



Fisheries annual report 2021 to 2022

Date: January 2023

1. What we've done with our resources

During the financial year 1 April 2021 to 31 March 2022 we sold 934,760 fishing licences. This generated an income of £21,854,093. We also received £1,450,000 grant-in-aid (GiA) from central government.

With this money we were able to:

- check 41,446 fishing licences
- make 726 successful prosecutions
- attend 317 fisheries incidents involving dead or dying fish
- carry out 926 fish stock surveys
- supply and stock 627,495 coarse fish
- work with over 1,000 different project partners
- complete 30 fish pass solutions and remove 16 weirs or barriers
- open up or improve habitats for fish on 602 kilometres (km) of rivers
- enhance 168 hectares (ha) of stillwater fisheries

2. The activities we've spent the money on

We provided 29.5% of the income to complete work in all our 14 areas. This included monitoring, enforcement, fish stocking, fish rescues, responding to incidents and providing fisheries advice.

We contributed 25.7% of our income towards the fisheries project portfolio. This included funding the partnership work we do with other organisations. Examples of these are the Angling Trust, the Wild Trout Trust (WTT) and the local rivers trusts plus many others. It also included funding for the Angling Improvement Fund and Fisheries Improvement Programme projects.

We invested 14.6% of our income on support services. These included the costs of:

- IT infrastructure
- finance
- corporate services

• human resources

We spent 20.7% on national services. This expenditure covered the costs of:

- fishing licence sales administration
- prosecutions
- the National Fisheries Laboratory
- contributions to our National Customer Contact Centre
- Estates and Fleet Operations

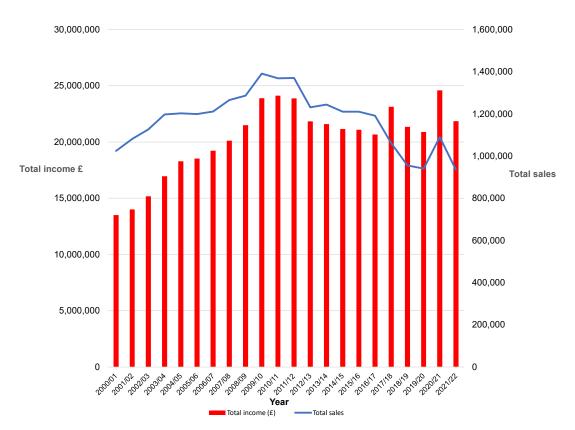
We used 9.5% to support government and input to the strategic direction for achieving our fisheries priority outcomes. This included the costs of our national fisheries team.

Where fishing licence income is spent

Income	Percentage
Area	29.5%
Fisheries project portfolio	25.7%
Support services	14.6%
National services	20.7%
Government support and strategic services	9.5%

3. Fishing licence sales and income

This graph shows the total sales and total income from the financial year 2000 to 2022.



In the previous decade up until the financial year 2019 to 2020, the number of people that went fishing and bought licences had declined each year. This led to a fall in our fishing licence income by approximately 12% and a drop in licence sales by over a third. As income and sales declined, we had less money to spend on our fisheries work. However, we managed to restrict the effects of this through efficiency savings and better partnership working. During that period we increased prices just once in 2017. We deliberately kept prices low to encourage angling and not make it too expensive.

Since 2020 COVID-19 has had wide ranging effects on society. When lockdown restrictions eased on 13 May 2020 people were keen to enjoy outdoor activities to improve their health and wellbeing. And as a result we saw an increase in people buying fishing licences. Subsequently in the financial year 2020 to 2021 we sold 1,090,068 licences to 958,279 individual anglers. This represented an increase of 17% on fishing licence sales and generated £24,583,342 income. As society returned back to a more normal footing in 2021 to 2022 we have seen angling participation rates and fishing licence sales return to pre pandemic levels.

4. How partnerships help us achieve our objectives

By working in partnership with other like-minded groups and organisations we can achieve more with our money and provide better fisheries outcomes.

We worked with over 1,000 partners in 2021 to 2022. These included the:

- Angling Trust
- WTT
- Institute of Fisheries Management
- Riverfly Partnership
- local river trusts, angling clubs, charities and others

The work we do with partners includes:

- carrying out projects to improve fish stocks and habitats
- providing new facilities for anglers and making fisheries more accessible
- promoting angling and giving more people the opportunity to try fishing
- joined up enforcement and intelligence sharing

The Angling Trust

We commission the <u>Angling Trust</u> to carry out certain activities to improve and develop angling under our National Angling Strategic Services (NASS) contract. The service is worth about £1.35 million every year. The current contract was awarded in 2019, following competitive tender, and will run for 4 years until 31 March 2023.

One of the main objectives is to increase the number of people fishing and buying a licence. COVID-19 continued to influence the number and format of Get Fishing events organised during the year. Although fewer participation events were run, the quality of events gave attendees greater learning time and an enjoyable fishing experience. The Get Fishing Award scheme, launched in 2020, continued to prove popular with new anglers attending for 3 days and progressing through bronze, silver and gold levels. At the end participants get a fishing licence and are hopefully on the path to becoming a lifelong angler.

In 2021 to 2022 the Angling Trust was supported by many delivery partners, most notably the <u>Canal and River Trust</u> and <u>Get Hooked on Fishing</u> to run 1,707 angling participation events. This resulted in 26,636 people trying fishing for the first time.

Numbers of events and attendees rose significantly compared to 2020. The Take a Friend Fishing initiative in association with the Angling Trust and the <u>Angling Trades</u> <u>Association</u> continued. Also, National Fishing Month restarted in 2021. This celebration of angling involved a significant marketing campaign and in particular concentrating on new anglers.

The Angling Trust also trained a number of people who helped introduce newcomers to angling. They used Environment Agency bursaries and we saw 157 new Level 1 and 97 Level 2 licenced coaches.

In 2021 to 2022 the <u>Get Fishing Fund</u> awarded 118 grants totaling £195,785. The beneficiaries included young person's groups and charities involved in drug and alcohol abuse. We also invested in angling interventions that improved mental wellbeing.

As part of the commissioned partnership 2 new campaigns were launched this year:

- Get Fishing for Wellbeing
- <u>We Fish as One</u> (community inclusion project)

In total the angling participation programme of work has been possible with an estimated £960,000 match funding.

The way the Angling Trust engaged with anglers changed during COVID-19 by developing online forum events. Twenty three virtual meetings were held covering a broad range of topics including fish health advice and behind the scenes at Calverton Fish Farm. We also provided targeted advice on preparing fisheries for prolonged dry weather and health and safety considerations. The total number of attendees was 1,357. All forums were posted on the Angling Trust website. By the end of the year there were 3,466 additional viewings.

Some face-to-face meetings were held from October 2021 onwards. Seven local forums were organised and 170 people attended them.

The <u>Fishing Buzz</u> website was created in response to the COVID-19 lockdown to keep anglers engaged with their 'fishing habit'. It has since evolved to provide high quality news articles, features and videos to all types of anglers. In 2021 to 2022:

• 277 items of content were published

• there were 91,475 user sessions

The Angling Trust used social media channels such as Instagram and Twitter on behalf of the Environment Agency. These contained fisheries features and continued to be popular through 2021 to 2022. A minimum of 6 Environment Agency related items were posted each quarter on the main Angling Trust Facebook page, the total:

- reach was 1.1 million
- engagement was 89,000

Six regional Angling Trust pages that predominantly feature Environment Agency information grew to reach 12,320 by the year end, the total:

- reach was 1.6 million
- engagement was 103,000

Twenty five articles were posted on the <u>Lines on the Water</u> blog. They were read over 105,000 times.

The Angling Trust, as part of the predation control advisory work, responded to 994 requests for help relating to otter or fish-eating bird problems during 2021 to 2022. This included attending meetings, site visits and telephone or email contact.

During 2021 to 2022 we funded 2 new positions focusing on invasive non-native species and biosecurity. Following recruitment in June 2020 these officers responded to over 100 requests for help from fisheries with issues ranging from giant hogweed to signal crayfish. In the Thames area we concentrated on co-ordinating action against rivers affected by floating pennywort.

The new positions concentrated on the Anglers Against Litter campaign. They continued to support the <u>Anglers National Line Recycling Scheme</u> (ANLRS). They did this by providing recycling bins for fisheries and at tackle shops for the disposal of unwanted fishing line. They also helped provide equipment and support for clubs organising litter picking days.

WTT

We continue to enjoy a productive partnership with the <u>WTT</u>. Our joint aim is to involve people and communities in conservation. This includes enhancing the natural environment, especially our rivers, their trout and other wildlife.

We contributed £90,000 to fund advisory work and £34,000 for project costs. In 2021 to 2022 they completed:

- 64 advisory visits and reports of recommendations for habitat improvement work
- 23 practical river improvement workshops
- 9 fisheries improvement projects
- activities that directly enhanced 137.3km of rivers across England

They recruited 1,013 volunteers over the year who provided 6,390 hours of support. The WTT generated £998,000 of co-funding (cash and in-kind) towards the partnership (this represents a 1:8 ratio for our investment).

The Riverfly Partnership

The Anglers' Riverfly Monitoring Initiative (ARMI) is a citizen science initiative. Volunteers are trained to carry out standardised monitoring of aquatic invertebrates in rivers. They do this monthly and use it to assess water quality.

The ARMI is hosted by the Freshwater Biological Association. We provided the <u>Riverfly Partnership</u> funding of £32,941.

In 2021 to 2022 Riverfly volunteers have:

- uploaded 3,587 survey records to ARMI database
- monitored 724 sites across 324 rivers and 97 catchments
- passed on 105 trigger level alerts (indicating a possible pollution impact)
- generated £403,242 in match funding

There are 390 active samplers.

5. Improvement projects

There are 2 types of projects funded directly by fishing licence income, they are:

• Angling Improvement Fund (AIF) projects managed by the Angling Trust through the NASS contract

• Fisheries Improvements Programme (FIP) projects managed by local Environment Agency teams

In addition, benefits to fisheries were provided by other projects carried out by the Environment Agency. Most notably the Water Environment Improvement Fund (WEIF) that provided Water Framework Directive outcomes funded as GiA from central government.

In total we spent just over £1 million of fishing licence income and £39 million of other funding in projects to improve fisheries.

Angling Improvement Fund (AIF projects)

Fifty projects were completed during the year. There were 2 themes:

- protection of fisheries from predation by otters and cormorants (40)
- invasive non-native species control and biosecurity measures (10)

The funding for AIF projects came from:

- fishing licence income £195,460
- match funding including cash from partners, match funding grants or the 'in kind' time of volunteers – £429,194

See the <u>map for locations of the AIF projects</u> for locations of the AIF projects.

Fisheries Improvement Programme (FIP) projects

One hundred and twenty-two projects were completed during the year. Working with around 140 partners we improved 21km of rivers and 168ha of stillwaters. Five fish passes were constructed. Around half the projects provided improved angler access to fisheries especially at stillwater venues.

The funding of FIP projects came from:

- fishing licence income £586,407
- match funding £735,485

See the map for locations of the FIP projects.

Water Environment Improvement Fund (WEIF)

Projects are typically organised through catchment partnerships. Habitat improvements can benefit fish and fisheries.

Working with 973 partners we improved 581km of rivers. Twenty-five fish and eel pass improvements were built and 16 weirs or barriers removed.

The funding for WEIF projects was:

- £15.7 million from Environment Agency funding (not fishing licence income)
- £22 million from match funding

6. Coarse fish stocking

We ran a coarse fish hatchery at Calverton near Nottingham. This is funded by fishing licence income. This rears fish to help:

- replenish stocks after an environmental incident
- kick-start the recovery of fisheries after they have recovered from long term issues, for example pollution

In 2021 to 2022 we stocked 627,495 fish into rivers and stillwaters around the country. This was made up of the following species:

- barbel 139,662
- bream 64,035
- chub 39,286
- dace 64,800
- roach 101,221
- crucian carp 34,349
- tench 74,108
- rudd 20,534
- grayling 89,500

These were a mixture of one-and two-year-old fish. In addition to that figure we also stocked in excess of 2.4 million advanced reared fish larvae.

7. National Fisheries Laboratory

We operate a National Fisheries Laboratory based in Brampton, Cambridgeshire which is largely funded through fishing licence income.

The laboratory identifies and monitors current and future threats to fisheries and the aquatic environment from fish disease and non-native fish species. This work limits the impacts. The work is essential for:

- ongoing monitoring and surveillance of the health status of fish populations
- informing fishery management actions
- giving advice
- regulating

It involves:

- detailed mortality investigations
- health checks
- fish ageing analysis
- monitoring
- surveillance
- providing technical advice, training and support to our staff and stakeholders

In 2021 to 2022 the laboratory:

- assessed 146 fish mortality events related to potential fish disease incidents
- carried out full fish disease diagnostic investigations into fish kills at 43 fisheries
- did 36 health checks to enable safe stocking of over half a million fish

- provided response and expert support for identifying, monitoring, managing, risk assessing and regulating 7 priority non-native fish species, 2 new and emerging pathogens and a range of existing pathogens
- analysed 2,453 sets of fish scales to determine the age structure and performance of fish populations
- carried out 50 additional age surveys to inform fish disease incidents
- developed new and improved diagnostic techniques to detect existing and novel fish and pathogens
- carried out 20 laboratory investigations to support national projects for high priority species or risks to fisheries, for example critical eel passage
- provided advice, training, guidance and support to internal staff and stakeholders
- responded to over 1,500 queries to support national incidents, fishery management advice and guidance

8. National Fish Movements team

The National Fish Movements team is based in Brampton, Cambridgeshire, and is mainly funded through fishing licence income.

The Fish Movements team are a national customer facing team. They are responsible for administrating, processing and issuing fish movement permissions. This service is integral to regulating fisheries. Regulation protects native fish stocks and the wider aquatic environment from adverse impacts. For example where inappropriate fish are introduced or removed into or from the wild (excluding fish farms).

The team's service is for internal and external customers and includes issuing:

- fish movement permissions for introducing and keeping fish
- fish removal authorisations (including crayfish), and authorisations and licences for commercial fisheries (salmon, sea trout, eel, elver, smelt and lamprey)

The team collect fisheries exploitation data (catch returns) for salmon and sea trout and publish the annual Salmonid and Freshwater Fisheries Statistics for England and Wales. The Fish Movements team also support fisheries enforcement and provide technical advice to staff, external customers and stakeholders. In 2021 to 2022 the team issued:

- 1,735 Section 27A authorisations to remove fish and crayfish
- 677 permits to introduce and or keep fish
- 125 commercial salmon and sea trout licences
- 149 commercial elver authorisations
- 41 commercial eel authorisations

They also collated and reported on 16,463 salmon and sea trout rod catch returns.

9. Enforcement

We make sure anglers comply with regulations to protect fish stocks, such as during the close season.

In 2021 to 2022 we:

- checked 41,446 fishing licences
- issued 1,936 offence reports
- successfully prosecuted 726 anglers for fishing without a licence

It can take up to 6 months to bring a case to prosecution. Therefore the number of prosecutions may not reflect the number of people issued offence reports during this financial year.

The percentage of anglers who do not buy a licence and get caught by our enforcement officers was 4.46%. In total £114,371.50 was issued in penalties against anglers over the year. The average penalty received was £273.83.

An integral part of our enforcement activity is the Fisheries Enforcement Support Service (FESS) provided by the Angling Trust. This includes the Voluntary Bailiff Service which operates across England with a total of 678 volunteers, as of 31 March 2022.

Voluntary bailiffs:

- did 13,817 patrols
- gave 31,070 volunteer hours

- carried out 118 joint patrols with the Environment Agency
- carried out 123 joint patrols with the police
- submitted 766 incident reports to the Environment Agency, police and other agencies
- submitted 393 intelligence logs to the Environment Agency and or police

Forty one police forces have joined up to <u>Operation Leviathan and</u> <u>Traverse</u> initiatives as part of FESS.

10. Incident response

We attended 317 incidents involving dead or dying fish. These incidents included:

Type of incident	Number of incidents	Percentage of total incidents
Pollution	16	5.05%
Fish disease	22	6.94%
Warm or dry weather or algae	119	37.54%
Illegal fishing	21	6.62%
Fishery management	11	3.47%

Type of incident	Number of incidents	Percentage of total incidents
Other causes	69	21.77%
Not identified	59	18.61%
Total	317	100%

11. Monitoring

Monitoring fish populations helps us to:

- inform our management decisions
- report on the Water Framework Directive (to show the state of the water environment)

We carry out surveys either every year, 2 years, 3 years or 6 years. The frequency depends on why we are collecting information at the site. Not every water body is monitored for fish as we prioritise those with angling interest and those considered at most risk.

During 2021 to 2022 we did 926 fish stock surveys. This is still down from the 1,521 surveys done in 2019 to 2020. In 2020 to 2021 we did 119 surveys which was because of the effect of COVID-19 on operational activities.

Waterbody status for fish as indicated by these and previous years' surveys and other data showed:

- 41% good or better
- 28% moderate
- 24% poor

• 7% – bad

We also use our fisheries monitoring to assess the status of migratory fish stocks in our main salmon and sea trout rivers. We employ a range of fish counters and use rod catch data to make these assessments.

In 2021, for England's 42 principal salmon rivers, we classified:

- 1 not at risk
- 4 probably not at risk
- 6 probably at risk
- 31 at risk

Salmon populations in England remain in a critical state.

For England's 44 principal sea trout rivers, we classified:

- 7 not at risk
- 18 probably not at risk
- 7 probably at risk
- 12 at risk

See the map showing the status of salmon and sea trout rivers.

The declared salmon rod catch for England was 4,769 salmon, which was 50% lower than 2020 (9,520).

The declared sea trout rod catch in England was 8,582, which was 28% lower than 2020 (11,881).

See a detailed report on the status of salmon stocks across England and Wales in <u>The Annual Assessment of Salmon Stocks and Fisheries in England and Wales</u> <u>2021</u>. You can find information on rod catches from individual rivers in our <u>Salmonid</u> <u>and freshwater fisheries statistics reports for England and Wales 2021</u> report.

12. Research and development

Our research and development programme helps to make sure we have a rigorous evidence base to support risk-based decision making and provide sustainable fisheries management.

Between April 2021 and March 2022, we were engaged in various projects to address the main evidence gaps and improve our understanding of issues affecting fish populations. Where possible, we work with our partners to achieve shared research objectives more cost-effectively.

We have listed the national projects done by the Chief Scientist's Group under the fisheries research and development programme. This includes projects completed in 2021 to 2022 and work still ongoing. A <u>list of publications relating to recent and past</u> <u>projects</u> is available on GOV.UK.

- Strategic review of data and information on coarse fish in rivers detailed examination of fishery survey data from a number of rivers continued; selected rivers include the Thames, Yorkshire Dales rivers, 3 Fenland drain systems, Bristol Avon, Soar, Wensum, Waveney, Suffolk Stour, Essex Pant and Blackwater system, Medway and Yorkshire Ouse. Data and information from this project will be used in the reviews of our fisheries monitoring programmes
- Review of Salmon stock assessment methodologies joint work with Cefas, Natural Resources Wales and the Game and Wildlife Conservation Trust continues, reviewing all aspects of salmon stock assessment methodology and management decision structures in response to challenges to our management approaches from external stakeholders
- Beavers and fish we continue to advise on proposed new research on interactions and review emerging evidence and documentation on this subject
- Use of environmental DNA (eDNA) for fish sampling we continue to advise on the use of eDNA for various fisheries-related purposes due to growing interest in the methodology and ongoing academic research
- Natural capital value of inland fisheries we are looking at how specific values for angling can be incorporated into the new Natural Capital Register and Account Tool

We are supporting the development of indicators for the status of fish populations in rivers for the 25 Year Environment Plan.

We also have a 'watching brief 'on a variety of other research areas relevant to fisheries including:

- endocrine disruption in fish
- microplastics research
- climate change
- fish and eel passage and protection
- impacts of light on fish