



## Where your money goes

How we spend your money to improve fish stocks and fisheries

We are The Environment Agency. It's our job to look after your environment and make it **a better place** – for you, and for future generations.

Your environment is the air you breathe, the water you drink and the ground you walk on. Working with business, Government and society as a whole, we are making your environment cleaner and healthier.

The Environment Agency. Out there, making your environment a better place.

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# 1 Introduction

This report has been compiled to form a record of fisheries activity and expenditure within the Environment Agency for the 2009/10 year. As well as acting as an historical record, this report will also act as an important benchmark for our fisheries work.

The information and data contained within this report can form a reliable basis for external communications to help show that we are using our funds wisely to improve and protect the environment for fish and those who enjoy fishing.

Our specific duties for fisheries as interpreted by Government are shown in Appendix 1. Our fisheries work contributes to two environmental outcomes identified in our Corporate Strategy. These are as follows:

- The quality of rivers, lakes, estuaries and coastal waters will continue to improve for the benefit of people, the economy and wildlife
- More people from all backgrounds enjoy water and wetlands for sport and recreation

We also aim to put customers at the centre of everything we do, and provide them with the service they need.

For more details on how we plan to deliver these outcomes see our Corporate Plan sub-strategies for Angling, Navigation and Recreation and Biodiversity in Appendix 2 or see our [sub strategies](#).

These outcomes can be summarised as:

- An improved environment and more fish
- More people fishing and more places to fish
- More satisfied customers

This report gives information on what we have done to achieve these three outcomes for Fisheries in the year 2009/10.

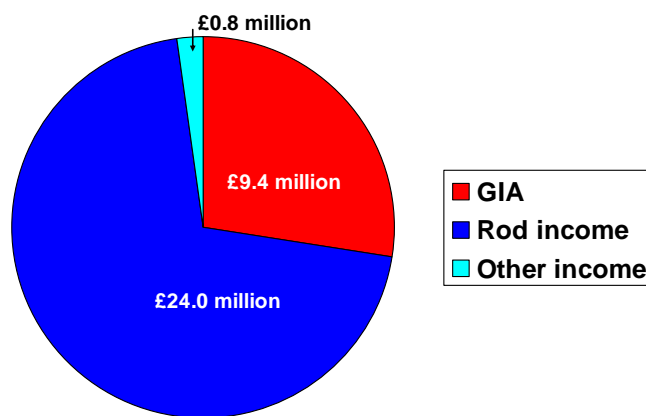


# 2 Income and Expenditure

## 2.1 Income

Fisheries is funded from a combination of Government Grant in Aid (GiA), income from the sale of rod and net licences, and other local sources.

Figure 1. shows the split of the £34.2 million received in 2009/10. (Please note this refers to the planned income at the beginning of the financial year.)



**Figure 1. Sources of income to fund our Fisheries service 2009/10**

## 2.2 Expenditure

The funding is used specifically to fund work to improve and develop fisheries. We work in collaboration with partners where possible which increases the total spend on environmental improvements. The expenditure on fisheries development projects increases significantly once partners' contributions are taken into account and in 2009/10 the total benefit to fisheries from project work in England and Wales is at least £19 million.

We also have major leverage on other processes for the benefit of fisheries and the environment. Our wider Environment Agency work also has significant benefits to the environment and our fish stocks. Over the next 5 years £4.4 billion will be spent by water companies to improve river quality. Wherever possible we also achieve significant environmental gain on the back of our capital spend such as that to improve flood defences. Examples of contributions from other internal departments such as Flood and Coastal Risk Management can be seen in our project list in Appendix 4.

Figure 2. indicates how Fisheries money is allocated and where this money is spent across the Environment Agency's fisheries activities. Around 700 people are involved in delivering the outcomes for fisheries for all or part of their time, which is equivalent to 420 full time staff.

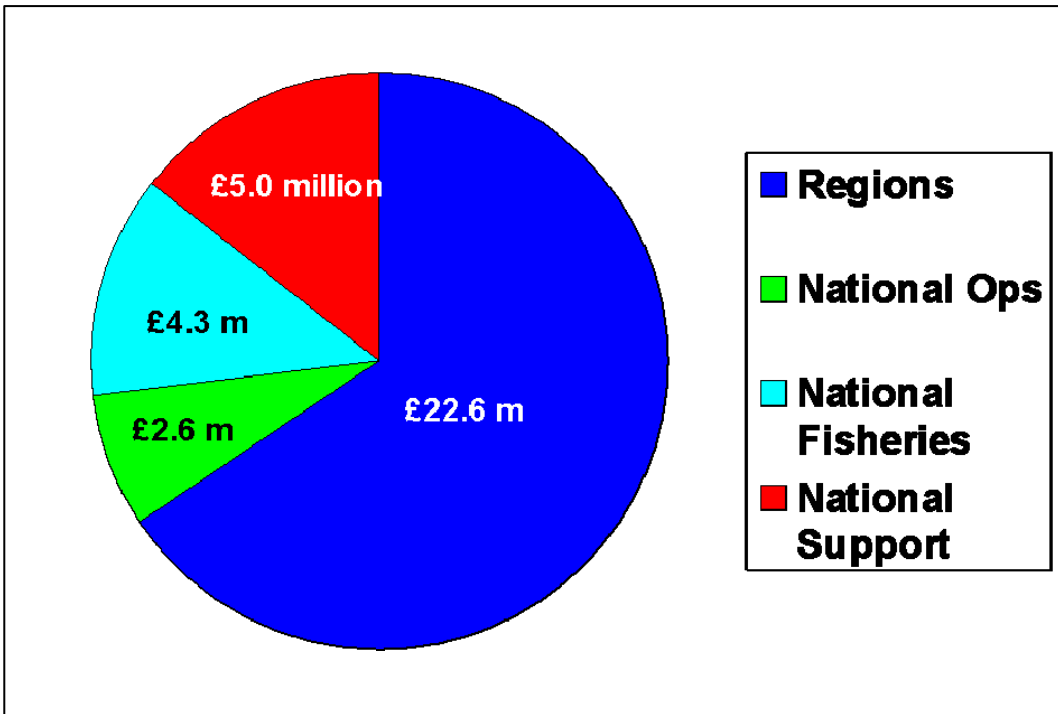


Figure 2a. Fisheries allocation in millions of pounds 2009/10

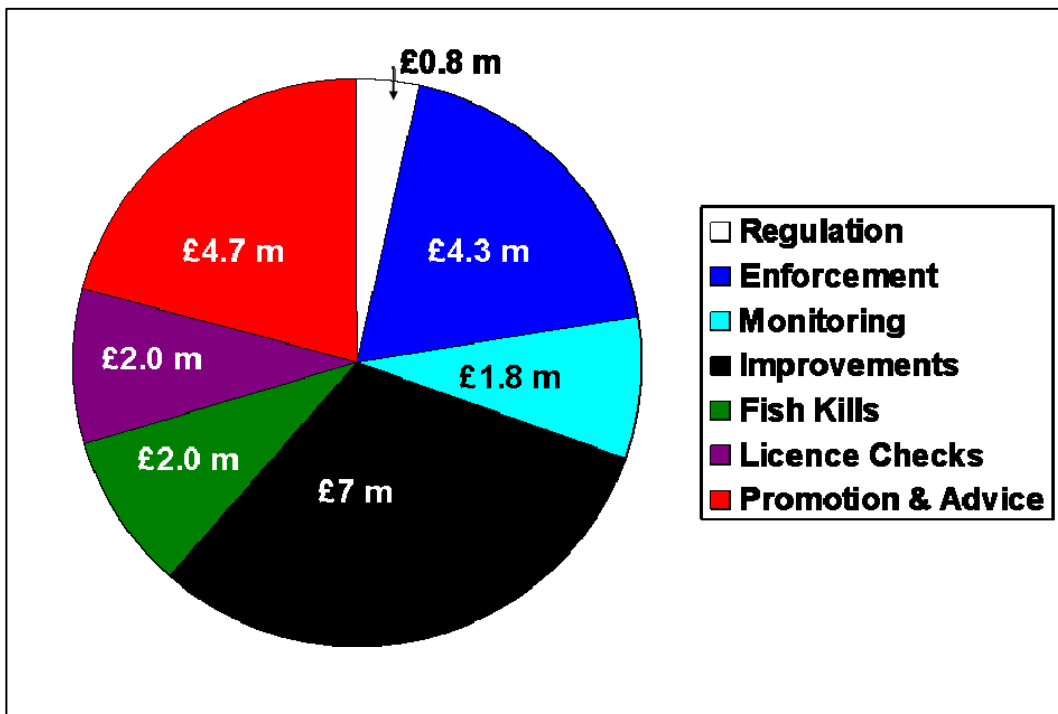


Figure 2b. Regional Fisheries expenditure by activity 2009/10

Appendix 3 describes the key activities undertaken against each of these categories of expenditure.

# 3 An improved environment and more fish

## 3.1 Coarse & trout projects

We have a national programme of habitat improvement for coarse fish and trout. We planned to invest over £2.7 million of rod licence income to the projects that also included improvements to access to fisheries and facilities for anglers. We planned 179 but we were able to complete over 240 from this source due to increased income from rod licence sales. Table 1 shows the regional breakdown of these projects.

Most of these projects are carried out in collaboration with partners such as the Association of Rivers Trusts (ART), Wild Trout Trust (WTT) and Angling Trust.



**Figure 3. Restoration of the Eynsham Loop, Upper Thames, Oxfordshire. A partnership project in Thames region.**

**Table 1. Coarse and trout fisheries improvement projects in 2009/10**

| Region     | Number of fisheries & habitat improvements planned | Number of fisheries & habitat improvements completed |
|------------|----------------------------------------------------|------------------------------------------------------|
| Anglian    | 22                                                 | 24                                                   |
| Midlands   | 21                                                 | 35                                                   |
| North East | 15                                                 | 17                                                   |
| North West | 39                                                 | 58                                                   |
| Southern   | 22                                                 | 22                                                   |
| South West | 24                                                 | 40                                                   |
| Thames     | 14                                                 | 23                                                   |
| EA Wales   | 22                                                 | 22                                                   |
| Total      | 179                                                | 241                                                  |

In addition to the above, we built 37 fish passes that opened up in excess of 900km of river to fish species.



**Figure 4. We have improved fish passage at Botley Mill on the River Hamble.**

**Table 2. Fish passes built (excluding eel and elver) in 2009/10**

| Region     | No. of passes | Length of river (km) |
|------------|---------------|----------------------|
| Anglian    | 4             | 89.8                 |
| Midlands   | 1             | 20                   |
| North East | 3             | TBA                  |
| North West | 11            | 534.5                |
| Southern   | 8             | 75                   |
| South West | 7             | TBA                  |
| Thames     | 5             | 12                   |
| EA Wales   | 3             | 171                  |
| Total      | 37            | Minimum 902.3        |

Some 210 passes to help facilitate the free passage of eels and elvers were also created on rivers during this year.

Whilst Tables 1 and 2 provide details of projects delivered from our core fisheries budget, it is important to note these only represent part of the overall project activity to benefit fisheries. Other internal departments and external partners also make key contributions and deliver numerous other 'on the ground' projects that benefit fisheries.

Details of in excess of 500 projects to benefit coarse fish and trout undertaken in 2009/10 can be seen in Appendix 4 (a separate Excel spreadsheet) giving a breakdown by Region and Area and showing expenditure and levels of contribution from internal and external partners. Projects are categorised by type and grouped by the types of fish species they benefit.

A summary by type of project is shown in Table 3. The Environment Agency fisheries budget contributes some £4.1 million (primarily from coarse and trout rod licence income) towards a total project spend benefiting fisheries of over £19.1 million. For every £1 of rod licence income over £4.50 of benefit to fisheries was generated thanks to our partnership working.

In England Defra contributed some £3.7 million towards projects that helped to improve the ecological status of fish under the Water Framework Directive. Many of these projects involved facilitating the free passage of fish around artificial obstructions.

Other Environment Agency departments contributed some £3.5 million – primarily through the Flood Risk and Coastal Management capital works programme. External partners contributed over £7 million. Over £11.3 million was spent directly to benefit coarse and trout fisheries and in addition another £4.8 million was spent on projects that benefit all species.

Over £8.8 million was spent on projects to restore or improve fisheries in rivers; over £4 million was spent on improving fish passage and £325k on stillwater improvements.

Over £4.25 million was spent to improve angler access to fisheries and over £1 million was spent encouraging angling participation with the associated social and economic benefits.

| Region                              | Anglian | Midlands | Northeast | Northwest | Southern | South West | Thames | Wales  | National (salmon/ sea trout) | National (coarse/ brown trout) | Total (£k) |
|-------------------------------------|---------|----------|-----------|-----------|----------|------------|--------|--------|------------------------------|--------------------------------|------------|
| Coarse/Trout                        | 1272.9  | 960.9    | 3464.1    | 433.6     | 1072.8   | 279.6      | 2765.4 | 702.1  | -                            | 402.0                          | 11353.4    |
| Salmon/Sea Trout                    | 13.1    | 410.0    | 254.0     | 118.5     | 212.5    | 511.5      | -      | 372.4  | 431.0                        | -                              | 2323.0     |
| Eels                                | 85.6    | 38.0     | 20.0      | 64.5      | 203.5    | 54.6       | 149.8  | 3.3    | -                            | -                              | 619.3      |
| Biodiversity species                | -       | -        | -         | 10.0      | -        | -          | -      | -      | -                            | -                              | 10.0       |
| Multiple species                    | 325.5   | 114.7    | 727       | 1419.5    | 780.0    | 816.1      | -      | 674.1  | -                            | -                              | 4856.9     |
| Total                               | 1697.1  | 1523.6   | 4465.1    | 2046.1    | 2268.8   | 1661.8     | 2915.2 | 1751.9 | 431.0                        | 402.0                          | 19162.6    |
| River restoration                   | 1185.7  | 568.2    | 1562.0    | 725.2     | 927.4    | 812.2      | 2008.9 | 648.6  | 286.0                        | 120.0                          | 8844.2     |
| Fish passage                        | 152.6   | 327.5    | 1160      | 839.0     | 704.5    | 464.6      | 175.8  | 71.0   | 145.0                        | -                              | 4040.0     |
| Stillwater restoration              | 2.5     | -        | -         | 89.3      | 75.0     | 25.1       | 134.6  | -      | -                            | -                              | 326.5      |
| Angling participation access        | 266.3   | 191.0    | 1572.6    | 310.2     | 491.4    | 323.9      | 595.9  | 777.4  | -                            | -                              | 4528.7     |
| Angling participation coaching      | 35.0    | 416.7    | 69.5      | 80.3      | 70.5     | 27.0       | -      | 113.4  | -                            | 282.0                          | 1094.4     |
| Information /Education              | 55.0    | 20.3     | 101.0     | 2.1       | -        | 9.0        | -      | 141.4  | -                            | -                              | 328.8      |
| Total                               | 1697.1  | 1523.6   | 4465.1    | 2046.1    | 2268.8   | 1661.8     | 2915.2 | 1751.9 | 431.0                        | 402.0                          | 19162.6    |
| Fisheries                           | 511.0   | 389.0    | 494.5     | 644.3     | 395.3    | 490.2      | 317.5  | 319.7  | 161.0                        | 402.0                          | 4124.4     |
| Internal contribution               | 316.7   | 46.0     | 1709.0    | 596.6     | 401.4    | 123.0      | 330.2  | 60.8   | -                            | -                              | 3583.7     |
| Defra Water Framework Directive GiA | 420.0   | 502.0    | 631.0     | 559.0     | 581.5    | 397.4      | 608.3  | -      | -                            | -                              | 3699.2     |
| Welsh Assembly Government GiA       | -       | -        | -         | -         | -        | -          | -      | 510.3  | -                            | -                              | 510.3      |
| External partners                   | 449.4   | 586.7    | 1630.6    | 246.2     | 890.6    | 651.2      | 1659.2 | 861.1  | 270.0                        | ?                              | 7245.0     |
| Total                               | 1697.1  | 1523.6   | 4465.1    | 2046.1    | 2268.8   | 1661.8     | 2915.2 | 1751.9 | 431.0                        | 402.0                          | 19162.6    |

**Table 3. Project expenditure on fisheries work in England and Wales 2009/10. Includes Environment Agency and partnership expenditure.**

## 3.2 Salmon, sea trout and eel projects

We have specific plans to cover the management of threatened stocks of eel, salmon and sea trout stocks. Our salmon and sea trout plans set out the extent to which individual stocks should be exploited, as well as physical habitat improvements, work to improve water quality and quantity, and enforcement of local and national byelaws. Over 500 actions have been completed in this year. A regional breakdown of these plans can be seen in Table 4. In 2009/10 we were able to fund 17 salmon and sea trout projects to the value of £191k. A full list of these projects is given in Appendix 5.

**Table 4. Progress against our plans for salmon, sea trout and eel**

| Region     | Salmon and sea trout actions planned | Salmon and sea trout actions completed | Eel actions planned | Eel actions completed |
|------------|--------------------------------------|----------------------------------------|---------------------|-----------------------|
| Anglian    | 0                                    | 0                                      | 19                  | 19                    |
| Midlands   | 21                                   | 21                                     | 16                  | 17                    |
| North East | 106                                  | 106                                    | 7                   | 6                     |
| North West | 160                                  | 160                                    | 17                  | 17                    |
| Southern   | 41                                   | 44                                     | 8                   | 9                     |
| South West | 105                                  | 105                                    | 13                  | 13                    |
| Thames     | 14                                   | 14                                     | 13                  | 13                    |
| EA Wales   | 76                                   | 69                                     | 14                  | 14                    |
| Total      | 523                                  | 519                                    | 107                 | 108                   |

Eel management plans have also been drawn up for key catchments. Recent national surveys show that pollution, parasites and loss of habitat for adult eels, and obstacles to migration, mean that stocks of glass eels are at just 30% of the numbers seen in the 1980s. For example as part of the Thames Eel Management Plan we have begun to build eel passes to overcome the 400 obstructions identified on the Thames and its tributaries.

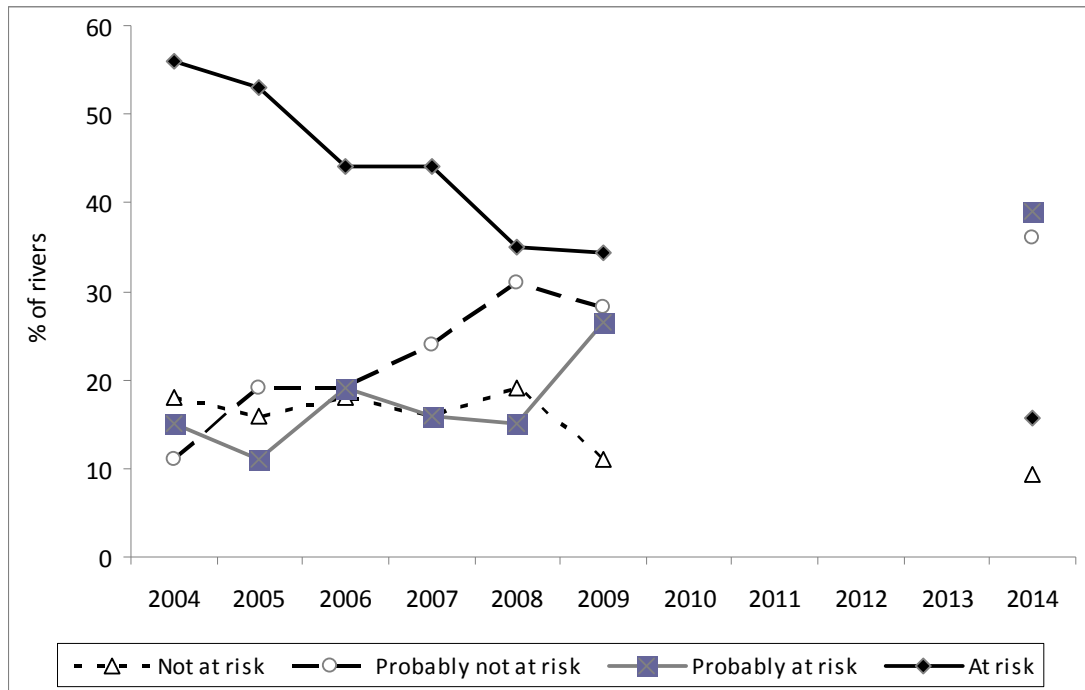
## 3.3 Salmon rivers

Each of the 64 principal salmon rivers in England and Wales has a conservation limit set based on the number of spawners needed to maintain a sustainable population. Each river is classified annually, based mainly on catch, according to the probability that salmon stocks are meeting the objective of exceeding this conservation limit four years out of five (management objective). The rivers are placed in one of the following four categories:

1. Not at risk - have a high probability (> 95%) of meeting the management objective;
2. Probably not at risk - have a probability of between 50% and 95% of meeting the management objective;
3. Probably at risk - have a probability of between 5% and 50% of meeting the management objective; and
4. At risk - have a very low probability (<5%) of meeting the management objective.

The estimated number of adult salmon returning to our rivers in 2009 was amongst the lowest on record and the grilse component appears to be particularly hard hit.

**Figure 5: The proportion of salmon rivers with spawning stocks in each risk category from 2004 to 2009 and as predicted for 2014.**



From: Annual assessment of salmon stocks and fisheries in England and Wales 2009  
<http://publications.environment-agency.gov.uk/pdf/GEHO0410BSLR-e-e.pdf>

The good news is that the proportion of rivers in category 4, ‘at risk’, has been declining and is predicted to decline further. Our target was for fewer than 40% of rivers to be ‘at risk’ in 2009 and we achieved this. The proportion of rivers in the intermediate categories, ‘probably at risk’ and probably not at risk’ has increased accordingly.

The bad news is that 61% of rivers remain either ‘at risk’ or ‘probably at risk’. Also, only 11% are classed as ‘not at risk’ and that proportion is not predicted to improve. So there is no room for complacency.

This outcome is reflected, more or less, in the status of salmon stocks across southern Europe. Despite huge reductions in exploitation at sea, in estuaries and, in some cases, in rivers, salmon stocks remain depressed. We think this is due mainly due to continuing poor survival in the marine environment attributed to climatic effects. This means we have to do all that we can to protect and improve the freshwater environment over which we have more control.

Sea trout catches in 2009 were also poor. We are developing a method of classifying sea trout rivers that will use the same terminology as for salmon and will be formally reported from 2011.

Appendix 5 lists projects undertaken in 2009/10 aimed specifically at improving salmon and sea trout stocks and include schemes to improve fish passage, spawning gravels and juvenile habitat. These have been funded by Grant-in -Aid from Government via the ‘Sea Trout and Salmon Development Programme’. Many of these schemes have been undertaken in collaboration with other partners such as Rivers Trusts and local clubs and landowners. Examples include funding the design and ground

work investigations to remove a fish barrier on the River Taw in Devon to then allow subsequent collaborative bids to carry out the work in future years; and blocking grips in the Wyre catchment in Lancashire to allow the water to feed the correct tributaries by percolating down the fell side and so reduce run off into a major salmon spawning beck.

### 3.4 Fish stocking

Coarse fish are produced at our Calverton Fish Farm to improve rivers where habitat has been improved, or water quality has recovered. The numbers of each fish species produced during 2009 are shown in Table 4.

**Table 5. Coarse fish stocked from Calverton in 2009/10**

| Species      | Number  |
|--------------|---------|
| Barbel       | 47,020  |
| Bream        | 28,200  |
| Chub         | 51,665  |
| Crucian carp | 12,250  |
| Dace         | 70,114  |
| Grayling     | 35,500  |
| Roach        | 89,855  |
| Tench        | 26,240  |
| Rudd         | 200     |
| Total        | 361,044 |

The Environment Agency has several fish hatcheries devoted to producing fish for stocking into rivers. Salmon are produced and paid for by specific schemes as mitigation for significant impacts of habitat or access – examples include Cardiff Bay barrage. See Table 6 for details.



**Figure 6. The River Wandle receives a boost from Calverton Fish Farm**

**Table 6. Salmonids stocked from fish hatcheries in 2009/10 (includes fish from Environment Agency Wales hatcheries and the Kielder hatchery).**

| Hatchery | Production                                                         | Purpose                                                |
|----------|--------------------------------------------------------------------|--------------------------------------------------------|
| Cynrig   | 100,000 0+ salmon                                                  | River Taff - Cardiff Bay Barrage Mitigation            |
| Cynrig   | 100,000 0+ salmon                                                  | River Wye - Elan Valley Reservoir Mitigation           |
| Maerdy   | 100,000 0+ salmon fry<br>80,000 0+ salmon parr<br>50,000 1+ salmon | River Dee, mitigation for Celyn Reservoir              |
| Mawddach | 10,000 1+ salmon smolts                                            | River Thames Restoration                               |
|          | 10,000 0+ salmon parr                                              | River Axe restoration                                  |
|          | 10,000 0+ and 8,000 1+ salmon                                      | River Mawddach, Trust agreement                        |
|          | 10,000 0+ and 8,000 1+ sea trout                                   | River Mawddach Trust agreement                         |
|          | 20,000 0+ and 8,000 1+ salmon                                      | River Conwy, restoration                               |
|          | 4,000 1 + salmon                                                   | River Seiont mitigation                                |
| Clywedog | 100,000+ and 25,000 1+ salmon                                      | Upper River Severn restoration                         |
| Kielder  | 450,000 0+ and 94,000 1+ salmon<br>15,000 0+ sea trout             | River Tyne catchment, mitigation for Kielder Reservoir |
|          | 160,000 0+ salmon                                                  | River Trent (Dove) restoration                         |

### 3.5 Fisheries monitoring

We use monitoring to help assess the state of fish stocks and the environment and to help us prioritise where we spend our time and money. We use our monitoring data to:

- Identify the number of species, population abundance, size distributions.
- Identify trends in population changes of fish.
- Predict what effect certain changes will have, e.g. what effect increasing water abstractions or climate change may have on fish populations.
- See what changes different activities have on different waters, such as the impact catch controls might have on the stock of salmon.

In 2009/10 we monitored over 2,300 sites.



**Table 7. Regional breakdown of fisheries monitoring**

| Region     | Number of fisheries monitoring sites planned | Number of fisheries monitoring sites sampled |
|------------|----------------------------------------------|----------------------------------------------|
| Anglian    | 311                                          | 311                                          |
| Midlands   | 168                                          | 176                                          |
| North East | 289                                          | 265                                          |
| North West | 262                                          | 276                                          |
| Southern   | 353                                          | 353                                          |
| South West | 303                                          | 327                                          |
| Thames     | 224                                          | 224                                          |
| EA Wales   | 391                                          | 389                                          |
| Total      | 2,301                                        | 2,321                                        |

The monitoring is also an important element of determining ecological status for the Water Framework Directive. 58% of waters are currently failing to achieve “good ecological status”, and 40% of these failures are where fish are the failing biological indicator.

Much work has been undertaken in this year to classify fish stocks for our River Basin Management Plans. Further information and details of these classifications and commentary is given in Appendix 6.

### 3.6 Regulating fish movements and auditing of high-risk fish species

Our consent is required before any fish can be introduced or stocked into a waterway or fishery. Last year we received over 7,000 stocking consent applications, and the majority (99%) was processed within 20 days. The ones that take a little longer are the complex ones that may include stocking fish species that could pose a risk to native species. To ensure that the consent is being complied with, some of these high-risk fish introductions are audited by our officers. In 2009/10 we audited 125 such operations – details are given in Table 8.

|            | Number of high-risk fish audits planned | Number of high-risk fish audits carried out |
|------------|-----------------------------------------|---------------------------------------------|
| Anglian    | 27                                      | 27                                          |
| Midlands   | 7                                       | 7                                           |
| North East | 9                                       | 29                                          |
| North West | 13                                      | 21                                          |
| Southern   | 5                                       | 5                                           |
| South West | 0                                       | 2                                           |
| Thames     | 18                                      | 18                                          |
| EA Wales   | 16                                      | 16                                          |
| Total      | 95                                      | 125                                         |

**Table 8. High-risk fish audits**

Using Defra funding from the Water Framework Directive, we have set up a Non-Native Species Eradication service. This team undertake reactive eradications in support of area teams as well as continue with our strategic eradications of high risk species and sites. Species include motherless minnows and topmouth gudgeon – highly prolific species of fish that can ruin a fishery if left unchecked.

In 2009/10 we carried out an eradication of the only wild population of fathead minnows in the country. The eradication of this single water means that this invasive fish species is no longer present in the wild in the UK.

Topmouth gudgeon remains our top strategic priority. Since 2005, nine sites have been successfully eradicated, with current eradication and control techniques limiting the spread of topmouth gudgeon. Given that all eradications to date have been successful and sites containing topmouth gudgeon have fallen by approximately 25% since 2005, it is looking hopeful that we can win the battle to eradicate this non native species from England and Wales.



**Figure 7. Eradicating topmouth gudgeon remains a priority**

### 3.7 Better Legislation

In 2009/10 we continued to work with governments to help shape future legislation to regulate freshwater and migratory fisheries. The following outcomes have strengthened our ability to protect fish stocks.

- The Marine and Coastal Access Act became law in November 2009. This widens our duties to maintain, improve and develop fisheries for several migratory species, notably smelt and lamprey. It also improves the powers we have to protect the full range of migratory and freshwater fisheries, including a new scheme to license or authorise different fishing methods; new byelaw-making powers; and a system to regulate live fish movements.
- Once the Act was in place, we prepared new byelaws to a) regulate the removal of freshwater fish, eel and shad, to help protect valuable fisheries and threatened stocks; and b) remove the brown trout close season on enclosed stillwaters, allowing anglers to fish year round without threatening wild fish. These were implemented in 2010.
- New Eel Regulations were made in 2009 which a) set close seasons for eel and elver net fishing for the first time (these will be transferred to byelaws in 2010); b) improved the quality of net catch returns; c) gave us powers to reserve a certain proportion of caught elvers for restocking; and d) gave us powers to require eel passes and screens to be built on obstructions to migration. The close season could represent a reduction of 9% for elver, 18% for yellow eel and 53% for silver eel for these fisheries. Combined with new Marine Act powers and byelaws, we are much better placed to take action to halt and reverse the decline in European eel stocks;

- We introduced byelaws in 2009 that require licensed salmon and sea trout netmen to attach carcass tags to each fish they catch and record the details in an annual logbook. Combined with a ban on the sale of rod caught fish, this closed a loophole used by illegal fishermen to dispose of their catch, as the only wild fish caught in England and Wales that may be sold legally must be tagged;
- Having consulted on new fish passage regulations in early 2009, government postponed these for all species other than eel until at least May 2012. This followed a wider review of the financial implications of government regulation, prompted by the economic downturn. Measures to improve eel migration are contained in separate regulations (see above) and should help to address many of the barriers to migration, making more juvenile eel habitat available and allowing more adults to escape to sea to spawn.

We will continue to work to implement this legislation, using new ways of regulating and enforcing to make sure this is done in the most cost-effective way.

# 4 Our Research and Development Programme

During 2009/10 significant changes were made to the way that our science programme was delivered within the Evidence Directorate. Despite these changes we were able to deliver a significant range of projects within our Fisheries programme. Appendix 7 details ongoing work, projects reporting and new starts for this year.

# 5 More people fishing and more places to fish

## 5.1 Rod licence sales

Over the past decade, annual sales of Environment Agency rod licences for England and Wales have increased by 35 %, from 1.09 million in 2000/1 to 1.47 million in 2009/10. Rod licence sales were up by 12% in 2009/10 compared to the previous year to set a record high of 1.47 million licences sold. The income received as a result was £25.4 million.

We believe that a significant reason for the increase in licence sales was our targeted marketing programme including the new look licence and TV adverts and in particular the widespread distribution of angling guides.

**Table 9. Regional breakdown of rod licence sales in 2009/10**

| Region     | Salmon & sea trout (all licences) | Coarse & trout (all licences) | Total     |
|------------|-----------------------------------|-------------------------------|-----------|
| Anglian    | 1,450                             | 237,265                       | 238,715   |
| Midlands   | 3,326                             | 279,684                       | 283,010   |
| North East | 6,435                             | 192,752                       | 199,187   |
| North West | 7,497                             | 156,662                       | 164,159   |
| Southern   | 1,561                             | 135,557                       | 137,118   |
| South West | 4,141                             | 99,809                        | 103,950   |
| Thames     | 3,630                             | 252,331                       | 255,961   |
| Unknown    | 610                               | 8,491                         | 9,101     |
| EA Wales   | 7,815                             | 67,460                        | 75,275    |
| Total      | 36,465                            | 1,430,011                     | 1,466,476 |

## 5.2 Rod licence enforcement

The number of rod licence checks made exceeded the target number by 7%. Detected evasion was low at an average of 3.85%, and ranged from 1.5% to 6.0% between regions.

**Table 10 Rod licence enforcement activity in 2009/10**

| Region     | Rod licence checks |
|------------|--------------------|
| Anglian    | 21,024             |
| Midlands   | 28,513             |
| North East | 27,124             |
| North West | 13,203             |
| Southern   | 11,505             |
| South West | 5,104              |
| Thames     | 30,140             |
| EA Wales   | 6,503              |
| Total      | 143,116            |

## 5.3 Prosecutions

As a result of the rod licence checks made, 3,496 anglers were prosecuted for rod licence offences. The success rate was close to 100%, with just 15 anglers being discharged.

| Region     | Prosecutions concluded | Successful prosecutions | Success rate | Fines    | Average costs | Average fine |
|------------|------------------------|-------------------------|--------------|----------|---------------|--------------|
| Anglian    | 465                    | 464                     | 100%         | £43,968  | £71.10        | £94.56       |
| Midlands   | 374                    | 373                     | 100%         | £36,904  | £71.13        | £98.67       |
| North East | 739                    | 734                     | 99%          | £74,887  | £73.83        | £101.34      |
| North West | 426                    | 424                     | 100%         | £43,029  | £69.94        | £101.01      |
| Southern   | 272                    | 271                     | 100%         | £28,262  | £70.04        | £103.90      |
| South West | 117                    | 116                     | 99%          | £15,534  | £69.79        | £132.77      |
| Thames     | 857                    | 853                     | 100%         | £87,858  | £69.75        | £102.52      |
| EA Wales   | 246                    | 246                     | 100%         | £23,808  | £67.60        | £96.78       |
| Total      | 3496                   | 3481                    | 100%         | £354,249 | £70.84        | £101.33      |

**Table 11. Rod licence prosecutions in 2009/10**

## 5.4 Tackling illegal fishing and poaching

Close season and fish removal byelaws were drafted, taking account of input from FERAC and other key stakeholders. The fish removal byelaws will enable us to tackle coarse fish removal effectively for the first time.

Where possible we have worked in partnership with other to identify and target enforcement problems. For example details of our collaboration with others as part of Operation Sterling can be seen in Appendix 8.

## 5.5 Promotion & advice

We carry out a range of activities that benefit our customers - anglers and their clubs and angling associations. We undertake field visits to give fisheries management advice, attend angling clubs to give presentations, publish press releases giving news of what we have done to improve fisheries and organise angler coaching sessions with registered coaches. All of these activities are designed to give a positive feel to our work and encourage more people to go fishing.

**Table 12. Anglers coached and press activity.**

| Region     | Target number of anglers coached | Actual number of anglers coached | Target number of fisheries press releases submitted | Number of fisheries press releases submitted |
|------------|----------------------------------|----------------------------------|-----------------------------------------------------|----------------------------------------------|
| Anglian    | 3000                             | 4577                             | 8                                                   | 26                                           |
| Midlands   | 3000                             | 7470                             | 6                                                   | 57                                           |
| North East | 3000                             | 3194                             | 6                                                   | 19                                           |
| North West | 2100                             | 2911                             | 9                                                   | 12                                           |
| Southern   | 3000                             | 3733                             | 6                                                   | 29                                           |
| South West | 2000                             | 2694                             | 9                                                   | 46                                           |
| Thames     | 3100                             | 3484                             | 12                                                  | 38                                           |
| EA Wales   | 3000                             | 3170                             | 20                                                  | 22                                           |
| Total      | 22200                            | 31233                            | 76                                                  | 249                                          |

## 5.6 Rod licence marketing activity.

A key contributory factor for record sales this year and the pattern of increasing sales over recent years has been the publicity to promote angling participation and to reduce rod licence evasion. The planned schedule of activity to promote rod licence sales in 2009/10 is shown in Appendix 9.

## 5.7 Angling guides

The most significant activity in terms of expenditure and impact was the distribution of local angling guides, paper or electronic, to all licence holder households in England and Wales as well as fishing tackle shops. Building on a successful previous experiment, the mailing acted as a prompt to go fishing and a reminder to buy a licence. It also aimed to address one of the major barriers to participation, namely the lack of information on local angling opportunities.

Market research undertaken in summer 2009 showed that the guides had an impact on 40% of 2009 rod licence holders. 370 thousand anglers were encouraged to find new places to fish. 230 thousand reported the guides 'encouraged you or others to go fishing'. 170 thousand were reminded to buy a licence. We feel the guides made a significant contribution towards record licence sales in this year.

# 6 Satisfied customers

## 6.1 Customer survey

Market research has recorded the highest ever proportion of anglers who are very happy with the service provided. Surveys since 2001 have recorded an increasing percentage of customers who think the service provided by us with money raised from rod licences is fairly good or very good. The proportion who considered it 'fairly' or 'very good' has increased from 70% in 2001 to 76% in 2009, with the percentage who think it is very good increased from 19% in 2001 to 42% in 2009.

# 7 Challenges and Issues

In addition to the challenges facing the Environment Agency as a whole, there are several other issues and challenges faced by Fisheries. These include:

- Achievement of Water Framework Directive targets
- Dealing with the impact of otters on fisheries
- Tackling illegal fishing and the reported issues with anglers from Eastern European countries
- Balancing our role in protecting fish with our duty for permitting hydropower schemes

## 7.1 Tackling these issues

### 7.1.1 Otters

The recovery of the otter population appears to be adversely impacting on some river fisheries, barbel in particular. We have worked with the Angling Trust and Natural England to improve our understanding of the problem - without this we can not take action to resolve the problem. Working together we have identified the rivers that seem to have been affected; these are generally smaller rivers which suffer from existing pressures on spawning success and where otters have now re-colonised. Larger rivers and those where otters have been long-established do not seem to have suffered undue otter predation. Restocking will be needed as an interim measure for some rivers until we can address these wider problems. Meanwhile we are continuing to work with the Angling Trust and Natural England on this difficult issue.

**Example:** We recognise the problems that otters can cause to some fisheries. Fish farms and ponds lacking suitable protection, can give otters with an easy food supply. In particular, large carp in ponds, gravel pits and lakes represent an easy source of food for otters. There are several measures that could be taken, for example fencing high value fisheries and developing a small decoy pond close to the river or stream, stocked with low value fish and with easy access for otters. Permanent fencing is an option which is known to work.

**Action taken:** In 2009/10 we allocated £32,000 to six projects to help fishery owners build otter-proof fencing.

### 7.1.2 Illegal Fishing

We have tackled one of the emerging issues by working with partners such as the Angling Trust to appoint a liaison officer for the Eastern European community. Many other successful local partnerships such as Operation Sterling have been established to reduce crime. In our Yorkshire and North East region we launched Operation Nassau in response to illegal poaching of salmon by anglers below the Tees Barrage. The use of hidden CCTV helped us catch 4 Middlesbrough men who were fined a total of £850 and £535 costs as well as forfeiting their fishing equipment.

### 7.1.3 Hydropower

We are working to ensure we continue to balance our role in protecting fish and the water environment with our commitment to helping the UK generate more power from renewable sources. Below are a number of key steps we took in 2009/10 to deal with this emerging issue.

- We produced The Good Practice Guide (GPG) as a valuable reference for developers, staff and third parties in understanding our role on hydropower permitting. We issued basic guidance on how to apply for the relevant permits.
- To deal with the increasing number of applications for hydropower schemes across England and Wales our National Permitting Service (NPS) has drawn together a specialist team to meet this demand. We established hubs of functional specialists within Regions to consider applications in detail from the pre-application stage onwards. A national expert panel was also established to advise on difficult cases.
- A programme of hydropower training took place across our regions, to update staff on the GPG and how the various pieces of legislation such as the Water Framework Directive and Planning responses should operate.
- We held regular meetings with fisheries and hydropower interests to work on issues and implementation including a joint stakeholders meeting held in London.
- Our phase 1 work on mapping hydropower highlighted the analysis of over 26,000 impoundments across England and Wales against environmental sensitivities and estimates of power potential. It detailed around 5000 win-win sites where combining fish pass provision and hydropower might help the environment and facilitate power production. We expect significant interest in this material.
- We updated our information on eel passage and screening in support of the recently established Eel SI. This document will inform developers and help achieve the right protection required by the European Eel Directive.
- Welsh Assembly Government (WAG) and Environment Agency Wales are working together to explore how to further enable hydropower schemes. Our ongoing work to improve our knowledge around hydropower will be important, particularly for the salmonid dominated upland fisheries of Wales, where the potential for hydropower development is perhaps most significant.

## 8 Working with other recreational users

We work closely with all recreational users to ensure shared outcomes that manage the different uses to allow them to take place without impacting on each other or the environment.

An example of these shared outcomes is the new fish and canoe passes on the River Medway. These have been installed to allow fish passage, addressing WFD issues, and have helped with the development of a canoe trail along the Medway by creating easy passage for canoes.



**Figure 8. River Medway fish and canoe pass**

# 9 Successes

There have been several notable successes during this year:

- Marine and Coastal Access Act enacted and includes provisions requested by Environment Agency
- Secondary legislation (from Marine Act) introduced through Fish for the Future programme
- New rod licence contract negotiated and new licence design introduced
- Fish passage – around £6 million was granted by Defra for implementing Water Framework Directive needs and we spent this on delivering a suite of projects to ease fish passage. (Detailed above).
- Record rod licence sales achieved Our customer satisfaction rating continues to exceed targets
- Public Attitudes to Angling survey shows that interest in going fishing has increased. 12% of people who have not been fishing in the last 2 years are interested in going in the future. This is more than 5 million potential freshwater anglers. The level of interest is particularly high in the 12-16 age group.
- Working with partners. We have continued to build on our work with key external partners who can help us deliver shared objectives. For example we have built on our relationship with the Association of Rivers both to increase the network of Trusts and to deliver projects. For example in the South West we have worked with the West Country Rivers Trust (WRT) to increase angling through the Collabor8 scheme which opens up new areas for angling.

## Appendices

**Appendix 1.** Our Key fisheries duties as interpreted by government.

**Appendix 2.** Copies of the table of key fisheries outcomes from our Corporate Plan tabulated in our Angling, Navigation and Recreation and Biodiversity sub strategies – this is a hyperlink to our website.

**Appendix 3.** Definitions of our fisheries activities.

**Appendix 4.** Spreadsheet detailing our project activity by type and region showing costs and contributions from other Agency departments as well as external partners.

**Appendix 5.** Salmon and Sea Trout projects.

**Appendix 6.** Fisheries and the Water Framework Directive. This will include maps showing Fisheries Classification/ Compliance and commentary.

**Appendix 7.** Our programme of Research and Development for Fisheries delivered through our Evidence Directorate.

**Appendix 8.** Operation Sterling demonstrating a partnership approach to reducing crime.

**Appendix 9.** Rod licence marketing programme for 2009/10.

## Appendix 1. Statutory Fisheries duties

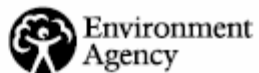
Government guidance on the interpretation of our duty to maintain, develop and improve fisheries is:

- To ensure the conservation, and maintain the diversity of, freshwater fish, salmon, sea trout, eels and their aquatic environment.
- To enhance the contribution salmon and freshwater fisheries make to the economy (particularly in remote rural areas and in areas with low levels of income).
- To enhance the social value of fishing as a widely available and healthy form of recreation.

Our role for fisheries encompasses protection of fish stocks and their environment and a service to anglers paid for from the rod licence duty to manage fisheries.

We also have a statutory duty to operate a licensing system for fishing under Section 25 of the Salmon and Freshwater Fisheries Act.

Appendix 2. Link to our sub strategies for ANR and Biodiversity sub strategies [click here](#)



**Creating a better place 2010–2015  
Angling, navigation and recreation supporting strategy**



**Creating a better place 2010–2015  
Biodiversity supporting strategy**



### Appendix 3. Description of fisheries activity – as shown in Figure 2b

| Activity             | Description of work included                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regulation           | National and regional byelaw production, determination of complex consent applications, production of net limitation orders                                                                                                                                                                                                                                                                                                                                                                                                          |
| Enforcement          | Salmonid and eel enforcement work; Response to reports of illegal fishing/coarse fish theft; Planned work checking high risk fish movements – disease/alien species                                                                                                                                                                                                                                                                                                                                                                  |
| Licence checks       | Rod licence checking and supporting services                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Monitoring           | Planned and reactive fish population surveys and associated reporting                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Improvements         | Fisheries improvement projects for physical and chemical habitat and access improvements to promote angling participation.                                                                                                                                                                                                                                                                                                                                                                                                           |
| Fish kills           | Response to incidents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Promotion and advice | National marketing and communication initiatives, angling club meetings and presentations, bankside advice. Coaching in support of angling participation programmes; National, regional and local committees, regional forum.                                                                                                                                                                                                                                                                                                        |
| National Operations  | National once work for permitting work for eels, crayfish, salmon etc. Fish movement and associated byelaw consenting. Fish disease work in support of this. Administration of the rod fishing licence.                                                                                                                                                                                                                                                                                                                              |
| National Fisheries   | Interpretation of policies and administration; National projects e.g. Wild Trout Trust, Angling Development Board, Fish for the Future, Flylife, Fisheries project audit, Electric fishing equipment, Angling Trust                                                                                                                                                                                                                                                                                                                  |
| National Support     | Head Office costs including Chief Executive's Office, Communications, Environment & Business, Operations, Finance, Resources, Legal, FCRM, Evidence. Delivery of our Fisheries science programme through the Evidence Directorate. Contribution to national services including National Customer Contact Centre, Fleet Operations, National Marine Monitoring Team, Procurement, Finance Service Centre, National Recruitment Service, CIS, 1B1S Support Centre, Internal Audit, HR Shared Service Centre, National Property Centre. |

## Appendix 4.

See the spreadsheet on our website, detailing our project activity by type and region showing costs and contributions from other Agency departments as well as external partners.

## Appendix 5. Salmon & Sea Trout Projects funded by GiA in 2009/10

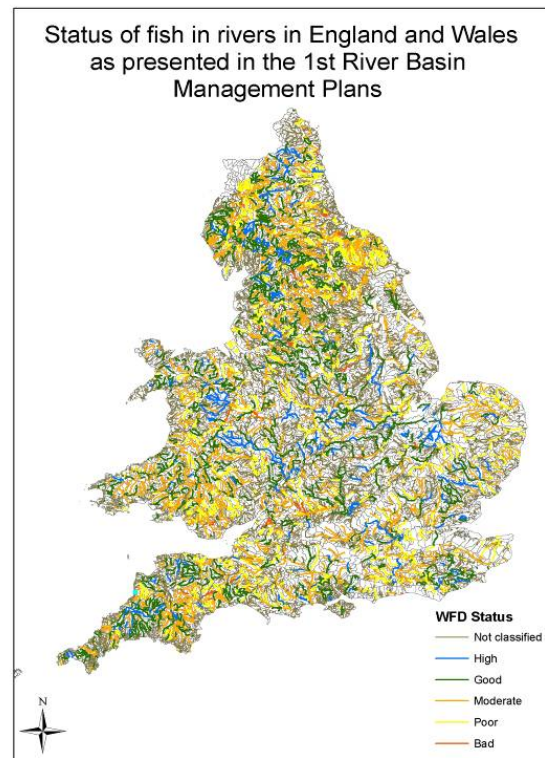
| Region     | Area             | Catchment    | Project                                    | Contact            | Agency | External | Total  | Type         |
|------------|------------------|--------------|--------------------------------------------|--------------------|--------|----------|--------|--------------|
| Thames     |                  | Thames       | Chertsey weir fish pass improvements       | Darryl Clifton-Dey | 5000   | 0        | 5000   | Fish passage |
| Midlands   | West             | Leadon       | River Leadon gravel introduction           | Chris Bainger      | 5000   | 0        | 5000   | Habitat      |
| Midlands   | West             | River Teme   | Ashford fish pass trash screen             | Chris Bainger      | 10000  | 0        | 10000  | Fish passage |
| North West | North Lancashire | River Ribble | River Ribble spawning habitat              | Lee Preston        | 5000   | 11815    | 16815  | Habitat      |
| North West | North Lancashire | River Wyre   | River Wyre gravel                          | Lee Preston        | 2000   | 3000     | 5000   | Habitat      |
| North West | North Lancashire | Cam Beck     | Cam beck grip blocking                     | Lee Preston        | 3000   | 3000     | 6000   | Habitat      |
| North West | North            | Black Esk    | Black Esk habitat work                     | Jim Muir           | 3000   | 7000     | 10000  | Habitat      |
| North West | North            | Derwent      | Log/Christmas tree erosion control-Derwent | Michael Farrell    | 8000   | 10000    | 18000  | Habitat      |
| SouthWest  | South Wessex     | Hants Avon   | Managing temperatures on Hants Avon.       | Andy Martin        | 15000  | 0        | 15000  | Habitat      |
| SouthWest  | South Wessex     | Dorset Frome | Salmon habitat enhancement                 | Andy Martin        | 10000  | 60000    | 70000  | Habitat      |
| SouthWest  | Cornwall         | Tamar        | Coomebebow pipe bridge                     | Lesley Newport     | 20000  | 20000    | 40000  | Fish passage |
| SouthWest  | Cornwall         | Yealm, Tamar | SAP river tributaries                      | Lesley Newport     | 15000  | 45000    | 60000  | Habitat      |
| SouthWest  | Cornwall         | Tamar        | Tamar gravel                               | Lesley Newport     | 20000  | 20000    | 40000  | Habitat      |
| SouthWest  | Devon            | Taw          | Head weir removal                          | Emma-Rose Herrera  | 15000  | 75000    | 90000  | Fish passage |
| Southern   | SSD              | Itchen       | Salmon habitat Itchen                      | Hannah Wright      | 10000  | 0        | 10000  | Habitat      |
| Wales      | SE               | River Lugg   | River Lugg habitat improvements            | Pete Gough         | 15000  | 15000    | 30000  | Habitat      |
| TOTAL      |                  |              |                                            |                    | 161000 | 269815   | 430815 |              |

## Appendix 6. Fisheries and the Water Framework Directive.

The Water Framework Directive requires us to assess the ecological status of rivers in England and Wales. Fish are one of the components of this assessment and we have developed a tool for determining the status of fish in rivers by analysing sampling data collected through our National Core Fisheries Monitoring Programme. There are 5818 river water bodies in England and Wales, from which we currently assess the status of fish populations in 2661 water bodies (~46%).

The assessment of the status of fish populations published in the first River Basin Management Plans (RBMP) showed that ~42% of the water bodies classified for fish were at or above good status. The WFD requires that we aim to achieve good status (or potential) in all water bodies by 2015. This improvement in status can be realised through future cycles of the WFD, ending in 2027.

Currently ~58% of the water bodies assessed for fish are failing to achieve this target. We have been through an exercise which aimed to identify the pressures that are responsible for the failures observed. The top three pressures identified were morphology, hydrology and sediment inputs. In many cases the cause of the failure was unknown and we will need to undertake investigative monitoring to determine the cause of the impact.



At this stage it is not possible to estimate the costs associated with achieving the aims of the WFD for fish populations. First we need a better understanding of the number and distribution of pressures that need addressing. Then we will need to identify and secure funding for appropriate measures.

## Appendix 7. Summary of Fisheries work delivered through Evidence Directorate 2009/10

| <b>New start projects 2009-10</b>                                          | <b>Reference Number</b>  | <b>Start date</b> | <b>Planned finish</b> | <b>Budget - external Evidence spend</b> | <b>Envisaged outcomes</b>                                                                                                                                                                              |
|----------------------------------------------------------------------------|--------------------------|-------------------|-----------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Elver Passes and Hydrometry                                                | I4E give it a go project | Dec-09            | Mar-10                | £29k                                    | Evaluation of impacts of elver bristle board on crump -type gauging weirs to support guidance on construction and siting.                                                                              |
| Review of home range and migration requirements of freshwater fish species |                          | Jun-09            | Feb-10                | no external spend - in-house            | To provide basic information on fish movement needs to enable development of fish pass priority plans and to inform consenting decisions in relation to hydropower and other barriers to fish movement |
| Celtic Sea Trout Project                                                   | SC080037                 | Jun-09            | 2012-13               | £30K p.a. + £90k from Wales             | To provide information and knowledge to support better management of sea- trout fisheries to deliver social and economic benefits to the catchments entering the Irish Sea.                            |
| <b>Ongoing Projects 09-10</b>                                              | <b>Reference Number</b>  | <b>Start date</b> | <b>Planned finish</b> | <b>Budget - external Evidence spend</b> | <b>Envisaged outcomes</b>                                                                                                                                                                              |
| Ecosystem Approach to Fisheries Management                                 | SC080032                 | Aug-08            | Jun-10                | Nil - in-house                          | To recommend changes in fisheries management policies and practices to accord with the ecosystems approach and how they might be implemented                                                           |
| Optimising Habitat description and evaluation systems for fish (ToolHab)   | SC060093                 | Sep-06            | Dec-10                | £10.5k (+ 14.5 from Thames)             | To develop a proof of concept decision support software tool for fishery habitat enhancement for WFD                                                                                                   |
| Eel life Tables                                                            | SC060028                 | Jan-07            | 01/03/2010            | £211k                                   | To develop a range of life-cycle models for eel in order to estimate eel escapement from catchments - to support Eel Regulations and WFD compliance                                                    |

| <b>New start projects 2009-10</b>                                   | <b>Reference Number</b> | <b>Start date</b> | <b>Planned finish</b> | <b>Budget - external Evidence spend</b>                 | <b>Envisaged outcomes</b>                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------|-------------------------|-------------------|-----------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Economic and Ecological viability of small scale hydropower schemes | SC080038                | Oct-08            | Dec-10                | In-house- no external spend                             | To assess the ecological impacts and economics of different types of low-head hydropower schemes and balance them in relation to the environmental benefits. To produce guidance for Operations and Policy staff when considering hydropower developments.                                                                                             |
| KHV distribution project                                            | SC070057                | Nov-07            | Sep-10                | No external spend, collaborative with Cefas             | To assess the distribution of KHV in the fish supply chain and carp fisheries. To evaluate the disease risks associated with fish movements to inform our fish movement consenting decisions and our own fish movements.                                                                                                                               |
| Spatial Distribution and Productivity of Sea Trout                  | SC60069                 | Oct-06            | Jun-10                | £3k - CASE award - collaborative with Bangor University | Exploration of the relationship between physico-chemical factors and sea trout production in 2 catchments in Wales - will inform management and protection of sea trout stocks.                                                                                                                                                                        |
| Role of food availability in critical life stages of coarse fish    | SC060048                | May-07            | Dec-10                | £66k - collaborative with HIFI                          | To gain an understanding of the role of food availability in the recruitment dynamics of riverine coarse fish - when, where and what food is available in relation to what is eaten and to subsequent growth and survival - in order to inform river rehabilitation and protection work for WFD.                                                       |
| Field Evaluation of combined fish pass and flow gauging structures  | SC070013                | Oct-07            | Dec-10                | £62.3k external spend                                   | To undertake field testing of combined fish pass and flow gauging structures in order to assess impacts of fish passes on gauging accuracy and the effectiveness of combined structures in passing migrating fish. To enable the Agency to install fish passage on gauging weirs to improve fish status whilst not compromising flow gauging accuracy. |
| Fish Pass Uncertainty Calculation tool                              | SC070030                | Sep-07            | Dec-10                | £71k external spend                                     | Production of a software tool that will enable calculation of the uncertainties associated with flow measurement at combined gauging weirs and fish passes of various forms.                                                                                                                                                                           |

| <b>New start projects 2009-10</b>                                          | <b>Reference Number</b>  | <b>Start date</b> | <b>Planned finish</b> | <b>Budget - external Evidence spend</b> | <b>Envisaged outcomes</b>                                                                                                                                                                              |
|----------------------------------------------------------------------------|--------------------------|-------------------|-----------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Triploid trout                                                             | SC030207                 | Sep-02            | Dec-10                | £109 - collaborative with GWCT          | To determine the performance and effects of stocked triploid trout (both browns and rainbows) to support the trout strategy and its associated stocking policy.                                        |
| Salmon Life cycle Model                                                    | SC020077                 | Oct-02            | Dec-10                | No external spend - in-house            | To develop a salmon lifecycle model to predict the consequences of stock management decisions, optimise management practice and prioritise research needs.                                             |
| Projects completed 09-10                                                   | Reference Number         | Start date        | Planned finish        | Budget - external Evidence spend        | Envisaged outcomes                                                                                                                                                                                     |
| Elver Passes and Hydrometry                                                | I4E give it a go project | Dec-09            | Mar-10                | £29k                                    | Evaluation of impacts of elver bristle board on crump -type gauging weirs to support guidance on construction and siting.                                                                              |
| Review of home range and migration requirements of freshwater fish species |                          | Jun-09            | Feb-10                | no external spend - in-house            | To provide basic information on fish movement needs to enable development of fish pass priority plans and to inform consenting decisions in relation to hydropower and other barriers to fish movement |
| Support for other science work and                                         |                          |                   |                       |                                         |                                                                                                                                                                                                        |
| Hydromorphology for WFD                                                    | SC070024                 |                   |                       |                                         | Mostly GP                                                                                                                                                                                              |
| Evidence to support measures for second round of WFD River Basin Planning  | SC080031                 |                   |                       |                                         | Mostly GP                                                                                                                                                                                              |
| Hydropower research programme                                              |                          |                   |                       |                                         | Vicky Greest / Steve Axford input to Hydropower research programme                                                                                                                                     |

| New start projects 2009-10                                               | Reference Number | Start date | Planned finish | Budget - external Evidence spend | Envisaged outcomes                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------|------------------|------------|----------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fish health science - Brampton                                           |                  |            |                |                                  | Aquatic Animal Health Research Requirements Document 2009/10.<br>R2 The control of crayfish plague in England and Wales; Water quality fluctuations in fisheries - importance to fish health. Sublethal effects of introduced parasites ;NERC/Defra CSA Eel Health project; Impact assessment and risk management of Category 2 parasites |
| Role of shading in mitigating climate warming in chalk streams           |                  |            |                |                                  | Katie Sumner in conjunction with South West Region                                                                                                                                                                                                                                                                                        |
| Use of water temperature archive to support Cefas fish disease risk work |                  |            |                |                                  | Mostly GP                                                                                                                                                                                                                                                                                                                                 |
| Annual Fisheries Statistics                                              |                  |            |                |                                  | Amanna Rahman - in -house work                                                                                                                                                                                                                                                                                                            |

## Appendix 8. Operation Sterling

# OPERATION STERLING

## Every Fish Counts

### An enforcer's guide to tackling the poaching of migratory fish

The demand for wild salmon in the UK and international markets is greater than it has ever been before.

'A bar of silver' is the phrase most often used by anglers to describe a salmon or sea trout in prime condition, a reference to the almost metallic silver sheen of a pristine fish. If we take into consideration that each additional rod caught salmon can provide more than £4,000 for the local economy this comparison becomes increasingly accurate. Operation Sterling is an Environment Agency campaign as part of the joint initiative of Rural Net, a partnership of organisations working to tackle poaching and wildlife crime. Operation Sterling is aimed at protecting migratory fish, one of our most valuable natural resources, from illegal exploitation.

This will become an awareness campaign directed at both police forces and anglers. The aim will be to provide information and advice that will help us and our partners to combat salmon poaching using the best intelligence available.



#### The offenders

The migratory cycle of salmon and sea trout is such that they are born in the headwaters of our famous rivers such as the Tyne, Eden, Usk, Tamar and Test. Their early years are spent in the river until they leave and head for the rich feeding grounds around Greenland the Arctic Circle. They remain there until the urge to breed comes upon them when they need to return to the river of their birth. It is during this return migration that these great fish are of most interest to the legal fisherman and poacher alike. Forget the romantic image you may have of the poacher; he is no longer the rustic, wise in the ways of the countryside after one for the pot. He is frequently little more than a travelling criminal, intent on making as much money as he can by whatever means available to him and while salmon at £3 to £5 per lb on the black market prove an attractive proposition he will not refuse any opportunity that comes his way. Poachers are prepared to travel considerable distances to carry out their crime and round trip journeys in excess of 100 miles are not uncommon.

#### Who regulates this?

The Environment Agency is responsible for the enforcement of fisheries legislation in relation to salmon, trout, freshwater fish and eels. It has substantial powers aimed at the protection of these fish and many of its officers are specialists in that field.

#### When does this happen?

Salmon poaching can occur throughout the year although generally it will become more profitable from around June through to early December.

#### What are the signs of illegal poaching activity?



- Reports from the public of men acting suspiciously on or near to river banks in remote locations could indicate an illegal netting operation.
- Strange lights. A popular means of taking migratory fish during the autumn and winter months is by way of lamp and gaff; here the reports may include reference to lights shining onto the river or burn.
- Equipment. On patrol you may have cause to stop a suspicious vehicle travelling late at night or in the early hours of the morning. On speaking to the occupants to determine the reason for their journey their answer may well be 'we've been fishing'. A check of the vehicle could reveal a number of large fish and fishing equipment. It may be immediately obvious the fish have been poached with the tools of the trade in plain view alongside the fish. Items to consider as suspicious would be gaffs or spears, nets, wet/dry suits, inflatable dinghies or large quantities of dirty wet clothing. **The fact they may have fishing rods as part of the equipment does not always ensure the fish have been caught by legal means**, as another popular method of poaching fish is called snatching. Here the fish are deliberately foul hooked with a rod and line, unfortunately after the event this can usually only be identified through forensic examination of the fish. Some fish may have obvious wounds and marks on the body that would indicate they had been speared, gaffed, netted or snared.
- Where you discover several migratory fish you may wish to further your line of enquiry by asking the occupants where they had been fishing and how they caught so many fish. They should be able to produce EA rod licences authorising them to fish for salmon and sea trout and generally a club membership card or other authorisation to fish at the location they claim to have been at. Your normal PNC check might also reveal a history of previous poaching offences that may lead you to question the truth of any explanation they give.

#### What to do if you suspect evidence of illegal activity?

The Environment Agency operates a 24hr emergency hot line to report incidents such as these. The telephone number is 0800 807060 from where you will be connected to an operator who will take details of the incident. You will be contacted by an officer involved in fisheries enforcement who will identify what further action you could take and tell you what the Environment Agency's level of response will be. Environment Agency enforcement officers are fully trained in the investigation of illegal incidents and will take responsibility for all fisheries related matters

#### LEAD PARTNERS



#### SUPPORTED BY



# OPERATION STERLING

## Every Fish Counts

### Fighting Wildlife Crime

A guide to control of migratory fish poaching for anglers and angling clubs

#### Operation Sterling

The demand for wild salmon in the UK and international markets is greater than it has ever been before.

#### The offenders

The migratory cycle of salmon and sea trout is such that they are born in the headwaters of our famous rivers such as the Tyne, Eden, Usk, Tamar and Test. Their early years are spent in the river until they leave and head for the rich feeding grounds around Greenland and the Arctic Circle. They remain there until the urge to breed comes upon them when they need to return to the river of their birth. It is during this return migration that these great fish are of most interest to the legal fisherman and poacher alike.



Forget the romantic image you may have of the poacher, he is no longer the rustic local character, wise in the ways of the countryside after one for the pot. He is frequently little more than a travelling criminal, intent on making as much money as he can by whatever means available to him. Whilst salmon will sell for £3 to £5 per lb on the black market, he will not refuse any opportunity that comes his way. Poachers are prepared to travel considerable distances to carry out their crime and round trip journeys in excess of 100 miles are not uncommon. Many poachers also have links to organised crime and gangs.

#### Who regulates this?

The Environment Agency is responsible for the enforcement of fisheries legislation in relation to salmon, trout, freshwater fish and eels. It has substantial powers and duties to protect these fish and many of its officers are specialists in tackling environmental crime.

#### How can you help?

Salmon poaching can occur throughout the year, although generally it will become more profitable from around June through to early December. As an angler or member of the public with concern for our environment what can you do if you suspect poaching has taken or is taking place? In common with most modern enforcement agencies the Environment Agency develops strategies to deal with illegal activity based around prevention, intelligence and enforcement. With your assistance we can improve our levels of intelligence to ensure we are the best we can be at detecting and dealing with illegal fishing activity. Everyone can be a valuable source of information, providing



the link in a chain of evidence that ensures effective enforcement. However, to be of value the information needs to follow certain rules and obviously the sooner the information is passed on to the appropriate person the more chance we have of dealing with the problem. So what are the important facts that ensure the information you provide can assist a prosecution?



**WHAT** - What exactly do you suspect them of doing? (Netting, gaffing, using poison, snatching?)

**WHO** - Who is it carrying out the activity? Are they known to you? Can you get a description that would help identify them later? Is there a vehicle involved and can you get the registration, make and model without putting your self in danger?

**HOW** - How are they doing it? Acting alone or is there a lookout?

**WHERE** - We don't necessarily need grid references; you can refer to easily recognisable points such as bridges, or buildings, give approximate distances upstream or down from these locations. To identify which bank you are referring to imagine you are looking downstream and use left and right hand

**WHEN** - We need to know when it happened: now, this morning, yesterday evening? It is better for us that we get the information as soon as possible so we can make a decision on the appropriate level of response. Poaching by its very nature is dynamic and there is rarely very little evidence left that will allow us to identify culprits once they have left. However that does not mean they will not come back for another go later.

**The Environment Agency does not recommend you attempt to tackle anyone you suspect of carrying out illegal fishing activity. These people are frequently prepared to resort to violence to make their escape.**

#### Expected response

As is common with many enforcement agencies we (the EA) do not have people actively in the field 24hrs a day we rely on intelligence to enable us to plan and deploy our resources where they are most effective. Any information you provide is logged on a database that allows officers involved in fisheries enforcement to evaluate and plan for efficient patrols and operations. This may mean a report will not initiate an immediate physical attendance. That does not mean it has been dismissed, just that resources are either deployed elsewhere or not available at the time. The information will be reviewed and appropriate action taken.

#### What to do if you suspect evidence of illegal activity?

The Environment Agency operates a 24hr emergency hot line to report incidents such as these. The telephone number is 0800 807060 from where you will be connected to an operator who will take details of the incident. You do not need to leave your name or any contact details; although a contact number would be helpful to allow for any follow up questions for further clarification. You will be contacted by an officer involved in fisheries enforcement who will identify what, if any, further action you could take and advise you what the Environment Agency's level of response will be. Environment Agency enforcement officers are fully trained in the investigation of illegal fisheries incidents and will take responsibility for all fisheries related matters. If you are unable to contact the Environment Agency please contact your local police and pass on your information.

#### LEAD PARTNERS



#### SUPPORTED BY



## Appendix 9. Planned programme of rod–licence marketing activity 2009/10

| <b>National Promotional Action for rod licences 2009</b>                                                                                                                                                                                                  | <b>Date</b>                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| New rod licences on sale & associated PR                                                                                                                                                                                                                  | From 2 March                                                                                                  |
| Renewal letters to 2008/9 licence holders (not short-term)                                                                                                                                                                                                | From 2 March for a fortnight                                                                                  |
| First batch mailing of 75,000 rod licences arrives. Includes Fish for free/ Angling Trust leaflet                                                                                                                                                         | ~10 March                                                                                                     |
| Posters mailed to tackle shops across England & Wales and fisheries in all regions except South West                                                                                                                                                      | Third week of March                                                                                           |
| 1st e-mail reminder to renew licence to ~250,000 licence-holders who previously bought on-line. Includes link to internet angling guides.                                                                                                                 | Last week of March                                                                                            |
| Adverts in specialist angling press:                                                                                                                                                                                                                      | Angling Times, 7/04/09<br>Improve your Coarse Fishing and Trout Fisherman in April<br>Angler's Mail, 31/03/09 |
| 'Get Hooked' regional fishing guides mailed to 2008/9 licence holder households (except on-line buyers) in South West                                                                                                                                     | Guides will hit doorsteps 6-9 April, before Easter Bank Holiday                                               |
| 'Where to go fishing' Area angling guides mailed to 2008/9 licence holder households (except on-line buyers) in all regions except South West.                                                                                                            | Guides will hit doorsteps 26-30 April before May Bank Holiday                                                 |
| 1st 'Spring' issue of 'Reel Life' e-magazine to 250,000 licence-holders who previously bought on-line. Includes links to internet angling guides (Waterscape, Get hooked, Fishing Wales, Visit Thames). Also local news stories & link to licence buying. | e-mails will be sent 26-30 April before May Bank Holiday                                                      |
| TV advertising: 'Where's Dave' adverts 10 seconds or 30 seconds.                                                                                                                                                                                          | Late April to August. including 'Extreme Fishing' in April with audiences up to 1.4 million                   |
| Google advertising                                                                                                                                                                                                                                        | late April to August                                                                                          |
| 2nd e-mail reminder to renew licence to ~250,000 licence-holders who previously bought on-line. Includes link to internet angling guides.                                                                                                                 | e-mails will be sent 18-22 May before Spring Bank Holiday                                                     |
| News releases for national rod licence blitz                                                                                                                                                                                                              | In angling press w/c18 May before Blitz on 23-25 over Spring Bank Holiday                                     |
| News releases with results of national rod licence blitz                                                                                                                                                                                                  | In angling press w/c 1 June, provided all results collated and sent to press by 28 May                        |

|                                                                                                                                                                                                                                                                                                    |                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <p>2nd issue of 'Reel Life' e-magazine to 200,000+ licence-holders who bought on-line 2008/9. Includes links to internet angling guides (Waterscape, Get hooked, Fishing Wales, Visit Thames). Also news stories, angling events, 'what you get for your licence', and link to licence buying.</p> | <p>e-mails will be sent 8-12 June before coarse river fishing season opens on 16 June</p> |
| <p>3rd 'Summer' issue of 'Reel Life' e-magazine to 200,000+ licence-holders who bought on-line 2008/9. Includes links to internet angling guides (Waterscape, Get hooked, Fishing Wales, Visit Thames). Also news stories, angling events, and link to licence buying.</p>                         | <p>e-mails will be sent third week July at start of the summer holidays</p>               |

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