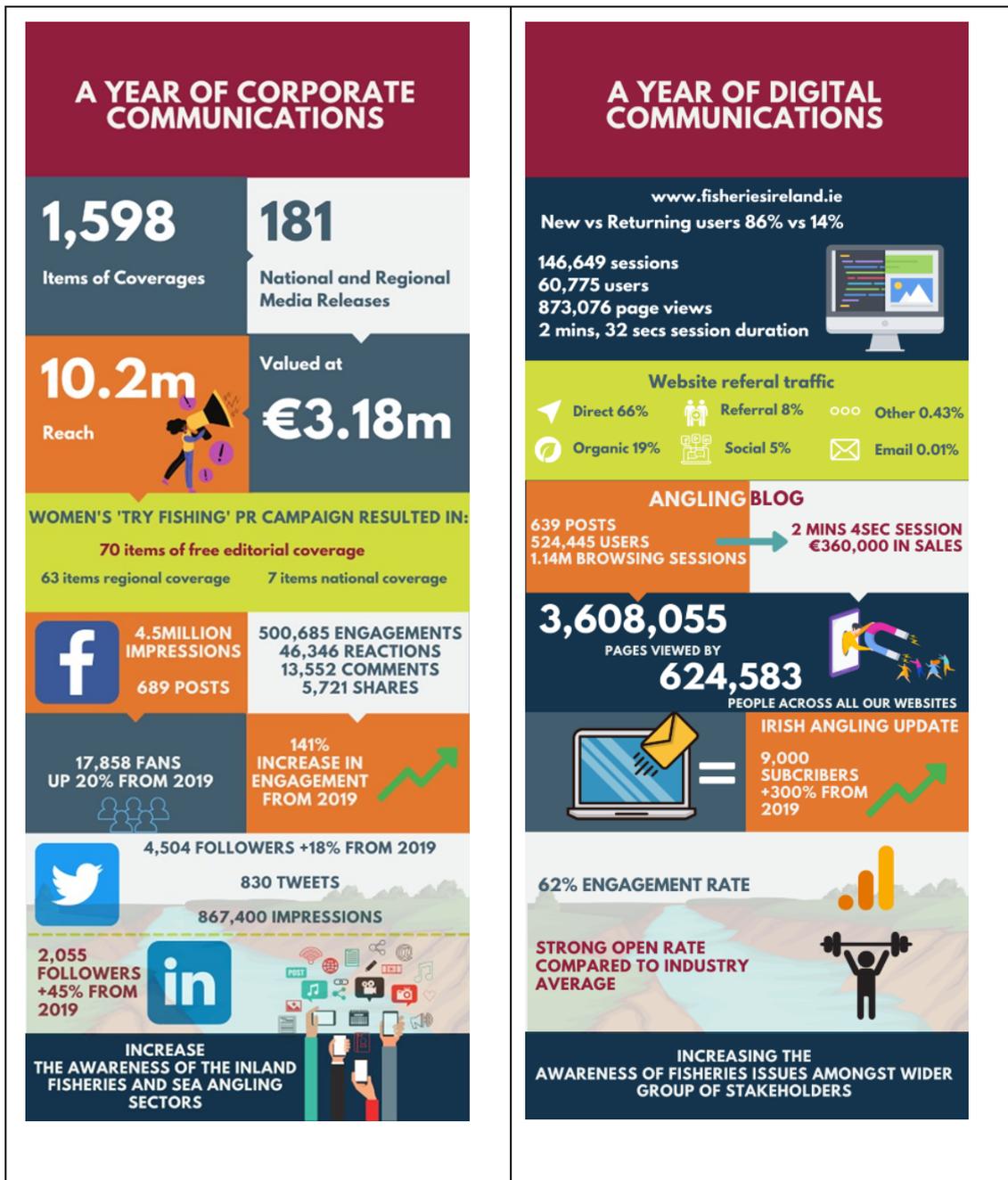
Digital communications

Across all our websites in 2020, 3,608,055 pages were viewed by 624,583 readers.

Inland Fisheries Ireland's social media channels grew in followers with our Facebook page receiving an increase of 2,975 new fans to 17,858 (up by 20 per cent). There were 689 posts published on this platform during the year (up 140 per cent from 2019) and 4.5 million impressions (up 56 per cent from 2019). Eighteen organic Facebook posts reached over 20,000 people per individual post.

The Twitter account @InlandFisherIE saw its followers increase to over 4,504 (up 18.5 per cent from 2019) and monthly tweet impressions were as high as 120,000. In 2020, there were over 800 tweets sent from this channel.

The popular Irish Angling Update continued to be well received with subscribers. In 2020 subscriber numbers reached 9,000 (up 300 per cent) with a 62 percent engagement rate and a strong open rate compared to the industry average.



Education and outreach

Inland Fisheries Ireland's Education and Outreach programmes aim to educate stakeholders, including primary school students, anglers, agencies and the public regarding the protection and stewardship of Ireland's precious fisheries resource. These programmes have traditionally involved face-to-face engagement both with the angling community and the general public. However, it became clear that because of Covid 19 this would not be possible, and it was necessary to develop and adapt content suitable for online delivery.

3.2 Increase the awareness of the inland fisheries and sea angling sectors

In our *Corporate Plan 2016 – 2020* we set out our vision ‘... to provide an accessible and sustainable, world class, inland fisheries resource for all’. The work of our Education and Outreach team is also integrated into wider public policy across a number of related areas.

- ▶ Within the *National Biodiversity Action Plan 2017-2021*, Inland Fisheries Ireland is listed as one of the state bodies with a role in biodiversity conservation. During 2020, we devoted online content sessions to the key areas of biodiversity, biosecurity and the need to protect our precious inland fisheries and sea angling resource.
- ▶ In 2016 the National Council for Special Education (NCSE) published policy advice for children with autism spectrum disorder (ASD) and in its review called for all Government departments to develop a national day activity programme to provide a structured, safe and social environment for students with complex needs during the month of July. While it was not possible to run any programmes in 2020 directly to these groups, the lesson plans for the Nurture Transition Year angling programme were completed and will be rolled out when it is safe to do so. This programme is aimed at students with additional needs and covers five sessions including a local fishing trip.
- ▶ We continue to feed into Pillar 3 (Maximising our Rural Tourism and Recreation Potential) of the Government’s *Realising Our Rural Potential: Action Plan for Rural Development*.⁷ This involved engaging with students on fish, water, angling and the environment in their local areas, and normally it is delivered through the ‘Something Fishy’ national schools programme throughout rural Ireland. In February 2020, a number of schools took part prior to school closures, and following that the programme, including the poetry competition, was delivered online.
- ▶ *Healthy Ireland* is a government-led initiative aimed at improving the health and wellbeing of everyone living in Ireland. Fishing can provide both physical and mental health benefits and this messaging was included in all initiatives in 2020.

In a year dominated by Covid 19, our core education and outreach effort has continued to centre on three broad interconnected categories: novice angling initiatives, educational programmes, and public and stakeholder events. An outline of our work in these areas in 2020 is set out below, as is our continuing work to raise awareness about illegal fishing.

Novice angling

3.1 Grow the number of recreational anglers (PI 2)

Year 2 of ‘Go Fishing’

Throughout 2020, the Education and Outreach team continued with Year 2 of the ‘Go fishing’ measure which is externally funded from Dormant Accounts Fund to the value of €300,305. Inland Fisheries Ireland staff based in Wexford, Cork, Limerick, Mayo, Leitrim and Dublin took

⁷ See: <https://www.gov.ie/en/publication/091dba-realising-our-rural-potential-action-plan-for-rural-development/>

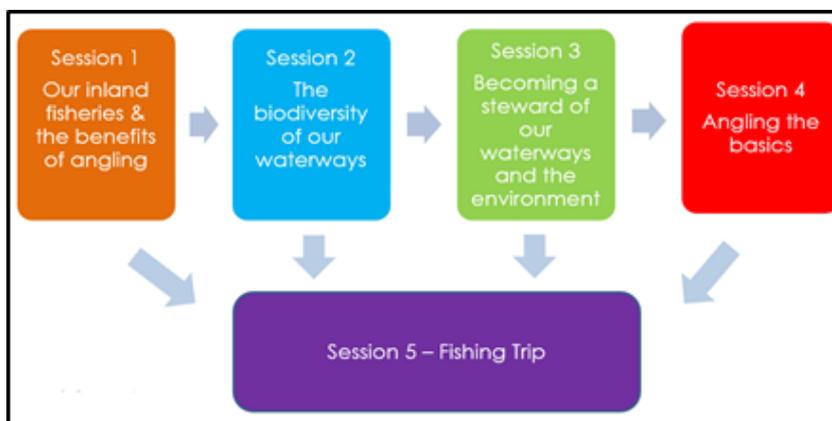
responsibility for the roll-out of this programme. In building from what was learned in the previous year of the programme, we continued to offer two main categories:

- ▶ Running an event for people who have never fished before – Try Fishing
- ▶ Running a longer programme for those who already know that they like to fish – Go Fishing.



Photo: Participants from Acquired Brain Injury Ireland, Cavan (left) and Youth group, Wexford (right) enjoying fishing in the rain in August

True to the spirit of blended learning in 2020, we developed a blended ‘Go fishing’ programme, with the first four sessions taking place online followed by a fishing session. Unfortunately, some of the fishing sessions could not take place in 2020, but we will accommodate the groups’ fishing trips’ as soon as public health guidelines permit.



Themes from the Go Fishing online course

Since the roll-out of the programme in July 2020 a total of 23 Foróige-led youth groups from nine counties have registered their interest, with Donegal groups leading the way. The programme was also offered to other youth groups with participants ranging in age from 12 to 19 completing the online programme. Many were already interested in fishing and have asked for further sessions to improve their angling skills and environmental stewardship and knowledge.

Novice angler activation

Since 2019 Inland Fisheries Ireland has been engaged in a novice angler activation programme which aims to increase the number of coaches available for angling. The coaching programme was developed with Sport Ireland and is delivered by the National Coarse Fishing Federation of Ireland (NCFI). An assistant coach module (Level 0) began as a blended learning pilot with a group from Inland Fisheries Ireland. The online component has been completed and the face-to-face practical will take place once public health guidelines permit.

To support these new coaches and all coaches involved in angling, a further teaching resource was developed – *Angler Skills*. This is designed as a series of session planners aimed at having qualified coaches fully equipped to deliver a structured session. It contains 84 session planners and covers coarse fish, predators, game fish and sea angling. Once this resource is used and trialled it is planned to get it approved by Sport Ireland.

Governance of novice angling

Having good governance in place for novice angling has been a priority for Inland Fisheries Ireland – it is important to ‘provide a safe place to fish’. Our efforts in this area have been greatly helped by the successful roll-out of the ‘Angling for All’ fund in October 2020 of a support scheme for organisations through the Angling for All grant. The emphasis of the fund is on improving governance, health and safety and education resources. A total of €140,000 was distributed to 35 groups; for more details – see <https://www.fisheriesireland.ie/Press-releases/media-release-inland-fisheries-ireland-announces-35-angling-for-all-projects-granted-funding-in-2020.html>.

3.1 Increase the governance and professionalism of the sector

New novice angler strategy: *Let's fish*

Inland Fisheries Ireland’s novice angler strategy, *Let's fish*, has been through public consultation and two stages of environmental assessment and is expected to be published early in 2021. We would like to thank those who took the time to read the document and make submissions

Educational programmes

Something Fishy

‘Something Fishy’ is Inland Fisheries Ireland’s flagship educational programme and it continues to be very successful at increasing awareness of fisheries issues among wider stakeholder groups. Its delivery by the local fisheries staff is key to its attraction to teachers. The 2019/2020 school year began with 104 schools signing up to take part. But, unfortunately, due to school closures the valuable field trip element of the programme was not completed. For that reason, schools are carrying the programme over to the next school year.

Region	Number of Schools
North Western River Basin District	18
Western River Basin District	31
Shannon River Basin District	21
Eastern River Basin District	6
South Western River Basin District	13
South Eastern River Basin District	15
Total number of schools	104

Table 3.1: Distribution of schools for 2019/2020 Something Fishy programme

Additional resources were developed to aid in the delivery of the programme; these included a larger version of the macro invertebrate guide and a macroinvertebrate wooden dice with the IFI logo on one face and five different images of common macroinvertebrates (such as the freshwater shrimp Gammarus) on the other faces.

A series of ideas for games has also been put together, and these can be adapted to suit each class. The wooden dice is an informative and fun-added learning tool for 'Something Fishy' coordinators to use in schools and is especially useful for those students with additional needs.



Images: Two new something fishy resources completed in 2020.

In May in conjunction with the [Blackrock Education Centre](#) we ran a very successful 'Something Fishy' schools poetry competition with the theme "My Life as a fish" we received 197 entries from all over the country. We moved our competitions online to facilitate the schools during the Covid-19 lockdown. This also meant that instead of a class project it was an individual student entry. We had winning poems in each RBD the overall winning schools were from the Shannon and Eastern RBD.

Region	Number of Entries
North Western River Basin District	9
Western River Basin District (Galway)	34
Western River Basin District (Mayo)	66
Shannon River Basin District	33
Eastern River Basin District	6
South Western River Basin District	41
South Eastern River Basin District	8
Total number of entries	197

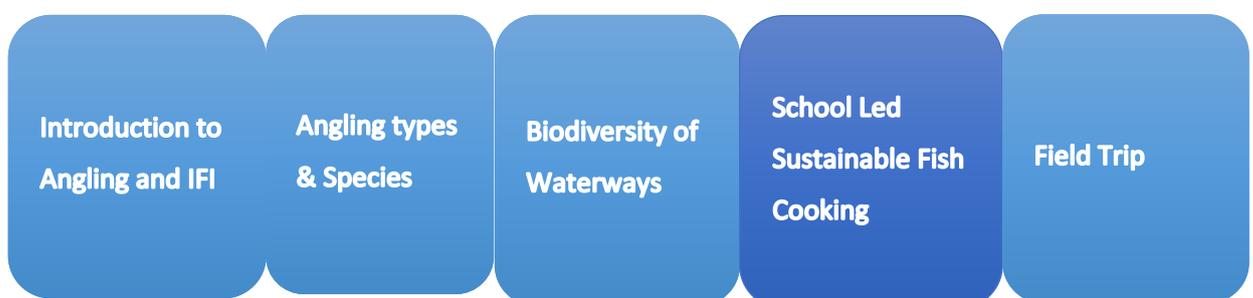
Table 3.2: Entries for the 2019/2020 Something Fishy Schools Poetry competition

Under the service level agreement with the Blackrock Education Centre a number of new 'Something Fishy' lesson plans have been completed on aquatic safety, coarse fish, invasive species, sea angling and biosecurity.

Transition year programme

The ERBD ran its fourth Transition Year programme at St James Street School in Dublin City Centre. It mixes classroom and field trips to introduce non-anglers to give angling a try and it is now being delivered through the Dublin Angling Initiative with support from Inland Fisheries Ireland. The 2020 course was a multidisciplinary programme covering coarse fishing, pike fishing, fly fishing, environmental awareness and sea fishing. School visits incorporate workshops and practical casting lessons in the school yard. Other Transition Year programmes took place in September and October at Wexford and Lanesborough.

A new fishing programme is now ready to be rolled out once schools allow in-class visits. This comes under 'Nurture', an initiative aimed at transition year students with additional needs. This programme has been supported by the Dormant Accounts Fund and lesson plans have been developed in conjunction with the Blackrock Education Centre.



IFI Nurture Transition Year Angling programme.

Public and stakeholder events

The Institute of Fisheries Management (IFM) is an international organisation dedicated to the advancement of sustainable fisheries management, and its Irish

3.2 Increase the awareness of the inland fisheries and sea angling sectors

branch hosted a conference in January on ‘Learning from the past to inform the future’ at which Inland Fisheries Ireland staff members delivered presentations on:

- ▶ Salmon – from abundance to conservation
- ▶ Implementation of regulations to assist conservation
- ▶ ‘Go Fishing’ – initiatives to improve participation in angling
- ▶ Working to restore damaged fisheries habitat.

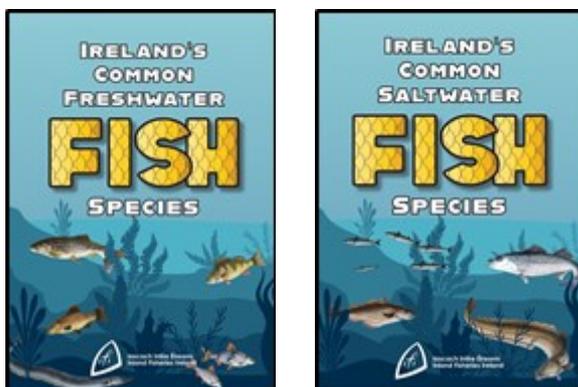
Swords Angling Show

The main public interaction event of the year was the Ireland Angling Show which took place in Swords in February, and at which attendance was lower than in previous years. Inland Fisheries Ireland was involved in the family zone at which our displays of invertebrates and fish encouraged many of our angling stakeholders and families to call for a chat or lively discussion. The angling simulator was also a feature for those who wanted to try their hand at the now common ‘virtual experience’. Inland Fisheries Ireland staff members delivered talks on the following:

- ▶ Irish Marine Recreational Angling Survey (IMREC)
- ▶ Go Fishing - Ideas for improving participation in angling
- ▶ Opportunities for Ladies to Try fishing in 2020

A further opportunity for outreach took place at the end of February when we collaborated again with the Natural History Museum. A series of pop-up talks took place around the theme of ‘Nature’s Heroes’ and an amazing 3,000 members of the public visited the museum on the day. Inland Fisheries Ireland staff gave a talk on ‘how our freshwater fish are *superheroes*’.

We also produced two workbooks for children in 2020, *Ireland’s Common Freshwater Fish Species* and *Ireland’s Common Saltwater Fish Species* – these had previously been a single workbook.



Two completed workbooks for children but which will also benefit those with an interest in common fish species.

Raising awareness about illegal fishing

1.1 Educate stakeholders on the cost and impact of illegal fishing (PI 5)

At the beginning of the Covid-19 restrictions there was a rise in the amount of illegal fishing that was taking place. To communicate to stakeholders the work that our protection staff were continuing to do to combat illegal fishing, we began a social media campaign to raise awareness and educate our stakeholders.

The uptake on these posts was huge and between 9 April and the end of May 2020, 15 organic Facebook posts regarding illegal fishing reached 221,647 people. In July of 2020, we launched a PR campaign warning against the trading of illegal salmon, which had one of the highest take-ups in media coverage for releases issued in 2020 – a total of 28 items of news coverage, 10 of which were national news items.



Salmon seized on 13 July 2020 – this photo was used in the PR campaign against the illegal trading of salmon

4. SUPPORTING EFFICIENCY AND EFFECTIVENESS

Inland Fisheries Ireland's Corporate Services provides all of the corporate management, human resources (HR) and financial management, logistics and IT services that enable the organisation to run smoothly and to deliver on our mission to protect and conserve Ireland's fisheries resource in an efficient and effective manner. These services also cover responsibility for health and safety, learning and training procurement, facilities management, and data governance.

Dealing with Covid-19

The outbreak of Covid-19 early in the year had a profound impact across all of Inland Fisheries Ireland's activities in 2020. We had to change from being an organisation where most people worked in offices or in the field to one where almost everyone worked from home and in the field only when circumstances permitted.

In early March, we set up a 14-member staff task force to consider and implement Government guidance on Covid-19 and to communicate with all staff on a regular basis. In the early months of the pandemic the two main challenges we faced were to source personal protective equipment (PPE) and to adapt our working practices to ensure they were compliant with Covid-19 guidelines. Our Logistics, HR and IT teams met these challenges and delivered a number of innovative solutions to support business continuity during this critical time.

Covid 19 expenditure

The total expenditure on Covid-19 related PPE and materials sourced by the Logistics team from March through to December 2020 amounted to €75,000. A total of €50,000 was spent on PPE for staff and €25,000 on vehicle separation screens for 88 cars (to enable safe dual occupancy) and screens for reception desks at offices that are open to the public.

PPE, training and signage

Our Logistics team procured appropriate PPE (e.g., face masks, gels and sprays etc.) for our workspaces, equipment and vehicles and distributed these to staff nationally. We also equipped our offices with Government Covid-19 signage, sanitation stations, distancing instructions and special/extra outsourced cleaning arrangements were put in place.

Adapting work practices

Our Logistics and HR teams produced working guides and standard operating procedures (SOP's) to accommodate changes in working practices required by Government restrictions.

Our HR and IT teams also worked together to develop a '*Working from Home During COVID*' policy in consultation with staff and trade unions, which was rolled out in the summer of 2020. Ergonomic assessments were completed with staff who were now working from home and additional IT equipment was supplied where required – for example, appropriate office chairs, keyboards, visual display units, mice and so on.

Covid-19 workplace safety measures

Following the first full lockdown in May 2020 and in line with the Labour Employer Economic Forum's protocol, the HR team developed and rolled out the following Covid-19 workplace safety measures:

- ▶ All staff completed a mandatory Covid-19 Pre-Return to Work form and Covid-19 induction training before returning to the workplace in June/July when restrictions lessened for a period (*all new staff joining the organisation since May now complete this form / training).
- ▶ An *IFI Employee Safety Handbook on Covid-19* was developed and distributed through IFI's intranet and mobile phone app – this is a living document, which is continually updated and distributed to staff periodically.
- ▶ Covid-19 compliance lead training was completed by 66 staff members of whom 40 were designated as location compliance leads.

Staff welfare and wellbeing

Covid-19 highlighted as never before the importance of staff welfare and wellbeing. Taking a lead from the regular Employee Pulse Surveys, our HR team introduced a number of wellbeing initiatives and activities – these included online competitions, healthy eating online tutorials, expert personal financial consultations and so on.

Financial management

Inland Fisheries Ireland's Finance division provides a comprehensive set of financial and governance systems that ensure effective financial management. These systems are flexible enough to adapt to our evolving needs as an organisation and also meet the highest standards of corporate governance.

5.2 Manage IFI's budget in full compliance with financial procedures and support business decision making with relevant financial information

The Finance division is also responsible for providing the Senior Leadership Team (SLT) and the Board with the financial advice they need for strategic decision making; and we also provide financial advice to other divisions of the organisation as required.

The Budget is agreed by the Board and management accounts are presented to each meeting of the Board, together with a commentary on performance against budget. On a quarterly basis, the Finance division provides the Board with a Statement of Financial Position, a Statement of Income and Expenditure and a Capital Account Statement.

The Finance division continued to carry out all its payments functions smoothly (suppliers, pensions and salaries) even when all staff were working remotely.

Value for money ethos

Value for money continued to be a key overarching requirement across all Inland Fisheries Ireland's activities in 2020. Any proposed substantial spending must be supported by a strong business case outlining the value that the project will bring to the organisation; and the tendering process we follow is also a key driver of value of money.

5.3 Continue cost reduction programme in all areas of the business and drive value for money analyses in areas of the business which can yield greater efficiency

The Finance division undertakes reviews of various aspects of the business to establish that we are getting value for money, and we have made demonstrable monetary savings over the life of the Corporate Plan. We also follow the guidelines set out by the Department of Public Expenditure and Reform's *Public Spending Code*.

Other areas where we have sought to achieve greater value for money include:

- ▶ For all capital items, carrying out detailed appraisals in advance of purchase, and following up with reviews of effectiveness after purchase
- ▶ Ceasing non-core activities which do not add value to the strategic operations of Inland Fisheries Ireland – the Finance Division had advised on these areas in previous years.

Financial statements for 2019

Inland Fisheries Ireland submitted its financial statements in respect of 2019 to the Minister for Environment, Climate and Communications before 28 February 2020 and to the Office of the Comptroller and Auditor General (OCAG) before 31 March 2020, in compliance with our statutory obligations.

Financial and treasury management

In conjunction with our parent department, the Department of the Environment, Climate and Communications, Inland Fisheries Ireland met both its strategic and operational funding requirements during 2020.

Internal audits

Our contracted internal auditor, ASM Chartered Accountants carried out three internal audits during 2020; all of these were conducted remotely because of Covid-19 restrictions, and in all we achieved a satisfactory assurance:

5.5 Adhere to all of the provisions of the Code of Practice for the Governance of State Bodies

- ▶ IT Strategy, Security and Resilience
- ▶ Health and Safety
- ▶ Internal Financial Controls – confirming that we have systems to provide satisfactory assurance that objectives relating to key financial systems can be achieved.

In 2020 we also carried out a *Value for Money Review* of fisheries protection, and this was close to finalisation at the end of the year.

There were no significant issues in the management letter from the C&AG for the 2019 financial year.

Our parent department reviewed our adherence to the *Code of Practice for the Governance of State Bodies* (CoPGSB) and found us to be compliant with some minor areas for improvement.

Human resources

The Human Resources division is responsible for all aspects of managing our most important asset – our people. It manages all the administrative functions around recruitment, payroll and benefits, health and safety, and training.

Almost 80 per cent of our staff work in the field most of the year in protecting, developing, conserving, and researching fish and their habitats.

Leadership and management development

In 2020, we progressed a number of leadership and management development initiatives.

4.1 Improve leadership capability at all levels of the organisation (PI 1)

- ▶ Our bespoke training course on Coaching & Feedback for Managers aims to provide all managers in Inland Fisheries Ireland with the proper toolkit to empower, coach and give

helpful and effective feedback to their teams. All people managers in the organisation (from Heads of Function to Assistant Inspectors and Research Officers) have received this training.

- ▶ Despite the onset of Covid-19 in early 2020, the HR team progressed the first set of graduates through our bespoke Management Development Programme (32 people managers) in May 2020, and a second set of students began the programme in Q3 2020.
- ▶ In collaboration with DCM Learning⁸, the HR team has enabled and promoted online management and leadership development courses for all staff. These courses are available online and on demand. Inland Fisheries Ireland staff members took part in over 100 DCM online courses in 2020.

Performance Development Review

4.1 Enhance performance management throughout the organisation (PI 2)

In 2020 the HR team led a working group of staff volunteers from across the organisation in revitalising, redeveloping and improving our performance management system. The new system is called PDR (Performance Development Review); it was designed for staff by staff and it provides a framework for:

- ▶ Continuous performance improving performance
- ▶ Setting individual and team goals aligned to our strategic goals
- ▶ Reviewing and assessing progress
- ▶ Developing the knowledge, skills and abilities of our people.

Workforce planning

4.1 Implement knowledge capture and succession plans (PI 3)

Inland Fisheries Ireland's HR team recognises the importance of good workforce planning, and throughout 2020 we continued to develop our HR Information System (HRIS) to ensure that we could have access to real-time, accurate HR data for reporting purposes. This has included developing key reports for monitoring and managing leave, headcount, recruitment, hours worked, learning and development, gender diversity, and turnover.

This has been particularly important in ensuring that we retain the necessary skill sets and resources as staff members depart or retire. We also support staff members as they move closer to retirement and have developed a *Retirement Policy* in consultation with staff and trade unions.

⁸ DCM Learning – learning and development service provider

Diversity and Inclusion

Over the last 6mths (leading up to Dec 2020), the HR Team have adapted IFI's recruitment and internal employee communications to ensure they are unbiased and inclusive. For example, in our job descriptions and recruitment adverts we have paid careful attention to the wording used so as to avoid implicit and explicit bias and increase diversity. In line with research around gender bias, women will typically only apply for a job if they meet 100% of the qualifications. So, in IFI we have attempted to eliminate needless requirements to make our job opportunities more accessible to women. We also ensure that our media ad campaigns include photography that depicts male and female officers (or research staff) working together in the field – all with the intention of trying to attract female staff into our organisation. Furthermore, we have been successful in closing the gender gap at the Senior Leadership Team level by increasing our female representation by two female RBD Directors.

Diversity and Inclusion will remain a critical priority in the HR Strategy 2025 which is planned for design and implementation in late 2021.

Two-way communication with our staff

4.1 Develop and implement a corporate communication strategy (PI 4)

Communication with our staff is a two-way process. Throughout 2020 we carried out a number of *employee pulse surveys* to gauge staff views which we could then take into account in determining important issues such as changes in work practices arising from Covid-19: staff wellbeing, remote working, ideas on improving internal communications, and dual occupancy of vehicles during Covid-19 pandemic.

Best Consultancy Partnership Award

4.1 Formal recognition of excellence and high achievers (PI 5)

In collaboration with the International Centre for Security Excellence (ICSE), IFI won the Best Consultancy Partnership Award from the Irish Institute of Training & Development (IITD) for our bespoke Conflict Resolution training programme and roll out. This programme was designed and developed in direct collaboration with field staff with the aim of providing them with comprehensive skills, knowledge and competencies in the area of conflict management. Nearly 200 of our field staff have received this training and accreditation.

Defining and articulating our values

In preparation for the development of Inland Fisheries Ireland's *Corporate Plan 2021-2025*, we have reviewed and modified our organisational *mission, vision* and *values*. As part of this effort, the HR team led a working group of staff from across the organisation in an exercise to define and articulate our *values* as an organisation. The outcome from this exercise was a

short video and a *Values Challenge* online training module that all staff had completed by the end of the year.

Logistics: managing our physical resources

The Logistics team played a key role in enabling Inland Fisheries Ireland to continue our work through the pandemic lockdown. More generally, the team is responsible for the management of physical resources such as our office facilities, equipment supplies, vehicles and boats.

Our facilities in Citywest

IFI's headquarters at Lake Drive, Citywest has been under occupied since March 2020 as a result of staff being mandated to work from home, where possible, due to the pandemic. However, our adjacent logistics facility, Castle House, has been fully functional during the entire period.

The decision was made in Q4 to limit access to Lake Drive on a needs-only basis and all non-essential heating ventilation and air conditioning (HVAC) systems have been shut down or run at minimal levels both in order to save money but also to reduce unnecessary emissions.

Despite the reduced utilisation of both buildings, all essential maintenance continued in 2020 as planned. As part of IFI's commitment to reduce energy consumption and CO₂ emissions, electricity and gas utilisation monitors were installed in both buildings and the results from this monitoring will be used to inform a more detailed energy consumption review being planned for Q1 2021.

The installation of Photo Voltaic panels on the roofs of Lake Drive and Castle House was completed in Q3 2020 and the electricity yield is ahead of expectations.

Vehicles

There was no change in the number of vehicles (182) in Inland Fisheries Ireland's fleet in 2020. However, 15 older vehicles were sold off in Q1 realising €60,000 for the organisation. An order for 22 new vehicles was placed in December for delivery in Q1–2 2021. This order includes five new electric vehicles which will increase our electric vehicle fleet to 13 in 2021.

As part of IFI's commitment to reducing its carbon emissions and achieving its emission targets, the CEO has requested that for our future fleet requirements, electric or hybrid vehicles must be our first choice. We will consider petrol or diesel vehicles where there is an operational requirement which cannot be met by an electric or hybrid vehicle.

The Logistics Team continued to undertake monitoring of the fleet using telematics software – this helps us to better understand the utilisation of vehicles so that we can deploy them more

efficiently across the organisation. The team also supported ongoing operations through the provision of additional hire vehicles as required during the year.

Boats

Inland Fisheries Ireland has 46 boats in service, all of which are inspected and certified as being fit for service every two years by the Marine Survey Officer (MSO). During the year, the Logistics team worked with other Inland Fisheries Ireland teams and the MSO to ensure that all boats retained their certifications and were passed fit for service.

In 2018/2019 we introduced 12 new fit-for-purpose sea-going RIBs to increase our operational presence at sea. Consequently, over the following years a number of RIBs which were past their useful economic life with Inland Fisheries Ireland were disposed of – in 2020, this involved the sale of six RIBs and one lake boat which were sold for a total of €100,000.

Safety

During Q2 2020 the Logistics team worked with our trailer maintenance partners, Holden Plant Rentals Ltd, to resolve a load balancing issue on the Delta RIB trailers. In Q3, following a competitive tendering process, Murcon Engineering were appointed as the service agent for all our trailers, and they commenced a full-service schedule for our trailer fleet.

Tenders

Several major tenders were awarded or published in 2020 including trailer maintenance, legal services, *Lagrosiphon major* weed control, vehicle telematics, surveillance drones and electric bikes. The Logistics Team continued to provide support and guidance on the e-tendering process to all teams within Inland Fisheries Ireland throughout 2020, including publication, evaluation and award of tenders.

Information and transparency

Freedom of Information

As a public body, Inland Fisheries Ireland is subject to the provisions of the Freedom of Information Act 2014. We received 24 FOI requests for the year ending on 31 December 2020. Of these requests, seven were granted in full, nine were part-granted and two were withdrawn. Six FOI requests were refused where records did not exist or where records were already in the public domain. There were two outstanding requests at the end of 2020. We received no requests for internal review in 2020 and there were no requests which were subject to appeal to the Office of the Information Commissioner.

Access to Information on the Environment (AIE)

The European Communities (Access to Information on the Environment) Regulations 2007 to 2018 (S.I. No. 133 of 2007, S.I. No. 662 of 2011, S.I. No. 615 of 2014 and S.I. No. 309 of 2018), provide legal rights to those seeking access to information on the environment from public authorities. Subject to certain specific exceptions, information relating to the environment held by or for a public authority must be made available on request to any person.

Inland Fisheries Ireland received four AIE requests in 2020. Of these requests, three were granted in full, including one that was processed on appeal to the Office of the Commissioner for Environmental Information – this appeal had been initiated in 2019. The other request was refused on the basis that the requested information was not held by Inland Fisheries Ireland. There were no outstanding requests at the end of 2020.

Parliamentary questions and Oireachtas queries

As part of our commitment to Dáil information flow, we supplied material for 22 parliamentary questions (PQs) answered by the Minister in 2020.

Protected disclosures

Section 22 of the Protected Disclosures Act 2014 requires the publication of a report each year relating to the number of protected disclosures made in the preceding year and any actions taken in response to such disclosures. We received no protected disclosures in 2020.

Complaints

Inland Fisheries Ireland received eight formal complaints for the year ending 31 December 2020. These related to fisheries protection, land access, development works and HR issues. Our new *Comment, Compliment & Complaint* policy statement and its associated procedure were presented to the Board for adoption and formal approval in November 2020 and this included the introduction of a digital complaint form.

ICT team: managing technology infrastructure

The ICT team is responsible for all aspects of Inland Fisheries Ireland's technology infrastructure, and for ensuring that it meets the organisation's operational and strategic technology requirements.

HEAnet: Ireland's national education and research network

In Q1 of 2020 Inland Fisheries Ireland became a client of HEAnet, Ireland's national education and research network, so providing us with many additional ICT services and frameworks such as those for network connectivity, brokerage (public procurement) and ICT security

services. As a first step, we have provisioned an Internet connectivity project that establishes secure connectivity to the HEAnet infrastructure. This enables us to access Cloud services in a secure manner and will provide the foundations for longer-term strategic adoption of Cloud services as we move away from conventional on-premises deployment of IT infrastructure.

ManageEngine: IT administration & management solution

In 2020 we began to use ManageEngine, an IT administration and management solution that enables us to manage and support all of our mobile devices (laptops, tablets and phones) and our desktop devices 'under one roof'.

This has been particularly valuable in the Covid-19 scenario where our staff members are almost all working off-site, at home or in the field. Using ManageEngine has also enhanced our device security and IT asset management functions, enabling detailed reporting and notifications of potential issues that might arise with offsite devices.

Office 365 deployment

In late 2020 we began the upgrade from Microsoft Office 2010 to the latest version of Microsoft Office 365. This will provide for greater productivity and collaboration due to its suite of Cloud based applications.

The ICT team worked closely with the Training and Development Manager to plan the deployment of Office 365 and to ensure the required training was provided to employees before the upgrade. Phase two of the upgrade will commence in Q2 of 2021 when additional enhancement to online video and voice communications and an internal social network form will form part of the deployment.

Laptops and mobile devices

In 2020, we had over 70 laptop computers, over 80 smartphones and 13 tablet devices – all of which provide our employees with remote working capabilities and secure access to essential IT services that they need to carry out their duties, and this was particularly important as the Covid-19 pandemic took hold.

For the IT team, the focus in 2020 was on provisioning secure remote working devices (laptops/tablets/etc.), and also maintaining IT support across all departments, including supply of laptops and peripheral devices. In an effort to secure a sufficient supply of equipment, the IT team signed two additional agreements under the Office of Government procurement (OGP) and Ireland's National Education and Research Network (HEAnet).

Corporate website redevelopment

In early 2020 we issued a call for tenders for the redevelopment and design of Inland Fisheries Ireland's corporate website. Following a rigorous evaluation process, the contract was awarded in October 2020 to an Irish company.

Data Protection

Data protection compliance is an ongoing activity that requires regular assessment of risks and awareness of data protection requirements.

Inland Fisheries Ireland continued the rollout of online data protection training to new and existing staff throughout 2020. Regular staff communications on data protection issues were circulated by the Data Protection Officer, particularly regarding to the protection of personal data relating to remote working arrangements during the Covid-19 pandemic.

We recorded four data breaches during 2020, two of which rose to the level of mandatory reporting to the Data Protection Commission. Three of these breaches occurred as a result of accidental disclosures/human error and one was as a result of a phishing incident.

We received one Subject Access Request for a copy of personal data pursuant to Article 15 of the GDPR for the year ended 31 December 2020.

Glossary

Acoustic telemetry	Tagging fish with sound-emitting devices that are detected by listening stations
Citizen science	The collection of data relating to the natural world by members of the general public, typically as part of a collaborative project with professional scientists
Elasmobranchs	A group of marine fish that have cartilage-based skeletons e.g. sharks, rays, and skates
Finfish aquaculture	Farming of fish with fins (fish farming)
Finnock	Sea trout that migrates to sea between April and June and returns to freshwater to spawn after the summer migration
Grilse	A salmon that has returned to fresh water after a single winter at sea
Hydroacoustics	The study and use of sound in water. Hydroacoustics also describes the use of sound (sonar) to monitor fish and other underwater features. An array of hydroacoustic receivers is a series of listening stations, listening for fish tagged with an acoustic (sound transmitting) tag
Kelt	A salmon that has recently spawned and is usually in poor condition
LA-ICPMS	An acronym for Laser Ablation Inductively Coupled Plasma Mass Spectrometry – a technique used to explore the life history of individual fish by analysing the elemental makeup of otoliths and scales
Pelagic zone	Mid-water zone
River	The physical characteristics of a river e.g. flow regime, sediment transport.
hydromorphology	Examples of alterations to natural hydromorphology are channelisation and man-made weirs
Smolt	A young salmon (or trout) after the parr stage, when it becomes silvery and migrates to the sea for the first time
Spring Salmon River	A river that receives salmon between January and May. These Salmon are generally larger as they spend more than one winter at sea
Time management system	Often include a time clock or web-based application used to track staff work hours, automating processes helping to reduce manual records
TRaC	An acronym for transitional and coastal waters
Transitional waters	Waters that are influenced by both tidal and freshwater flows e.g. estuaries, fjords and lagoons

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Appendix A

Published Papers in 2020

- Archer, L.C, Hutton, S.A, Harman, L, McCormick, S., O’Grady, M., Kerry J.P, Poole, W.R, Gargan, P, McGinnity, P., and Reed, T.E. (2020). Food and temperature stressors have opposing effects in determining flexible migration decisions in brown trout (*Salmo trutta*). *Global Change Biology*. 1-19. DOI: 10.1111/gcb.14990
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Appendix B

AUDIT AND RISK COMMITTEE ANNUAL REPORT 2020

For the year ending 31 December 2020



**Iascach Intíre Éireann
Inland Fisheries Ireland**

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1. Foreword

I wish to introduce Inland Fisheries Ireland's Audit and Risk Committee (ARC) 2020 annual report.

2020 was, as the cliché goes, a year like no other. Our world was hit by the devastating impact of a global pandemic. IFI sought to meet as best it could the human and operational challenges that the pandemic placed before it. This report provides a brief account of measures implemented to continue to provide public benefit while ensuring that IFI's staff and members of the public were not exposed to the threats associated with COVID-19. A separate more comprehensive and detailed paper will be compiled dedicated to reporting the specific COVID-19 related risk mitigations implemented by the organisation.

During this challenging time, thanks to the dynamism of our staff and the optimal use of technology in a year during which the Committee could only meet remotely, the work of the Committee continued to focus on the oversight of; the organisation's systems of risk management, compliance audits, policy review, provision of assurance and the review of management accounts, budgets and financial statements in advance of being presented to the Board of IFI.

I confirm that IFI continues to implement the Code of Practice for the Governance of State Bodies 2016 and completes an annual review of compliance for the Department of the Environment, Climate and Communications (DECC).

I would like to take this opportunity to thank my colleagues on the Committee, Professor Frances Lucy, Ms Bernadette Orbinski Burke, Ms Fiona Walsh and Ms Marie Louise Heffernan for their diligent work and commitment. Both Ms Walsh and Ms Heffernan were appointed by the Board during 2020 and Professor Lucy's term of office ceased on the Board on March 23rd, also ending her term as chair of the Committee.

I would particularly like to thank the Chairman of the Board, Fintan Gorman, for all his support during my time as Chair of the Committee and to our Committee and Board Secretary, Emma Fortune, for her efficiency and dedication, as well as to all the staff from the management team and beyond who helped the Committee go about its work effectively during the year.

A handwritten signature in blue ink that reads "Patrick Gibbons".

Mr Patrick Gibbons

Chair of the Audit & Risk Committee

April 2021

2. Control Measures Implemented during COVID-19

Reporting to the Board

The CEO first addressed the Audit & Risk Committee (ARC) regarding the seriousness of the national crisis and the actions taken by the organisation to manage the risks to staff, stakeholders and operations at the March 19th meeting. An organisational risk assessment was carried out and a number of significant and ongoing measures were implemented.

IFI COVID Task Force and critical Staff Communications

In early March, a 14 staff member⁹ task force was set up to consider and implement Government guidance and communicate with staff. Initially meeting every day, by April it then moved to meeting three times a week until July. An all-staff email and all-staff text message was sent following every meeting guiding and reassuring employees. Communications provided detailed guidance to administrative and operational staff on protective measures at the varying stages of the progression and recession of the virus.

The measures taken by Inland Fisheries Ireland included:

- The provision of **specific COVID-19 advice on an agile basis** to staff to reflect restrictions at each level in the Governments Resilience and Recovery 2020-2021: Plan for Living with COVID
- **Personal Protective Equipment (PPE)** was procured with masks distributed widely for staff and products (gels and sprays) for workspace, equipment and vehicle sanitisation
- **Offices** were equipped with Government COVID-19 signage, sanitisation stations, distancing instructions, special/extra outsourced cleaning arrangements. A limited number of staff attending offices did so on an exceptional basis
- **Training on correct hand sanitising and donning/doffing masks**, delivered to all staff via safety hub.
- Promoting and facilitating **home working arrangements** from the earliest opportunity for all office-based staff. Staff were issued with a '**Working from Home During COVID Policy**'
- An **ergonomic assessment** was completed with staff working from home and additional equipment supplied where required

⁹ Membership comprised: CEO (Deputy CEO), Senior Management Team, Health & Safety Executive, Logistics Manager, ICT Manager, Finance Director, Representatives of RBDs and Research, and HR Business Partners

- Operations staff delivering services outdoors were instructed to apply a **one person per vehicle** measure (requiring hire vehicles) from Q2.
- Following the 1st full lockdown in May:
 - o In advance of returning to work, staff completed mandatory '**COVID-19 Pre-Return to Work Form**' and the '**COVID-19 Induction Training**'
 - o An '**IFI Employee Safety Handbook COVID-19**' was developed and distributed through IFI's intranet (this is a living document, being updated and distributed to staff periodically)
 - o 66 staff have completed **Covid Compliance Lead** training with 40 thereof assigned as location compliance leads.
- From July **polycarbonate screens** were sourced and installed in fleet passenger vehicles to permit a driver and passenger to utilize the vehicles concerned (improving service delivery efficiency)
- All **meeting arrangements for staff** were moved to video conferencing from Q2
- All **training delivery** was moved to safety hub/video conferencing from Q2 (with one exception of Personal Sea Survival Training in Q3)
- HR implemented staff **wellbeing activities/measures**
- Functions/events/training **services delivered 'in-person'** were postponed or moved to video conferencing e.g. Research Conferences, Education & Outreach events.
- All meeting arrangements for the **Board and its sub-committees** moved to video conferencing from mid-March and this will continue into 2021.

A paper titled '**IFI's Response to COVID-19 Finance and Logistics Division**' was presented to the Audit & Risk Committee on May 14th. The paper outlined the implications of COVID on IFI's finances and the interaction with IFI's parent Department regarding the remittance of funds arising from savings anticipated through reduced activity. Head of Finance and Logistics, Pat Doherty briefed the Committee on funds surrendered and the scope for further savings. The report also reported the significant burden on IFI's Logistics team in the deployment of PPE, addressing 'new work elements' and the continued support of IFI's fleet of vehicles.

3. Membership and meetings of the Audit & Risk Committee

Members of the Committee during 2020

Professor Frances Lucy (Chair)	Term ended:	23/03/2020
Mr Patrick Gibbons (Succeeding as Chair)	Appointed:	24/03/2020
Ms Bernadette Orbinski-Burke (Vice Chair)	Re-appointed:	27/06/2019
Ms Fiona Walsh	Appointed:	16/04/2020
Ms Marie Louise Heffernan	Appointed:	25/09/2020

All members of the ARC are non-executive members. Each member serves for a period of three years on the Committee; this may be renewed for (but is limited to) a further three years or to the end of their term of office as a Board member. At the end of the reporting period, there continues to be a vacancy on the Committee.

Committee Meetings during 2020

The ARC met six times during the year:

- February 13th
- March 19th
- April 16th
- May 14th
- September 9th and
- November 23rd

Individual members of the Senior Leadership Team were invited to present on specific matters at each meeting, these included the CEO Dr Ciaran Byrne (term ended), Deputy CEO, Dr Greg Forde, CEO, Francis O'Donnell (newly appointed), Head of Finance and Logistics, Pat Doherty and Finance Director, Michael Martin. For specific matters, Director of the ERBD, Brian Beckett (February), Health & Safety Executive, Michael Cusack, ICT Manager, Ian Carroll, Head of Research, Dr Cathal Gallagher (November) were in attendance.

The members met on one occasion without the executive present, February 13th.

4. Comptroller & Auditor General

The Audit & Risk Committee has a professional working relationship with the Office of the Comptroller and Auditor General (OCAG). In early 2020, an invitation was extended to the Auditor General (or their nominee) to attend a meeting of the committee. Ms Sharon Robinson, Senior Auditor attended the March 19th meeting of the Audit & Risk Committee.

Ms Robinson reviewed the matters raised in the Management Letter in respect of the audit of the 2018 Financial Statements. These included IFI's cash reserves and the necessity of developing a contract (>€25k) register. Ms Robinson also outlined the work of the OACG with the National Audit Office (NAO) of the UK in developing the Financial Management Maturity Model.

IFI's appointed Internal Auditor, ASM Ltd. attended four meetings of the Committee: February 13th, March 19th, August 28th and November 22nd. The Committee took the opportunity to speak with the Internal Auditor without the executive present at each of these meetings.

5. ARC Programme of Work 2020

The Committee engaged in the following activities and made recommendations on its findings to the Board.

Internal Audit (IA) Programme 2020

The nature and scope of the 2020 internal audit programme was drafted in November 2019 and submitted for approval to the Board in December 2019. Terms of reference of each of the IA reviews were agreed and the following risk-based audit reviews were delivered.

Due to restrictions imposed as a result of Covid-19 all reviews were conducted remotely with the exception of Health & Safety review site visits conducted at Cushlough, Lough. Mask, Cong Hatchery, Co. Mayo and Fanure Fish Farm in Roscrea, Co. Tipperary.

Review of Health & Safety

Corporate Risk Register – risk of non-compliance with Revenue, Health & Safety and Road Safety regulations in relation to fleet management (risk 10); risk of serious accident/death relating to IFI work (risk 11); and health & safety and Environment risk under the continuation of the operation of IFI fish farms (risk 13)¹⁰

- to review those internal audit recommendations previously made to IFI in the 2018 Health & Safety internal audit report;
- to ensure that IFI has developed appropriate policies in relation to personal protection equipment (PPE), which reflect current legislation and best practice and which have been made available to employees and are consistently implemented;
- to ensure that health and safety training has been provided to staff in relation to health and safety generally, and personal protective equipment in particular, and that appropriate health and safety (incident/accident) records are maintained by IFI.

Following consideration of the initial draft output of this review presented at the Committee meeting in May, the Executive was requested to ensure that one of IFI's most significant risks,

¹⁰ IFI Corporate Risk Register as at January 2020

Roscrea Fish Farm, be included in the scope of the review, providing an organisation-wide approach. This action was taken and completed.

FINDING: Satisfactory [7 Recommendations: 4 x priority 2, and 3 x priority 3]

The final output of this review was analysed by the Committee at its meeting on September 9th and was presented to, considered and adopted by the Board on September 25th, 2020.

Review of ICT Strategy, Security and Resilience – November

Corporate Risk Register – non-compliance with General Data Protection Regulation (Risk 8); and disruption of operation due to ICT systems failure (Risk 12)¹¹

- to consider the adequacy and effectiveness of the controls in place to protect IFI's IT systems (including servers);
- to consider the adequacy and effectiveness of the controls in place to safeguard the confidentiality, integrity and availability of IFI data;
- to consider the adequacy of the arrangements in place in relation to IT resilience;
- to ensure that IT changes and investments are undertaken within the context of, and in alignment with, IFI's Strategic Plan and IT Strategy;
- to ensure that adequate IT and information security strategies, policies and procedures have been developed and are subject to regular review; and
- to consider the adequacy and effectiveness of IFI's disaster recovery planning and processes.

FINDING: Satisfactory [20 Recommendations: 3 x priority 2, and 17 x priority 3]

The output of this review was initially analysed by the Committee at its meeting on September 9th with feedback provided, and a final draft considered at the November 23rd meeting. It was presented to and adopted by the Board on December 17th, 2020.

Review of Internal Financial Controls - November

Corporate Risk Register– risk of financial fraud (inappropriate use of resources such as assets) (Risk 15) and risk of failure to maximise value for money (Risk 16)

- to ensure that IFI's policies and procedures are up to date; and

¹¹ IFI Corporate Risk Register as at January 2020

- to ensure that there are appropriate and effective key internal financial controls in place in the following areas:
 - Payments Process
 - Procurement Process
 - Capital assets
 - Financial Reporting system
 - Payroll, and
 - Tax compliance

FINDING: Satisfactory

[2 Recommendations: 2 x priority 3]

The output of this review was analysed by the Committee at its meetings on November 23rd, 2020. The Chair presented the work of the Committee, and the recommendations were considered by and adopted by the Board of IFI on December 17th, 2020.

Review of Previous Internal Audit Recommendations – November

During 2018 and 2019, 7 Internal Audit Reviews were completed. This comprised: Internal Financial Controls for 2018 and 2019; Management of Conflicts of Interest; NSAD; Fleet; GDPR and Internal Communications. The Committee shall monitor the implementation of the remaining recommendations.

The output of this review was considered in detail by the Committee at its meeting on November 23rd, 2020. The Chair presented the review of previous recommendations to the Board on December 17th, 2020.

Value for Money Review of Fisheries Patrols – November

The objective of the review is to review IFI's current arrangements for undertaking Fisheries Protection to identify whether the current arrangements provide value for money or whether there are alternative approaches to service delivery which should be considered.

A draft report on this review was received by the Committee in the papers for the November 23rd, meeting. It was agreed that further work on the report was necessary and that the Internal Auditor would report on this at the next ARC meeting.

Planned Internal Audit Programme for 2021

At its meeting on November 23rd, 2020, in collaboration with the Internal Auditor and with reference to IFI's Corporate Risk Register, the Audit and Risk Committee agreed to recommend the draft internal audit programme to the Board.

Draft Financial Statements 2019

In advance of presentation to the Board for adoption, at its meeting on March 19th, 2020 the Committee conducted a review of;

- the draft **Financial Statements** for 2019
- the draft **Statement of Internal Control** for 2019
- the **Governance Statement** and **Board Members' Report 2019**

In its review of the financial statements the following was considered;

- accounting policies, completeness of financial statements, anti-fraud policy and that losses are properly recorded and accounted for;
- suitable processes are in place to ensure that regularity, probity and propriety is achieved;
- Issues raised by the external auditor have been comprehensively and appropriately dealt with;
- the financial statements present fairly the financial position of IFI
- the comprehensiveness and meaningfulness of IFI's Statement on Internal Control and review of the Letter of Representation (to the OCAg) before issue

Risk Management

The ARC continued its risk management review work. Key aspects of the risk framework were considered by the Committee;

- regular status updates obtained regarding most significant risk, fish farm (Corporate Risk 13)
- consideration of IFI's Corporate Risk Register
- high level review of various organisational risk registers at (September/ November meetings):
 - ✓ NEW Fish Species Risk Register;
 - ✓ Project Management Office (PMO) Risk Register;
 - ✓ Salmon Management Risk Register;
 - ✓ Health & Safety Risk Register;
 - ✓ Data Protection Risk Register;
 - ✓ Field Risk Register;

- ✓ Child Safeguarding Risk Register:
- ✓ Education & Outreach Risk Register
- ✓ Environmental Risk Register;
- ✓ Logistic Risk Register;
- ✓ Communications Risk Register;

Review of Effectiveness of the IFI Audit & Risk Committee

Due to one retirement, a newly appointed Chair and the appointment of two new members, it was agreed that a review of the effectiveness of the Committee should be postponed until quarter 3, 2021.

Other Areas considered by the Committee

- Director of the Eastern River Basin District with responsibility for **IFI's Climate Action Strategy**, supporting IFI's Energy Performance Officer (EPO), Pat Doherty, presented to the Committee in March.
- update, review and adoption of the **Internal Audit Terms of Reference** (Charter) in February
- review of the most recent **Management Accounts** at each meeting
- reviewed the **Supplementary Pensions Quarterly Report**
- reviewed **IFI's Records Management Policy** in advance of approval by the Board in March
- reviewed the operation of the Board's Sub-committees and recommended a **Board Sub-committee Protocol** for adoption by the Board
- reviewed the **Gifts & Hospitality Policy & Procedure**
- reviewed the **Protected Disclosures Policy & Procedure**
- reviewed the **Conflicts of Interest Policy & Procedure**
- review of the **Dormant Accounts Fund Disbursement Angling for All** (2019 application expended in 2020) in advance of Board approval
- reviewed **GDPR Guidelines** for staff and **GDPR Poster** for offices

6. Priorities for 2021

- Ongoing review of Health & Safety and Operational risk associated with COVID-19
- Oversee the implementation of previous recommendations of the Internal Auditor
- Review the Statement of Internal Control (SIC) and the Annual Financial Statements for 2020 (Q1)
- Internal Audit reviews
 - o Licensing
 - o Energy Usage
 - o Selected areas within Research
 - o HR and Workforce Planning
- Conduct a review of effectiveness of the Audit & Risk Committee (Q3)
- Ongoing monitoring and review of cost saving, accountability and compliance measures
- Oversight of IFI's compliance with the Code of Practice for the Governance of State Bodies 2016
- Approve a risk-based Internal Audit Plan for 2022

7. Conclusion

The Audit & Risk Committee is satisfied that, in general, there are adequate systems of control across the organisation and makes its recommendation in respect of same to the Board. The members of the Committee would like to thank the staff of IFI for their professionalism and commitment to the high standards of governance of IFI throughout a particularly challenging year.

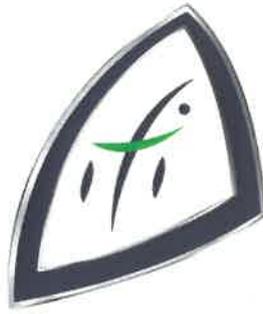
Appendix C

AUDITED FINANCIAL STATEMENTS 2020

For the year ending 31 December 2020



Iascach Iníre Éireann
Inland Fisheries Ireland



**Iascach Intíre Éireann
Inland Fisheries Ireland**

Financial Statements

Year End to 31st December 2020

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1. General Information

Address	3044 Lake Drive Citywest Business Campus Dublin 24, D24 Y265
Bank	Bank of Ireland College Green Dublin 2, D02 VR66
Auditor	The Comptroller and Auditor General 3A Mayor Street Upper Spencer Dock Dublin 1 D01 PF72
Solicitors	George Maloney & Co Solicitors 6 Farnham Street Cavan Co. Cavan, H12 V658 Arthur Cox, Earlsfort Terrace Dublin 2, D02 T380 Liam Keane & Partners Solicitors The Old Toll House Dunshaughlin Co. Meath A85 DR68 Patrick J Durcan & Co. Solicitors James Street Westport Co. Mayo F28 KC52

Solicitors continued:

MacHale Solicitors
Pearse Street
Ballina,
Co Mayo F26 K7C7

D.G. O'Donovan & Co
5th Floor, Riverpoint
Lower Mallow Street
Limerick V94WC6A

John M Forde & Son
2, Montpellier Terrace
Sea Road
Galway H91 A6P3

VP McMullin & Son Solicitors
Donegal Street
Ballybofey
Co. Donegal F93 DE63

Mason Hayes & Curran
South Bank House
Barrow Street
Dublin 4 D04 TR29

James Reilly & Sons
4, Brighton Place
Clonmel
Co Tipperary E91 X9V2

Coakley Moriarty
Solicitors
New Road
Kenmare
Co Kerry V93 N880

Fieldfisher
Capel Building
Mary's Abbey
Dublin 7 D07 N4C6

Kevin Quirke & Co
72 South Mall
Cork T12 VX9A

2. Governance Statement and Board Members' Report

The Board of Inland Fisheries Ireland was established under **Section 6** of the Inland Fisheries Act 2010. The functions of the Board are set out in **Section 7** of this Act. The Board is accountable to the Minister for the Environment, Climate and Communications and is responsible for ensuring good governance and that the principal functions of the agency as set out under **Section 7**, are performed. The Board performs this task by setting strategic objectives and taking strategic decisions on all key business issues. The regular day-to-day management, control and direction of Inland Fisheries Ireland are the responsibility of the Chief Executive Officer (CEO) and the senior management team. Their focus is on delivering on the broad strategic direction set out by the Board, ensuring that all Board members have a clear understanding of the key activities and decisions related to the entity, and of any significant risks likely to arise. The CEO acts as a direct liaison between the Board and management of Inland Fisheries Ireland.

2.1 Governance

The work and responsibilities of the Board are set out in its '*Statement of Board Responsibilities*'. Matters specifically reserved for Board decision are under a '*Schedule of Decisions Reserved to the IFI Board of Directors*'.

Standing items considered by the Board include;

- Declaration of interests
- Setting Board Strategy, in agreement with the Minister
- Reports from committees
- Financial reports/ management accounts
- Performance reports
- Reserved matters, and
- Risk

Section 46 of the Inland Fisheries Act 2010 requires the Board of Inland Fisheries Ireland to keep, in such form as may be approved by the Minister for the Environment, Climate and Communications (DECC) with consent of the Minister for Public Expenditure and Reform (DPER), all proper and usual accounts of money received and expended by it.

In preparing these financial statements, the Board of Inland Fisheries Ireland is required to;

- Select suitable accounting policies and apply them consistently,
- Make judgements and estimates that are reasonable and prudent,

- Prepare the financial statements on a going concern basis unless it is inappropriate to presume that it will continue in operation, and
- State whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements.

The Board is responsible for keeping adequate accounting records which disclose, with reasonable accuracy at any time, its financial position and enables it to ensure that the financial statements comply with **Section 46** of the Inland Fisheries Act 2010. The maintenance and integrity of the corporate and financial information on Inland Fisheries Ireland's website is the responsibility of the Board.

The Board is responsible for approving the annual budget and business plan, this was completed at its meetings on 30 January and 27 February 2020, respectively.

The Board is also responsible for safeguarding its assets and for taking reasonable steps for the prevention and detection of fraud and other irregularities.

COVID 19

A comprehensive COVID-19 crisis briefing was provided to the Board at its meeting on 28 April. This briefing outlined the impact of COVID-19 on staff and operations and that a dedicated COVID-19 Taskforce had been formed to implement government advice, coordinating mitigations in terms of health and safety, operational, finance and compliance risk. The Board were briefed on the impact the pandemic was having on the organisation's working capital and the impact on delivering on IFI's Business Plan objectives for 2020. The CEO confirmed at this point, that €468k had been remitted to the Department as part of the wider review of exchequer funding in light of the additional State expenditure on the COVID-19 pandemic. This sum represented an estimate of the surplus on the management accounts from January to March 2020.

A budgetary review was undertaken by the Executive in May of 2020.

The Board considers that the financial statements of Inland Fisheries Ireland give a true and fair view of the financial performance of the financial position of Inland Fisheries Ireland at 31 December 2020.

2.2 Board Structure

The Board consists of a Chairperson and nine ordinary members, seven of which are non-executive members. Two members of the executive are represented, the CEO and the elected staff nominee (appointed by the Minister under **Section 13** of the Inland Fisheries Act

2010). The Chairman, non-executive members of the Board and the staff representative are appointed for an initial period of five years.

With reference to the Circular 14/2020: Code of Practice for the Governance of State Bodies Annex (2020) on Gender Balance, Diversity and Inclusion, there were two members reappointed during the period for a period of 3 years, in line with this circular.

The Board meets no less than six times a year and met 17 times in 2020.

2.3 Board Member Listing

Position	Name	Date Appointed	Nomination
Chairman	Fintan Gorman ¹	10/09/2018	Ministerial
Ordinary	Frances Lucy ^{2,5}	07/12/2020	Joint Oireachtas
Staff Nominee	Sean Coady ^{2,5}	07/12/2020	Staff
Ordinary Member	Patrick Gibbons	13/01/2016	Joint Oireachtas
Ordinary Member	Bernadette Orbinski Burke	01/07/2016	Ministerial
Ordinary Member	Michael McGreal	22/03/2019	Ministerial
Ordinary Member	Seamus Boland	22/03/2019	Ministerial
Ordinary Member	Marie Louise Heffernan	01/05/2019	Joint Oireachtas
Ordinary Member	Fiona Walsh	12/07/2019	Ministerial
Executive	Ciaran Byrne ³	01/07/2010	CEO
Executive	Francis O'Donnell ⁴	02/11/2020	CEO

¹ Second term of office (originally appointed September 10th, 2013)

² Term of office ending in 2020: F. Lucy (March 23rd, 2020); S. Coady (November 16th, 2020)

³ CEO's contract ended June 30th

⁴ New CEO appointed

⁵ Re-appointed for second term on December 7th, for a period of 3 years

The Board has established and currently operates one standing committee, and four other sub-committees as follows;

Audit and Risk Committee (Standing): comprises four Board members. The role of the Audit and Risk Committee (ARC) is to support the Board in relation to its responsibilities for issues of risk, control and governance and associated assurance. The ARC is independent from the financial management of the organisation. In particular the ARC ensures that the internal control systems including audit activities are monitored actively and independently. The ARC reports to the Board after each meeting, and formally in writing annually, in the form of the 'Annual Report of the Audit & Risk Committee'.

Members of the Audit and Risk Committee are:

Position	Name	Appointed	Departure
Chair (to March 23 rd)	Frances Lucy	27/09/2018	23/03/2020
Chair (from April 16 th)	Patrick Gibbons	27/06/2019	Not applicable
Ordinary Member	Bernadette Orbinski Burke	27/06/2019	Not applicable
Ordinary Member	Fiona Walsh	16/04/2020	Not applicable
Ordinary Member	Marie Louise Heffernan	25/09/2020	Not applicable

There were 6 meetings of the ARC in 2020; the CEO, Head of Finance and Finance Director are standing invitees to each meeting.

Joint Fish Farm Working Group: this committee was formed in September 2016. This working group was established following a joint meeting between the Board of Inland Fisheries Ireland, the Trout Angling Federation of Ireland (TAFI) and the National Anglers Representative Association (NARA) in relation to the organisation's trout production facilities. Members of the Joint Fish Farm Working Group are:

Position	Name	Appointed	Departure
Chair	Fintan Gorman	29/09/2016	Not applicable
Ordinary Member	Prof. Frances Lucy	29/09/2016	23/03/2020
Executive Member	Dr Ciaran Byrne (CEO)	29/09/2016	30/06/2020
Executive Member	Francis O'Donnell	02/11/2020	Not applicable
Executive Member	Mr Pat Doherty (Head of Finance)	29/09/2016	Not applicable
Executive Member	Dr Cathal Gallagher (Head of R&D)	29/09/2016	Not applicable
TAFI* Representative	Martin Kinneavy	29/09/2016	Not applicable
TAFI* Representative	Eamonn Moore	29/09/2016	Not applicable
NARA** Representative	Michael Callaghan	29/09/2016	Not applicable
NARA** Representative	Pat Foley	29/09/2016	Not applicable

* Trout Anglers Federation of Ireland

** National Association of Recreational Anglers

There were no meetings of the Fish Farm Working Group in 2020.

Strategic Human Resources Sub-committee: this committee was formed in August 2019, with the primary purpose of overseeing the development of a Strategic Human Resources Plan.

Members of the Strategic Human Resources Sub-committee are:

Position	Name	Appointed	Departure
Chair	Seamus Boland	06/08/2019	Not applicable
Ordinary Member	Michael McGreal	06/08/2019	Not applicable
Executive Member	Dr Ciaran Byrne (CEO)	27/11/2019	30/06/2020*
Executive Member	Francis O'Donnell (CEO)	02/11/2020**	Not applicable
Executive Member	Roisin Bradley	27/11/2019	Not applicable

* Date of departure as CEO

** Date of appointment as CEO

There were 3 meetings of this sub-committee during 2020.

Property Sub-committee: this committee was formed in November 2020, with a primary purpose to oversee the preparation and delivery of an annual Property Optimisation Plan for IFI.

Position	Name	Appointed	Departure
Ordinary Member	Michael McGreal	12/11/2020	Not applicable
Executive Member	Sean Coady	12/11/2020	Not applicable
Executive Member	Francis O'Donnell (CEO)	12/11/2020	Not applicable

There was one meeting of this sub-committee during 2020.

2.4 Schedule of Attendance, Fees and Expenses

A schedule of attendance at the Board and committee meetings for 2020 is set out in [Note 7](#) of the Financial Statements for 2020. This includes the fees and expenses received by each member: Two Board members, Professor Frances Lucy (01/01/20 to 23/03/20 and from 07/12/20) and Sean Coady (from 07/12/20), did not receive a Board fee under the One Person One Salary (OPOS) principle.

2.5 Key Personnel Changes in 2020

Two members reached the end of their term of office and both of these members were re-appointed to the Board in December.

Dr Ciaran Byrne, CEO and ex-officio Board member, ended his contract on June 30th.

Francis O'Donnell was appointed CEO and ex-officio Board member on November 2nd.

2.6 Disclosures Required by the Code of Practice for the Governance of State Bodies 2016

The Board is responsible for ensuring that IFI has complied with the requirements of the Code of Practice for the Governance of State Bodies ('the Code'), as published by the Department of Public Expenditure and Reform in August 2016. The following disclosures are required by the Code.

Employee Short-term Benefits

There were 76 employee short-term benefits in excess of €60,000.

See [Note 6](#) of the Financial Statements.

Consultancy Costs

Consultancy costs include the cost of external advice to management and exclude outsourced 'business-as-usual' functions. See [Note 5a](#) of the Financial Statements.

Travel and Subsistence Expenditure

Travel and subsistence expenditure is categorised as follows:

Remuneration and Other Pay Costs

	2020	2019
	€	€
Travel & subsistence - National *	641,770	1,030,513
Travel & subsistence – International	9,256	61,793
	<u>651,026</u>	<u>1,092,306</u>

No international travel and subsistence payments were made for travel undertaken by Board members.

Legal Costs and Settlements

Legal Fees are for prosecution cases under fisheries legislation and corporate legal advice. Total legal costs in 2020 for prosecution cases were €126,803. In 2020, IFI paid three settlements totalling €57,662. These related to potential non-compliance with *Employment Rights legislation.

*Protection of Employees (Fixed-Term work) Act 2003, Employment Equality Acts 1998 – 2015 and the Unfair Dismissals Act 1977 – 2015.

Hospitality Expenditure

	2020	2019
	€	€
Staff hospitality*	4,131	9,391
Client hospitality	0	69
	4,131	9,460

* €6,000 of staff hospitality above was for vouchers distributed to staff for long service awards in 2019.

Statement of Compliance

The Board has adopted the Code of Practice for the Governance of State Bodies (2016) and has put procedures in place to ensure compliance with the Code. Inland Fisheries Ireland was in full compliance with the Code of Practice for the Governance of State Bodies for the period 2020.

On Behalf of the Board of IFI

Fintan Gorman

Mr. Fintan Gorman - Chairperson

16 December 2021

DATE



Ard Reachtaire Cuntas agus Ciste Comptroller and Auditor General

Report for presentation to the Houses of the Oireachtas

Inland Fisheries Ireland

Opinion on the financial statements

I have audited the financial statements of Inland Fisheries Ireland for the year ended 31 December 2020 as required under the provisions of section 46 of the Inland Fisheries Act 2010. The financial statements comprise

- the statement of income and expenditure and retained revenue reserves
- the statement of comprehensive income
- the statement of financial position
- the statement of cash flows and
- the related notes, including a summary of significant accounting policies.

In my opinion, the financial statements give a true and fair view of the assets, liabilities and financial position of Inland Fisheries Ireland at 31 December 2020 and of its income and expenditure for 2020 in accordance with Financial Reporting Standard (FRS) 102 — *The Financial Reporting Standard applicable in the UK and the Republic of Ireland.*

Basis of opinion

I conducted my audit of the financial statements in accordance with the International Standards on Auditing (ISAs) as promulgated by the International Organisation of Supreme Audit Institutions. My responsibilities under those standards are described in the appendix to this report. I am independent of Inland Fisheries Ireland and have fulfilled my other ethical responsibilities in accordance with the standards.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Report on information other than the financial statements, and on other matters

Inland Fisheries Ireland has presented certain other information together with the financial statements. This comprises the annual report, the governance statement and Board members' report and the statement on internal control. My responsibilities to report in relation to such information, and on certain other matters upon which I report by exception, are described in the appendix to this report.

I have nothing to report in that regard.

Andrew Harkness
For and on behalf of the
Comptroller and Auditor General
20 December 2021

Appendix to the report

Responsibilities of Board members

As detailed in the governance statement and Board members' report, the Board members are responsible for

- the preparation of financial statements in the form prescribed under section 10 of the Inland Fisheries Act 2010
- ensuring that the financial statements give a true and fair view in accordance with FRS102
- ensuring the regularity of transactions
- assessing whether the use of the going concern basis of accounting is appropriate, and
- such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Responsibilities of the Comptroller and Auditor General

I am required under section 10 of the Inland Fisheries Act 2010 to audit the financial statements of Inland Fisheries Ireland and to report thereon to the Houses of the Oireachtas.

My objective in carrying out the audit is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement due to fraud or error. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the ISAs, I exercise professional judgment and maintain professional scepticism throughout the audit. In doing so,

- I identify and assess the risks of material misstatement of the financial statements whether due to fraud or error; design and perform audit procedures responsive to those risks; and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- I obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal controls.
- I evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures.

- I conclude on the appropriateness of the use of the going concern basis of accounting and, based on the audit evidence obtained, on whether a material uncertainty exists related to events or conditions that may cast significant doubt on Inland Fisheries Ireland's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my report. However, future events or conditions may cause Inland Fisheries Ireland to cease to continue as a going concern.
- I evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Information other than the financial statements

My opinion on the financial statements does not cover the other information presented with those statements, and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, I am required under the ISAs to read the other information presented and, in doing so, consider whether the other information is materially inconsistent with the financial statements or with knowledge obtained during the audit, or if it otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact.

Reporting on other matters

My audit is conducted by reference to the special considerations which attach to State bodies in relation to their management and operation. I report if I identify material matters relating to the manner in which public business has been conducted.

I seek to obtain evidence about the regularity of financial transactions in the course of audit. I report if I identify any material instance where public money has not been applied for the purposes intended or where transactions did not conform to the authorities governing them.

I also report by exception if, in my opinion,

- I have not received all the information and explanations I required for my audit, or
- the accounting records were not sufficient to permit the financial statements to be readily and properly audited, or
- the financial statements are not in agreement with the accounting records.

4. Statement of Internal Control

4.1 Scope of Responsibility

On behalf of IFI, I acknowledge the Board's responsibility for ensuring that an effective system of internal control is maintained and operated. This responsibility takes account of the requirements of the Code of Practice for the Governance of State Bodies (2016).

4.2 Purpose of the System of Internal Control

The system of internal control is designed to manage risk to a tolerable level rather than to eliminate it. The system can therefore only provide reasonable and not absolute assurance that assets are safeguarded, transactions authorised and properly recorded, and that material errors or irregularities are either prevented or detected in a timely way.

The system of internal control, which accords with guidance issued by the Department of Public Expenditure and Reform (DPER), has been in place in IFI for the year ended 31 December 2020 and up to the date of approval of the financial statements.

4.3 Capacity to Handle Risk

IFI has an Audit & Risk Committee (ARC) comprising of four Board members [with one vacancy at the time of reporting], members skills sets incorporate; governance, legal, financial and audit expertise. The ARC met six times in 2020. IFI has outsourced its internal audit function, and the Internal Auditor conducts a programme of work agreed with the ARC and approved by the Board.

The ARC has developed a Risk Management Policy which sets out the risk management processes in place and details the roles and responsibilities of staff in relation to risk. IFI also has a Statement of Risk Appetite. The policy has been issued to all senior staff who with their teams are expected to work within this policy, to ensure that emerging risks and control weaknesses are notified and addressed accordingly, and to assume responsibility for risks and controls within their own area of work.

4.4 Risk and Control Framework

Inland Fisheries Ireland has implemented a risk management system which identifies and reports key risks and the management actions being taken to address and, to the extent possible, to mitigate those risks.

A risk register is in place which identifies the key risks facing Inland Fisheries Ireland and these have been identified, evaluated and graded according to their significance. The register is reviewed by the ARC on a quarterly basis. The outcome of these assessments is used to plan and allocate resources to ensure risks are managed to an acceptable level.

The risk register details the controls and actions needed to mitigate risks and responsibility for operation of controls assigned to specific staff. I confirm that a control environment containing the following elements is in place;

- Procedures for all key business processes have been documented
- Financial responsibilities have been assigned at management level
- There is an appropriate budgeting system with an annual budget which is kept under review by senior management
- There are systems aimed at ensuring the security of the information and communication technology systems
- There are systems in place to safeguard assets, and
- Control procedures over grant funding to applicants have been implemented. These ensure adequate approval of grants and monitoring and review of grantees to ensure grant funding has been applied for the purpose intended.

4.5 Ongoing Monitoring and Review

Formal procedures have been established for monitoring control processes. Control deficiencies are communicated to those responsible for taking corrective action and to management and the Board. I confirm that the following ongoing monitoring systems are in place;

- Key risks and related controls have been identified and processes have been put in place to monitor the operation of those key controls and report any identified,
- Reporting arrangements have been established at all levels where responsibility for financial management has been assigned, and
- There are regular reviews by senior management of periodic and annual performance and financial reports which indicate performance against budgets/ forecasts.

4.6 Procurement

I confirm that IFI has procedures in place to ensure compliance with current procurement rules and guidelines. Inland Fisheries Ireland complied with those procedures with the following exceptions during 2020 of € 390,516 whereby the Insurance tender had expired and was not advertised on e-tenders per public procurement guidelines.

Procurement of contractors with fees of €35,743 did not follow procurement guidelines. The process is being reviewed. Following the review of a project, it was found that IFI evaluation procedures during the procurement process needed to be improved and to achieve this it was recommended that a training programme be completed for staff. This training is taking place in December 2021.

4.7 Review of Effectiveness

I confirm that Inland Fisheries Ireland has procedures to monitor the effectiveness of its risk management and control procedures. Inland Fisheries Ireland's monitoring and review of the effectiveness of the system of internal financial control is informed by the work of the internal and external auditors, the Audit and Risk Committee which oversees their work, and the senior management within IFI responsible for the development and maintenance of the internal financial control framework.

COVID-19

COVID-19 had a significant effect on the activities of Inland Fisheries Ireland (IFI) during 2020. Having a distributed workforce with more than two thirds of staff field based and the remainder either whole time office or quasi office\ field depending on the time of year, increased the complexity of the response required to COVID-19 by management and staff of IFI.

Some of the measures introduced by IFI included:

- In early March, a 14 staff member task force was set up to consider and implement Government guidance, review risks, determine the impacts on IFI's operations\administration and to communicate with staff.
- Texts and emails were sent to all staff outlining guidance and changes in work practices after each task force meeting.
- Specific COVID-19 training was given to all staff following the first mandatory lockdown in May of 2020.
- The IFI Employee Safety Handbook COVID-19, was developed and distributed through IFI's intranet and mobile phone app
- Personal Protective Equipment (PPE) was procured with masks distributed widely for staff and sanitising products for workspace, equipment and vehicles sanitisation.
- Promoting and facilitating home working arrangements from the earliest opportunity for all office-based staff. Staff were issued with a 'Working from Home during COVID Policy'.
- Ergonomic assessments were completed with staff who were now working from home and additional equipment supplied where required.
- Increased IT Security to bolster Desktop, Laptop and email antivirus security. Email security and Spam filtering services have also undergone significant enhancements, including software security patching and the upgrading of Office 2010 to Office 365, providing IFI users with additional collaboration functionality and security while working remotely.
- Review of controls throughout the period to ensure that they remained robust.
- Regular reviews by Management, Audit and Risk Committee and the Board.

All controls continued to operate effectively throughout the period.

I confirm that the Board concluded an annual review of the effectiveness of the internal controls for 2020 on 17th December 2020.

4.8 Internal Control Issues

No weaknesses in internal control were identified in relation to 2020 that require disclosure in the financial statements.

On Behalf of the Board of IFI



Mr. Fintan Gorman - Chairperson

16 December 2021

DATE

INLAND FISHERIES IRELAND

STATEMENT OF INCOME AND EXPENDITURE AND RETAINED REVENUE RESERVES FOR THE 12 MONTHS TO 31 DECEMBER 2020

	Notes	2020		2019	
		€	€	€	€
Income					
State and EU Funding					
Oireachtas Grants	2	30,249,446		31,259,559	
Less Single Pension Scheme contributions remitted	14a	(174,864)		(124,210)	
Net deferred funding for pensions	14c	3,224,306	33,298,888	3,688,712	34,824,061
Other Income					
Department of Social Protection			9,678		86,827
Other	3		3,559,303		3,543,247
Total Income			36,867,869		38,454,135
Expenditure					
Administration	4		6,254,441		6,296,855
Operations	5		27,638,001		31,053,579
			33,892,442		37,350,434
Surplus / (Deficit) for the Year before Appropriations			2,975,427		1,103,701
Transfer from / (to) Capital Account	12		407,057		(1,823,316)
Surplus / (Deficit) for the Year after Appropriations			3,382,484		(719,615)
Balance Brought Forward at 01 January			7,403,436		8,123,051
Balance Carried Forward at 31 December			10,785,920		7,403,436

The Statement of Cash Flows and notes 1 to 19 form part of these financial statements.

On Behalf of the Board of Inland Fisheries Ireland

Fintan Gorman

Mr. Fintan Gorman - Chairperson

16 December 2021

Date

Bernadette Orbinski Burke

16 December 2021

Bernadette Orbinski Burke - Board Member

Date

INLAND FISHERIES IRELAND

STATEMENT OF COMPREHENSIVE INCOME FOR THE 12 MONTHS TO 31 DECEMBER 2020

	2020	2019
	€	€
Surplus / (Deficit) for the Year before Appropriations	2,975,427	1,103,701
Experience gains on retirement benefit obligations	(245,000)	2,489,000
Change in assumptions underlying the present value of retirement benefit obligations	(14,350,000)	(15,225,000)
Total actuarial gain/(loss) in the year 14b	(14,595,000)	(12,736,000)
Adjustment to deferred retirement benefits funding	14,595,000	12,736,000
Other Comprehensive Income for the year	<u>2,975,427</u>	<u>1,103,701</u>

The Statement of Cash Flows and notes 1 to 19 form part of these financial statements.

On Behalf of the Board of Inland Fisheries Ireland

Fintan Gorman

16 December 2021

Mr. Fintan Gorman - Chairperson

Date

Bernadette Orbinski Burke

16 December 2021

Bernadette Orbinski Burke - Board Member

Date

INLAND FISHERIES IRELAND

STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2020

	Notes	2020 €	2019 €
Fixed Assets			
Property, plant and equipment	9	21,309,255	21,716,312
Current Assets			
Inventory		1,910,351	344,853
Cash and cash equivalents	16	15,494,512	14,905,070
Receivables	10	820,637	953,950
		<u>18,225,500</u>	<u>16,203,873</u>
Current liabilities (amounts falling due within one year)			
Payables	11	7,439,580	8,800,437
		<u>7,439,580</u>	<u>8,800,437</u>
NET CURRENT ASSETS/(LIABILITIES)		10,785,920	7,403,436
TOTAL ASSETS LESS CURRENT LIABILITIES BEFORE PENSIONS		32,095,175	29,119,748
Deferred retirement benefit funding asset	14c	155,978,981	138,159,674
Retirement benefit obligations	14b	<u>(155,978,981)</u>	<u>(138,159,674)</u>
		-	-
TOTAL ASSETS LESS CURRENT LIABILITIES		<u>32,095,175</u>	<u>29,119,748</u>
NET ASSETS/(LIABILITIES)		<u>32,095,175</u>	<u>29,119,748</u>
Reserves			
Capital account	12	21,309,255	21,716,312
Surplus on Income and Expenditure and retained Revenue Reserves		10,785,920	7,403,436
		<u>32,095,175</u>	<u>29,119,748</u>

The Statement of Cash Flows and notes 1 to 19 form part of these financial statements.

On Behalf of the Board of Inland Fisheries Ireland

Fintan Gorman

Mr. Fintan Gorman - Chairperson

16 December 2021

Date

Bernadette Orbinski Burke

Bernadette Orbinski Burke - Board Member

16 December 2021

Date

INLAND FISHERIES IRELAND

STATEMENT OF CASHFLOWS FOR THE 12 MONTHS TO 31 DECEMBER 2020

Net Cash Flows from Operating Activities

	2020	2019
	€	€
Excess Income over Expenditure	2,975,427	1,103,701
Depreciation and Impairment of Fixed Assets	1,829,906	2,130,088
(Increase)/Decrease in Receivables	133,313	(515,400)
Increase/(Decrease) in Payables	(1,360,857)	(211,510)
(Profit) / Loss on sale of fixed assets	(166,996)	(276,792)
Net interest	22,879	23,016
(Increase)/Decrease in Inventory	(1,565,498)	38,738
Net Cash Inflow/(Outflow) from Operating Activities	1,868,174	2,291,841

Cash Flows from Investing Activities

Payments to acquire Property, Plant & Equipment	(1,428,047)	(3,966,484)
Proceeds from the disposals of Property Plant & Equipment	172,194	289,872
Net Cash Inflow/(Outflow) from Investing Activities	(1,255,853)	(3,676,612)

Cash Flows from Financing Activities

Net interest	(22,879)	(23,016)
Net Cash Inflow/(Outflow) from Financing Activities	(22,879)	(23,016)

Net Increase / (Decrease) in cash and cash equivalents	589,442	(1,407,787)
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Reconciliation of net Cash Inflow/(Outflow) to movement in net funds

	2020	2019
	€	€
Increase / (Decrease) in cash	589,442	(1,407,787)
Cash and cash equivalents at the beginning of the year	14,905,070	16,312,857
Cash and cash equivalents at the end of the year	15,494,512	14,905,070

The Statement of Cash Flows and notes 1 to 19 form part of these financial statements.

On Behalf of the Board of Inland Fisheries Ireland

Fintan Gorman

Mr. Fintan Gorman - Chairperson

16 December 2021

Date

Bernadette Orbinski Burke

Bernadette Orbinski Burke - Board Member

16 December 2021

Date

Notes to the Financial Statements

For the year ended 31 December 2020

I. Accounting Policies

The basis of accounting and significant accounting policies adopted by Inland Fisheries Ireland are set out below. They have all been applied consistently throughout the year and for the preceding year.

a) General Information

Inland Fisheries Ireland was set up under the Fisheries Act 2010 with a head office at 3044 Lake Drive, Citywest Business Campus, Dublin 24, D24 Y265.

Inland Fisheries Ireland primary objectives are to protect, manage and conserve Ireland's inland fisheries resource.

Inland Fisheries Ireland is a Public Benefit Entity (PBE).

b) Statement of Compliance

The financial statements of Inland Fisheries Ireland for the year ended 31 December 2020 have been prepared in compliance with the applicable legislation, and with FRS 102 The Financial Reporting Standard applicable in the UK and the Republic of Ireland issued by the Financial Reporting Council in the UK.

c) Basis of Preparation

The financial statements have been prepared under the historical cost convention, except for certain assets and liabilities that are measured at fair values as explained in the accounting policies below. The financial statements are in the form approved by the Minister for the Environment, Climate and Communications with the concurrence of the Minister for Public Expenditure and Reform under the Inland Fisheries Act 2010. The following accounting policies have been applied consistently in dealing with items which are considered material in relation to Inland Fisheries Ireland's financial statements.

d) Revenue

Oireachtas Grants

Income from Oireachtas Grants is accounted for on a cash receipts basis.

Income from the Department of Rural and Community Development under its Rural Recreation scheme is accounted for on an accruals basis.

Income from the Department of the Environment, Climate and Communications in respect of National Strategy for Angling Development (NSAD) and the Eel Fisherman Support Scheme are accounted for on an accruals basis.

All other income received is accounted for on an accruals basis.

Refunds of grants paid

Grants paid become refundable in certain circumstances, such as liquidation/dissolution of the recipient company, or if the conditions of the grant are not met. Grant refunds are recognised when it is probable that the money will be received by Inland Fisheries Ireland and the amount can be estimated reliably; therefore they are accounted for on an accruals basis.

Interest income

Interest income is recognised on an accruals basis using the effective interest rate method.

Other Revenue

Other revenue is recognised on an accruals basis except for Conservation fund, fines & forfeitures, sale of publications and Freedom of Information request fees which are reported on a cash received basis.

e) Capital Account

The Capital Account represents the unamortised amount of income used to purchase fixed assets.

Notes to the Financial Statements

For the year ended 31 December 2020

I. Accounting Policies continued**e) Property, Plant and Equipment**

Property, plant and equipment are stated at cost less accumulated depreciation, adjusted for any provision for impairment. Depreciation is provided on all property, plant and equipment, other than freehold land and artwork, at rates estimated to write off the cost less the estimated residual value of each asset on a straight line basis over their estimated useful lives, as follows:

(i) Buildings and Hatcheries	2%
(ii) Motor Vehicles	20%
(iii) Field Equipment	25%
(iv) Laboratory Equipment	33⅓%
(v) Boats	10%
(vi) Trailers	10%
(vii) Engines	20%
(viii) Furniture and Office Equipment	20%
(ix) Computers	33⅓%

Residual value represents the estimated amount which would currently be obtained from disposal of an asset, after deducting estimated costs of disposal, if the asset were already of an age and in the condition expected at the end of its useful life.

If there is objective evidence of impairment of the value of an asset, an impairment loss is recognised in the Statement of Income and Expenditure and Retained Revenue Reserves in the year.

f) Inventory

Inventory consists of goods for resale, and is recognised in the financial statements at the lower of Cost and Net Realisable Value (NRV). Cost is calculated on a first-in-first-out (FIFO) basis and includes all purchase costs. NRV is the selling price (actual or estimated) less all necessary completion costs. Stock in the fish farm is calculated with an assumed mortality rate of 60%.

g) Receivables

Receivables are recognised at fair value, less a provision for doubtful debts. The provision for doubtful debts is a specific provision, and is established when there is objective evidence that Inland Fisheries Ireland will not be able to collect all amounts owed to it. All movements in the provision for doubtful debts are recognised in the Statement of Income and Expenditure and Retained Revenue Reserves.

h) Operating Leases

Rental expenditure under operating leases is recognised in the Statement of Income and Expenditure and Retained Revenue Reserves over the life of the lease. Expenditure is recognised on a straight-line basis over the lease period, except where there are rental increases linked to the expected rate of inflation, in which case these increases are recognised when incurred. Any lease incentives received are recognised over the life of the lease.

Notes to the Financial Statements

For the year ended 31 December 2020

1. Accounting Policies continued

i) Employee Benefits

Short-term Benefits

Short term benefits such as holiday pay are recognised as an expense in the year, and benefits that are accrued at year-end are included in the Payables figure in the Statement of Financial Position.

Retirement Benefits

Inland Fisheries Ireland previously established its own defined benefit pension scheme, funded annually on a pay-as-you-go basis from monies provided by the Department of Environment, Climate and Communications and from contributions deducted from staff members' salaries which are retained. Inland Fisheries Ireland also operates the Single Public Services Pension Scheme ("Single Scheme"), which is a defined benefit scheme for pensionable public servants appointed on or after 1 January 2013. Single Scheme members' contributions are paid over to the Department of Public Expenditure and Reform (DPER).

Pension costs reflect pension benefits earned by employees, and are shown net of staff pension contributions. An amount corresponding to the pension charge is recognised as income to the extent that it is recoverable, and offset by grants received in the year to discharge pension payments.

Actuarial gains or losses arising on scheme liabilities are reflected in the Statement of Comprehensive Income, and a corresponding adjustment is recognised in the amount recoverable from the Department of Environment, Climate and Communications.

The financial statements reflect, at fair value, the assets and liabilities arising from Inland Fisheries Ireland's pension obligations and any related funding, and recognises the costs of providing pension benefits in the accounting periods in which they are earned by employees. Retirement benefit scheme liabilities are measured on an actuarial basis using the projected unit credit method.

j) Critical Accounting Judgements and Estimates

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported for assets and liabilities as at the balance sheet date and the amounts reported for revenues and expenses during the year. However, the nature of estimation means that actual outcomes could differ from those estimates. The following judgements have had the most significant effect on amounts recognised in the financial statements.

Impairment of Property, Plant and Equipment

Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less cost to sell and value in use. For the purpose of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units). Non-financial assets that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

Notes to the Financial Statements

For the year ended 31 December 2020

I. Accounting Policies continued**j) Critical Accounting Judgements and Estimates (continued)**Depreciation and Residual Values

The Directors have reviewed the asset lives and associated residual values of all fixed asset classes, and in particular, the useful economic life and residual values of fixtures and fittings, and have concluded that asset lives and residual values are appropriate.

Provisions

Inland Fisheries Ireland makes provisions for legal and constructive obligations, which it knows to be outstanding at the period end date. These provisions are generally made based on historical or other pertinent information, adjusted for recent trends where relevant. However, they are estimates of the financial costs of events that may not occur for some years. As a result of this and the level of uncertainty attaching to the final outcomes, the actual out-turn may differ significantly from that estimated.

Retirement Benefit Obligation

The assumptions underlying the actuarial valuations for which the amounts recognised in the financial statements are determined (including discount rates, rates of increase in future compensation levels, mortality rates and healthcare cost trend rates) are updated annually based on current economic conditions, and for any relevant changes to the terms and conditions of the pension and post-retirement plans.

The assumptions can be affected by:

- (i) the discount rate, changes in the rate of return on high-quality corporate bonds
- (ii) future compensation levels, future labour market conditions

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

2 Oireachtas Grants

The Oireachtas Grants voted to IFI from Vote 29 Environment, Climate and Communications, Sub Head E3 Inland Fisheries as shown in the financial statements consist of:

Inland Fisheries Ireland	2020	2019
	€	€
Current Expenditure Grant	27,497,441	28,027,736
Current Expenditure Grant - NSAD	226,916	576,605
Capital Expenditure Grant	2,525,089	2,655,218
	30,249,446	31,259,559

3 Other Income

	2020	2019
	€	€
Contract work	1,644,589	971,337
Fish Farm income	233,472	352,864
Permit Income	366,119	586,628
Licence Income		
Rod	400,392	
Commercial Fishing	43,249	
Part X Dealers	34,790	
State Fisheries	72,055	
Salmon Conservation Funding	260,691	388,324
Fines & Forfeitures (a)	85,036	124,531
Fishery Rates	234,124	234,318
Department of Social Protection - Community Employment	9,678	86,827
Profit (Loss) on Sale of Fixed Assets	166,996	276,792
Miscellaneous	17,790	1,361
	3,568,981	3,630,074

(a) During 2020 amounts, totalling €20,053 were paid from the Communications, Climate Action and Environment Vote under Section 315(3) of the Fisheries (Consolidation) Act 1959. These are included in Fines and Forfeitures (2019: € 22,065).

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

	Notes	2020	2019
		€	€
4 Administration			
Staff costs and Board Members' fees	6	4,696,872	4,563,627
Office expenses	8e	303,868	332,740
Bank interest		22,876	24,088
Advertising & public information		44,947	83,036
Publicity & promotion		129,766	160,799
Professional fees		163,013	229,486
Audit fee		36,300	33,000
Board expenses		5,605	32,752
Legal Fees		20,525	31,399
Insurance		56,145	51,540
Depreciation	9	456,359	432,164
Computer Expenditure	8d	132,387	156,122
Miscellaneous	8b	79,382	111,119
Bad debt provision	8b	106,396	54,983
		6,254,441	6,296,855
		2020	2019
		€	€
5 Operations			
Staff costs	6	20,582,313	21,643,066
Office expenses	8e	709,792	633,598
Safety *		(145,554)	708,652
Training		322,170	421,464
Legal Fees		158,203	251,704
Professional fees		1,289,647	1,799,244
Repairs & maintenance	8e	127,973	97,725
Field supplies		324,285	337,762
Development Works	8c	270,678	364,395
Development Supplies	8c	500,248	790,400
Running & upkeep of vehicles & boats	8a	1,132,006	1,346,675
Laboratory expenses		41,098	39,957
Purchase of fish & fish food		161,307	151,373
Insurance		272,403	267,005
Depreciation	9	1,373,547	1,697,924
Miscellaneous	8b	331,692	286,393
Computer Expenditure	8d	149,615	159,549
Licence and permit commission		36,578	56,693
		27,638,001	31,053,579
Total expenditure		33,892,442	37,350,434

* Safety expenditure for 2019 incorrectly included € 477,730 for workwear. This was part of a multi-annual order and was corrected in the 2020 figure (see note 16).

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

5a

	2020	2019
Consultancy Costs - Detail	€	€
Business Improvement	76,834	98,520
Financial	48,088	76,898
HR/Pension	82,467	93,300
Legal Fees	178,729	283,104
Consultant Engineer	22,290	33,875
Eel Survey	22,400	24,100
Eel Support Scheme payments *	689,160	1,325,340
Environmental Consultant	196,786	97,461
Medical Services	54,079	29,973
Veterinary Services	19,628	18,434
Lice Tracking	-	33,558
Other	33,126	38,979
Other Capital	52,795	103,853
PR / Marketing	148,886	124,952
Property/Planning	20,088	-
Total	1,645,356	2,382,347

* The Department of the Environment, Climate and Communications offers a restitution payment via the Eel Fisherpersons Support Scheme to former eel fisherpersons who were licenced/permitted to engage with the commercial eel fishery in 2007.

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

6 Remuneration and Other Pay Costs		2020	2019
		€	€
6a	Salaries & wages *	19,008,556	19,051,688
	Board Members fees 7	65,238	61,534
	Travel & subsistence - National	641,661	1,030,513
	Travel & subsistence - International	9,256	61,793
	Pension costs 14a	5,554,474	6,001,165
		<u>25,279,185</u>	<u>26,206,693</u>

Included in salaries and wages are:

- amounts totalling €1.309m paid to 246 staff (2019: €1.247m paid to 269 staff) in relation to unsocial hours payments
- There was 1 termination benefit paid in 2020
- There were 3 settlements paid in 2020 totalling € 57,662

Number of employees	2020	2019
	Number	Number
Managerial & clerical	68	67
Research / technical	270	253
Other	1	1
Total Staff	<u>339</u>	<u>321</u>

6b Range of salary short term employee benefits			Number of Employees	
From	To	2020	2019	
€ 60,000	- € 69,999	43	36	
€ 70,000	- € 79,999	17	3	
€ 80,000	- € 89,999	4	9	
€ 90,000	- € 99,999	6	1	
€ 100,000	- € 109,999	2	4	
€ 110,000	- € 119,999	3	-	
€ 120,000	- € 129,999	-	-	
€ 130,000	- € 139,999	-	-	
€ 140,000	- € 149,999	1	-	
€ 150,000	- € 159,999	-	-	
€ 160,000	- € 169,999	-	-	
€ 170,000	- € 179,999	-	1	

Note: for the purposes of this disclosure, short term employee benefits in relation to services rendered during the reporting period include salary, overtime, allowances and other payments made on behalf of the employee, but exclude employer's prsi

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

6c	Aggregate Employee Benefits	2020	2019
		€	€
	Staff salary and short-term benefits Permanent Staff	16,288,236	16,475,239
	Staff salary and short-term benefits Contract Staff	954,150	960,491
	Retirement benefit costs	5,554,474	6,001,165
	Employer contribution to social welfare	1,807,369	1,670,553
		24,604,229	25,107,448
6d	Staff Short-Term Benefits	2020	2019
		€	€
	Basic Pay	15,663,684	14,645,393
	Overtime	12,850	14,734
	Allowances	1,320,421	1,302,477
		16,996,955	15,962,604

***Salaries and wages
Benefit in kind**

Following legal tax advice, IFI agreed a liability for 2018 of €192,151 plus interest of €14,110 Total €206,261. A liability of €71,397 including interest (€3,998) was established for 2019, up to 31.10.19. This was paid in November 2019. Vehicles are now parked at a base or designated lock-up and IFI have taken steps to ensure compliance with Revenue going forward. Two areas are awaiting Revenue approval, however the full potential liability has been included in the agreement. The key issues in dispute were rostered and scheduling of staff call outs.

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

6e Key Management Personnel

Key management personnel in Inland Fisheries Ireland consists of the members of the Board, the Chief Executive Officer, Head of Finance & Logistics, Head of Operations, Head of Business Development, Head of Research & ICT, Head of Human Resources and Board Member Stipend (Details Note 7). The total value of employee benefits for key management personnel is set out below:

	2020	2019
	€	€
Salary	785,533	736,179
Allowances	-	-
Termination Benefits	-	-
Health Insurance	-	-
	<u>785,533</u>	<u>736,179</u>

This does not include the value of retirement benefits earned in the period. The key management personnel with the exception of the Board Members are members of Inland Fisheries Ireland pension scheme and their entitlements in that regard do not extend beyond the terms of the model public service pension scheme.

6f Chief Executive Officer's Remuneration

The Chief Executive's remuneration comprised of:

	2020	2019
	€	€
Previous CEO 01/01/2020 - 30/06/2020		
Basic Annual Salary	77,750	148,909
Arrears	3,425	21,833
Total	<u>81,175</u>	<u>170,742</u>
Interim CEO 01/07/2020 - 30/11/2020	53,007	-
Current CEO 02/11/2020 - 31/12/2020	24,211	-
Total	<u>158,393</u>	<u>170,742</u>

The CEO is a member of Inland Fisheries Ireland pension scheme and his entitlements do not extend beyond the standard entitlement in the model public sector defined benefit superannuation scheme. The value of retirement benefits earned in the period is not included here.

Remuneration shown above reflects salary for CEO position only. All 3 employees were in the employment of IFI in different roles prior and post CEO position.

The CEO received recoupment of travel and subsistence of €5,800 in 2020 (2019: €9,640).

There were no payments made to any of the CEO position holders under performance related pay schemes in the period. Annual Salary for the Chief Executive Officer @ 31st December 2020 was the starting point of the scale being €142,421. He also had use of an IFI Vehicle.

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

7 The following amounts were paid to Board members for the 12 months ended 31 December 2020

Board	Board 2020	Audit & Risk Committee 2020	Strategic HR		Mileage & Subsistence 2020	Fees & Remuneration 2020
			Sub- committee 2020	Property Sub- committee 2020		
Number of Meetings						
Fintan Gorman (Chairperson) G	17	2		1	2,244	11,970
Prof Frances Lucy ^{A, B, I}	4	2			435	-
Sean Coady ^{F, G, H, I}	15			1	699	7,098
Patrick Gibbons ^A	17	6			38	7,695
Bernadette Orbinski Burke ^A	15	5			-	7,695
Seamus Boland ^E	15		3		1,104	7,695
Michael McGreal ^{E, G}	17		3	1	-	7,695
Marie Louise Heffernan ^A	16				900	7,695
Fiona Walsh ^A	13	4			-	7,695
					5,420	65,238

The following amounts were paid to Board members for the 12 months ended 31 December 2019

Board	Mileage & Subsistence	Fees & Remuneration	Meetings Attended
	2019	2019	2019
Fintan Gorman (Chairperson) ^A	10,535	11,970	11
Prof Frances Lucy ^A	1,879	-	10
Martin McEnroe ^{C, D}	812	1,160	1
Niall Greene ^D	-	3,848	5
Sean Coady ^{C, D, F}	5,349	8,455	11
Patrick Gibbons ^{A, C}	690	7,695	11
Bernadette Orbinski Burke ^A	324	7,695	9
Seamus Boland		5,982	7
Michael McGreal	3,025	5,982	8
Marie Louise Heffernan	5,011	5,130	8
Fiona Walsh	-	3,617	5
	27,625	61,534	

The total number of meetings held in 2020 was 27 (2019: 18 meetings)

Prof Frances Lucy did not receive a Board fee under the One Person One Salary principle (OPOS)

Sean Coady did not receive a fee from 7th December 2020 when he was reappointed to the board under the OPOS principle

Some members also serve on Board Subcommittees:

^A denotes ARC Membership

^B 5 year term of office ended March 23rd 2020

^C denotes Protection Sub Committee

^D denotes Salmon Sub Committee

^E denotes Strategic HR Sub Committee

^F Sean Coady is the staff representative on the Board and his fee shown above includes Employer PRSI. OPOS applied from 7th December 2020

^G denotes Property Sub Committee

^H 5 year term of office ended November 16th 2020

^I Reappointed December 7th

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

Notes	2020	2019
	€	€
8a Running & upkeep of vehicles & boats		
Vehicle Insurance	89,539	102,580
Vehicle repairs & maintenance	235,629	280,088
Vehicle fuel	348,973	457,577
Boat Insurance	55,154	43,596
Boat repairs & maintenance	86,608	111,438
Boat fuel	23,227	36,242
Covert Car Hire	1,604	2,509
Storage of Boats & Vehicles	6,098	8,556
General Car hire	268,804	264,064
Other running costs	16,370	40,025
	1,132,006	1,346,675
8b Miscellaneous		
Magazines / periodicals	1,116	3,904
Meeting Expenses	13,507	48,304
Courier	12,274	9,225
Facilities Expenditure	76,555	67,166
Fish Vaccines	744	2,761
Hatchery Costs	30,103	35,935
Domestic supplies	10,327	20,878
Cleaning	86,817	53,175
Security	58,358	46,223
Equipment repairs & maintenance	92,028	59,580
Bad Debts Provision	105,679	54,983
Bad Debts Write Off	717	-
Equipment under €500	22,798	39,906
Sundry	6,447	10,455
	517,470	452,495

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

Notes	2020 €	2019 €
8c Development Expenditure		
Sub-contract / plant hire	265,103	360,858
Development supplies	500,248	790,400
Rehabilitation Works	5,575	3,537
	<u>770,926</u>	<u>1,154,795</u>
8d Computer Expenditure		
Computer consumables	30,508	10,010
Computer software	79,410	114,621
Computer Maintenance & Licencing	172,084	191,040
	<u>282,002</u>	<u>315,671</u>
8e Office expenses		
Printing & stationery	65,493	83,162
Postage & telephone	88,855	88,814
Mobile phones & Broadband & Antennae Masts & Off-Site Communication	426,051	313,538
Rent & rates	102,381	103,179
Heat & light	250,044	247,872
Repairs & maintenance	208,809	227,498
	<u>1,141,633</u>	<u>1,064,063</u>

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

9 Property, Plant & Equipment

	Land, buildings, fisheries & hatcheries	Motor vehicles	Boats & engines	Field & lab equip. incl Trailers	Furniture, office equip. & computers	Total
	€	€	€	€	€	€
Cost or valuation						
At 1 Jan 2020	21,355,750	5,553,562	6,554,964	6,029,017	2,852,470	42,345,763
Reclass 1 Jan 2020	(12,193)	-	-	1,451	10,742	-
Additions for year	746,304	191,867	69,501	246,832	173,543	1,428,047
Disposals for year	-	(370,511)	(206,528)	(39,141)	(7,745)	(623,925)
At 31 December 2020	22,089,861	5,374,918	6,417,937	6,238,159	3,029,010	43,149,885

Depreciation						
At 1 Jan 2020	5,093,307	4,002,481	3,415,698	5,448,210	2,669,755	20,629,451
Reclass 1 Jan 2020	(203)	-	-	282	(79)	-
Charge for year	449,015	446,596	480,330	305,730	148,235	1,829,906
Disposals for year	-	(370,511)	(206,528)	(33,943)	(7,745)	(618,727)
At 31 December 2020	5,542,119	4,078,566	3,689,500	5,720,279	2,810,166	21,840,630

Net Book Value						
At 1 January 2020	16,262,443	1,551,081	3,139,266	580,807	182,715	21,716,312
Net Movement for the year	285,299	(254,729)	(410,829)	(62,927)	36,129	(407,057)
At 31 December 2020	16,547,742	1,296,352	2,728,437	517,880	218,844	21,309,255

In Respect of Prior Year

	Land, buildings, fisheries & hatcheries	Motor vehicles	Boats & engines	Field & lab equip. incl Trailers	Furniture, office equip. & computers	Total
	€	€	€	€	€	€
Cost or valuation						
At 1 Jan 2019	20,945,219	5,208,221	5,563,823	5,882,122	2,781,959	40,381,344
Reclass 1 Jan 2019	-	-	(24,960)	24,960	-	-
Additions for year	410,531	1,904,762	1,325,517	196,448	129,226	3,966,484
Disposals for year	-	(1,559,421)	(309,416)	(74,513)	(58,715)	(2,002,065)
At 31 December 19	21,355,750	5,553,562	6,554,964	6,029,017	2,852,470	42,345,763

Depreciation						
At 1 Jan 2019	4,671,503	4,902,934	3,137,054	5,204,888	2,571,969	20,488,348
Reclass 1 Jan 2019	-	-	(3,702)	3,702	-	0
Charge for year	421,804	658,968	590,029	302,786	156,501	2,130,088
Disposals for year	0	(1,559,421)	(307,683)	(63,166)	(58,715)	(1,988,985)
At 31 December 19	5,093,307	4,002,481	3,415,698	5,448,210	2,669,755	20,629,451

Net Book Value						
31 December 2018	16,273,716	305,287	2,426,769	677,234	209,990	19,892,996

Net Book Value						
31 December 2019	16,262,443	1,551,081	3,139,266	580,807	182,715	21,716,312

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

10 Analysis of receivables	2020	2019
	€	€
Trade debtors etc.	1,012,532	1,188,637
Accrued Income	300,071	18,008
Bad debt provision	(600,658)	(494,979)
Other prepayments	108,692	242,284
	820,637	953,950

11 Analysis of payables	2020	2019
	€	€
11a Deferred Income		
Deferred Contract income	91,292	104,300
Department of Rural and Community Development - Rural Recreation Fund	171,885	171,885
National Strategy for Angling Development	718,026	944,942
Scientific Eels	251,000	1,011,067
Angling for All	10,466	-
Total Deferred Income	1,242,669	2,232,194
Funds held in trust		
Salmon Conservation Fund	3,509,806	3,412,230
Trade creditors and accruals	2,687,105	3,156,014
	7,439,580	8,800,438

Salmon Conservation Funds are generated from the sale of salmon angling and commercial fishing licences. The revenue generated from the Salmon Conservation Fund is reinvested to promote the recovery of our salmon stocks and habitats taking into account project feasibility, funding availability and value for money considerations.

The Fund is being managed by Inland Fisheries Ireland and is accounted for as a Creditor on the statement of financial position. Where Inland Fisheries Ireland incurs direct expenditure on projects related to Fund activities it is reimbursed from the Fund. IFI's direct expenditure is charged to the Income and Expenditure and retained revenue reserves. Reimbursement from the Fund is accounted for by Inland Fisheries Ireland as Other Income (Note 3) on a cash receipts basis. All other transactions in relation to the Fund, including payments to third parties, are accounted for as movements in the Creditors figure.

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

11 Analysis of payables

11b

Transactions in relation to the Salmon Conservation Fund in 2020 are disclosed below.		
	2020	2019
	€	€
Opening Balance	3,412,230	3,374,955
Receipts	418,811	477,010
Interest earned	19	571
Expenditure		
Insurance SCF Employer and Public Liability	(7,086)	(7,086)
To third parties	(53,477)	(44,896)
To IFI*	(260,691)	(388,324)
Closing Balance	3,509,806	3,412,230

*Accounted for by IFI as Other Income.

	Deferred Contract Income	Rural Recreation Fund	NSAD	Eel Fisherpayers Support Scheme	Angling for All	Scientific Eels	Total
	A	B	C	D	E	F	
Opening Balance	104,300	171,885	944,942	1,011,067	-	-	2,232,194
Receipts in year	14,347	-	-	-	140,000	-	154,347
TF to Scientific Eels Fund	-	-	-	(251,000)	-	251,000	-
Released to Income and Expenditure	(27,355)	-	(226,916)	(760,067)	(129,534)	-	(1,143,872)
Closing Balance	91,292	171,885	718,026	-	10,466	251,000	1,242,669

A Licence Income, Genetic Trout Study in the case of contract income

B The Department of Rural and Community Development provides funding from the Rural Recreation Fund to develop key angling projects in rural areas

C The Department of the Environment, Climate and Communications provides funding for any individual, angling club etc. with an interest in the development and improvement in Irish angling and/or fisheries under the National Strategy for Angling Development (NSAD).

D The Department of the Environment, Climate and Communications offers a restitution payment via the Eel Fisherpayers Support Scheme to former eel fisherpayers who were licenced/permitted to engage with the commercial eel fishery in 2007.

E Inland Fisheries Ireland has granted funding supported by the Dormant Account Fund which will benefit initiatives from groups in Ireland that are engaged in novice angling.

F Scientific Eels is a collaborative research initiative involving IFI scientists and a number of former eel fishermen to further develop national knowledge of the species and its medium to longer term potential for recovery

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

12 Capital account	2020	2019
	€	€
Balance at 1 Jan	21,716,312	19,892,996
Transfer (to) / from Income and Expenditure and retained revenue reserves		
To fund fixed asset purchases	1,428,047	3,966,484
Amount Released on Disposal of Fixed Assets	(5,198)	(13,080)
Amortisation in line with asset depreciation	<u>(1,829,906)</u>	<u>(2,130,088)</u>
	(407,057)	1,823,316
Balance	<u><u>21,309,255</u></u>	<u><u>21,716,312</u></u>

13 Related Party Disclosures

Inland Fisheries Ireland adopts procedures in accordance with the guidelines issued by the Department of Public Expenditure and Reform covering the personal interests of Board members. In the normal course of business, Inland Fisheries Ireland may approve grants or enter into other contractual arrangements with entities in which Inland Fisheries Ireland Board members are employed or are otherwise interested.

In cases of potential conflict of interest, Board members do not receive Board documentation or otherwise participate in or attend discussions regarding these transactions. A register is maintained and available on request of all such instances.

There were no 3rd party disclosures in 2020.

INLAND FISHERIES IRELAND

NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020

14 Retirement Benefit Costs

	2020	2019
Analysis of total Retirement benefit costs charged to the Statement of Income and Expenditure and		
a Retained Revenue Reserves	€	€
Current service costs	4,593,000	4,148,000
Interest on retirement benefit scheme liabilities	1,667,000	2,508,000
Employee contributions - Non Single Pension Scheme	(526,816)	(530,625)
Employee contributions - Single Pension Scheme	(178,710)	(124,210)
	<u>5,554,474</u>	<u>6,001,165</u>
b Movement in Net retirement benefit obligations during the financial year		
Net retirement benefit obligation at 1 January	(138,159,675)	(121,734,963)
Current Service Cost	(4,593,000)	(4,148,000)
Interest Costs	(1,667,000)	(2,508,000)
Experience gains on retirement benefit obligations	(245,000)	2,489,000
Change in assumptions underlying the present value of retirement benefit obligations	(14,350,000)	(15,225,000)
Total actuarial gain/(loss) in the year	(14,595,000)	(12,736,000)
Pensions paid in the period	3,035,694	2,967,288
Net retirement benefit obligation at 31 December	<u>(155,978,981)</u>	<u>(138,159,675)</u>
c Deferred Funding for Pensions		

Inland Fisheries Ireland recognises these amounts as an asset corresponding to the unfunded deferred liability for retirement benefits on the basis of the set of assumptions described above and a number of past events. These events include the statutory basis for the establishment of the pension scheme, and the policy and practice currently in place in relation to funding public service pensions including contributions by employees and the annual estimates process. Inland Fisheries Ireland has no evidence that this funding policy will not continue to meet such sums in accordance with current practice.

The Net Deferred Funding for retirement benefits recognised in the statement of Income and Expenditure and retained revenue reserves was as follows:

	2020	2019
	€	€
Funding Recoverable in respect of current year Retirement benefit costs	(6,260,000)	(6,656,000)
State Grant applied to pay retirement benefits	3,035,694	2,967,288
	<u>(3,224,306)</u>	<u>(3,688,712)</u>

The deferred funding asset for retirement benefits as at 31 December 2020 amounted to €155,982,828 (31 December 2019: €138,159,675)

	2020	2019	2018	2017	2016
d History of defined benefit obligations	€	€	€	€	€
Defined benefit obligations	(155,978,981)	(138,159,675)	(121,734,963)	(119,614,303)	(113,391,679)
Experience gains / (losses) on defined benefit scheme liabilities	(245,000)	2,489,000	2,005,000	(917,000)	1,114,000
Percentage of Scheme Liabilities	-0.2%	2%	2%	-1%	1%

INLAND FISHERIES IRELAND**NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020****14 Retirement benefit costs Cont.**

e The total amount recognised in the Statement of Comprehensive Income amounts to €14,595,000 (Experience gain/loss -€245,000 and changes in assumptions -€14,350,000)

f General Description of the Scheme

The pension scheme is a defined benefit final salary pension arrangement with benefits and contributions defined by reference to current "model" public sector scheme regulations. The scheme provides a pension (eightieths per year of service), a gratuity or lump sum (three eightieths per year of service) and spouse's and children's pensions. Normal Retirement Age is a member's 65th birthday and pre 2004 members have an entitlement to retire without actuarial reduction from age 60. Pensions in payment (and deferment) normally increase in line with general public sector salary inflation.

Section 50 of the Inland Fisheries Act states - "The pension payments and other superannuation liabilities of Inland Fisheries Ireland in respect of their former employees become on the establishment day the liabilities of IFI"

The valuation used for FRS102 disclosures has been based on a full actuarial valuation 31 December 2020 by a qualified independent actuary taking account of the requirements of the FRS in order to assess the scheme liabilities at 31 December 2020 of IFI.

The principal actuarial assumptions were as follows:

	31.12.20	31.12.19
Rate of increase in salaries	2.90%	2.90%
Rate of increase in pensions in payment	1.40%	1.40%
Rate of pensions increases - Superannuation Scheme	1.90%	1.90%
Rate of pensions increases - SPSPS	1.40%	1.40%
Discount Rate	0.70%	1.20%
Inflation Rate	1.40%	1.40%

The mortality basis adopted allows for improvements in life expectancy over time, so that life expectancy at retirement will depend on the year in which a member attains retirement age (age 65.) The table below shows the life expectancy for members attaining age 65 in 2021, 2041.

Year of attaining age 65	2021	2041
Life expectancy - male	21.4	23
Life expectancy - female	24	25.5

15 Lease Commitments

a Lease commitment payable after five years relates to a warehouse on Ballysimon Road, Limerick.

At 31 December 2020 Inland Fisheries Ireland had the following future minimum lease payments under non-cancellable operating leases for each of the following periods:

	€000's
Payable within one year	37
Payable within two and five years	147
Payable after five years	37
	<u>221</u>

Operating lease payments recognised as an expense were € 43,409 (2019: € 44,509).

b Capital Commitments

Capital Commitments of € 1,256,639.

INLAND FISHERIES IRELAND**NOTES TO THE FINANCIAL STATEMENTS FOR THE 12 MONTHS TO 31 DECEMBER 2020**

16 Inventory includes Stock of Work Wear €1.5M which will satisfy workwear requirements for the next 3-4 years.

17 Cash and cash equivalents

Included in IFI's year end bank balances of € 15.49 million are amounts of € 4.7 million being monies received but deferred at year end in respect of the Salmon Conservation Fund, the Rural Recreation Fund, the National Strategy for Angling Development and the Eel Fisherspersons Support Scheme, Scientific Eels and Angling for All. These monies are restricted for use on these projects.

The following funds are held by IFI and will be distributed when projects are complete - Salmon Conservation Fund €3.51 million, National Strategy for Angling Development € 718K, Rural Recreation Fund € 172K, Scientific Eels € 251K and Angling for All €10K. In addition there is deferred income of €91K.

Department of the Environment, Climate and Communications in relation to managing the balance in line with the Circular. Where Cash in hand is not ring-fenced (Salmon Conservation Fund, the Rural Recreation Fund, the National Strategy for Angling Development, the Eel Fisherspersons Support Scheme, Scientific Eels and Angling for All)

18 Events after the reporting date

The Covid-19 pandemic is a significant event during the reporting year. The Board is taking the situation seriously and is monitoring the situation, in conjunction with management, on an ongoing basis. The business continues to operate with measures in place to protect staff and Inland Fisheries Ireland stakeholders. Staff are working remotely and services continue to be provided. To date, the operations and most of the entity's activities are being maintained while adjusting to the different way in which the business is being delivered. While Inland Fisheries Ireland is unable to reliably predict the impact of Covid-19 on its cash flows, the performance and operations of Inland Fisheries Ireland are being monitored closely and regular cash flow forecasts are provided to the Board and to our parent department Department of the Environment, Climate and Communications.

Going concern - The Board considers that, as the entity provides a public service that is funded by moneys provided by the Exchequer, via its parent department Department of the Environment, Climate and Communications, it is appropriate to prepare these financial statements on a going concern basis.

19 Approval of Financial Statements

The financial Statements were approved by the IFI Board on the 16 December 2021