



South East Annual Fisheries Report 2012/13

Version: 20 November 2013

We are the Environment Agency. We protect and improve the environment and make it **a better place** for people and wildlife.

We operate at the place where environmental change has its greatest impact on people's lives. We reduce the risks to people and properties from flooding; make sure there is enough water for people and wildlife; protect and improve air, land and water quality and apply the environmental standards within which industry can operate.

Acting to reduce climate change and helping people and wildlife adapt to its consequences are at the heart of all that we do.

We cannot do this alone. We work closely with a wide range of partners including government, business, local authorities, other agencies, civil society groups and the communities we serve.

Published by:

Environment Agency
Horizon house, Deanery Road
Bristol BS1 5AH
Email: enquiries@environment-agency.gov.uk
www.environment-agency.gov.uk

© Environment Agency 2012

All rights reserved. This document may be reproduced with prior permission of the Environment Agency.

Further copies of this report are available from our publications catalogue: <http://publications.environment-agency.gov.uk> or our National Customer Contact Centre: T: 03708 506506

Email: enquiries@environment-agency.gov.uk.

Overview

An introduction from our South East Director and a summary of the key outcomes and issues

Our aim is to deliver better fisheries and to enhance the environment across the South East.

If you have ever wondered how we invest rod licence money to improve fisheries, this report gives you a graphic overview of some of the work that we delivered with partners during 2012/13.

In addition to rod licence income we have invested a range of funding sources into improving the environment. During 2012/13 over £3 million was invested in river habitat enhancement projects, £1.3 million in improving fish and eel passage, £450,000 enhancing stillwater fisheries, £102,000 in promoting angling and £20,000 providing all ability access to the water side. Not all of this was fisheries money.

Critical to better fisheries is good water quality and sufficient water resources. Through 2012/13 24 sewage treatment works were upgraded principally with phosphate removal and measures to reduce diffuse pollution included catchment sensitive farming, environmental stewardship, wet weather walk-overs, the creation of buffer zones and riverside fencing.

In terms of overall condition, under the Water Framework Directive, 20% Thames River Basin District and 16% South East River Basin District surface waters were classified as achieving good ecological status or potential in 2012. These figures highlight that there is much more that needs to be done to improve the state of rivers and stillwaters across the South East.

Finally, I would like to thank all the many partners that we have worked with to improve the region's fisheries. These range from local fishing clubs, commercial fisheries and local community to groups to Rivers Trusts, the Wild Trout Trust, Local Authorities, The Wheelyboat Trust, the Angling Trust and water companies amongst many others. Through working together we can not only deliver more, the outcomes are more likely to be locally based and longer lasting.

Thank you to everyone who played a part in improving our water environment.

A handwritten signature in black ink that reads "HD Davidson". The initials "HD" are written in a stylized, cursive font, followed by the name "Davidson" in a similar cursive style.

Howard Davidson

South East Director

Contents

1.1	Introduction	1
1.2	Better river fisheries through delivering the Water Framework Directive	1
1.2.1	Improving water quality and managing water resources	12
1.3	Salmon	14
1.4	Sea trout	16
1.5	Eels	19
1.6	Improving stillwater fisheries	22
1.7	Promoting angling participation and rod licence sales	23
1.8	Improving access to the waterside	26
1.9	Monitoring the state of fisheries and fisheries science	28
2.0	Disease prevention and control of non-native species	28
2.1	Incident response	30
2.2	Fisheries enforcement	30
2.3	Regulation, licencing and authorisations	33
2.4	Engagement and expert advice	34
2.5	Funding and resources	35

Appendices

Appendix (1) South East projects 2012/13

Appendix (2) National rod licence sales 2012/13

Appendix (3) National prosecution figures 2012/13

Appendix (4) National fisheries budget allocations 2012/13

1.1 Introduction

The purpose of the South East Fisheries Annual Report 2012/13 is to provide a summary of our fisheries activities in the 12 month period from the 1 April 2012 to 31 March 2013.

This follows on from last year's South East Annual Report 2011/12 which is available from our publications catalogue: <https://publications.environment-agency.gov.uk/skeleton/publications/ViewPublication.aspx?id=32a801a8-18d3-4e17-8547-c750744c1918>

We hope you find this report informative. If you have any comments or questions about the content please get in touch lawrence.talks@environment-agency.gov.uk (0790-9997734)

1.2 Better river fisheries through delivering Water Framework Directive outcomes

The Water Framework Directive (WFD) is a European directive which aims to protect and improve the water environment. It includes different types of water body: lakes, reservoirs, streams, rivers, canals, groundwaters, transitional waters (estuaries) and coastal waters. To describe how the aims of the Water Framework Directive will be achieved we have produced river basin management plans (RBMPs) that identify the actions and measures necessary to meet the ecological objective of all water bodies being in good status.

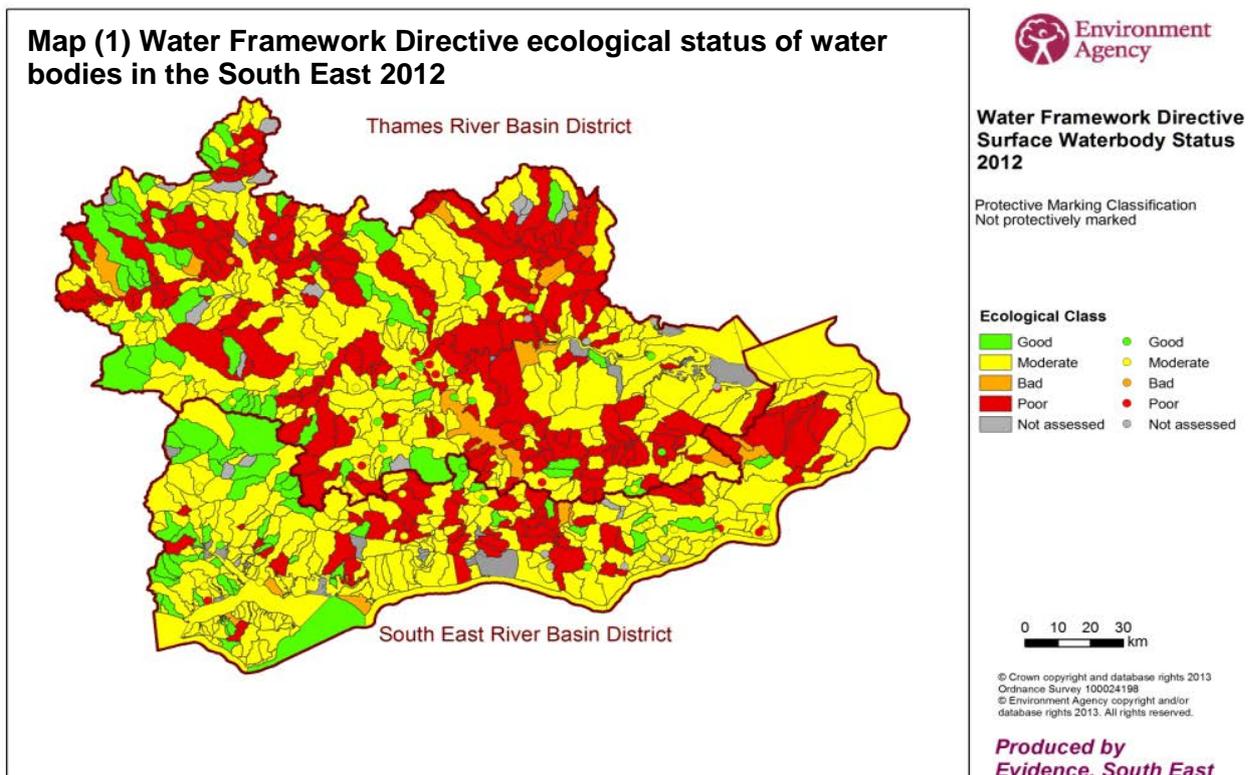
In the South East we have two River Basin Districts: the Thames River Basin District and the South East River Basin District. The individual River Basin Management Plans can viewed at <http://www.environment-agency.gov.uk/research/planning/33106.aspx>

The Thames River Basin District extends from the source of the River Thames in Gloucestershire through London to the North Sea. The South East River Basin District includes the North and South Downs, the Solent and the New Forest.

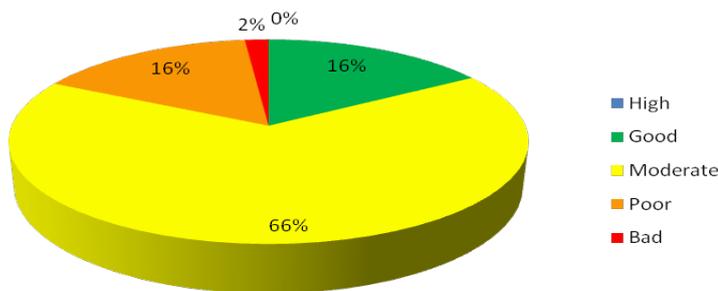
The South East is one of the most populated parts of Britain with a population of over 17 million people. It is also one of the driest areas in the UK with rainfall levels below the national average. There are a number of significant pressures on the water environment, which include: point source pollution from sewage treatment works; the physical modification of water bodies; diffuse pollution from agricultural activities and urban areas; water abstraction; and the impact of non-native species.

At present, because of these pressures and the higher environmental standards required by the Water Framework Directive, 16% of surface waters in the South East River Basin District and 20% of surface waters in the Thames River Basin District were classified as achieving good ecological status or potential in 2012.

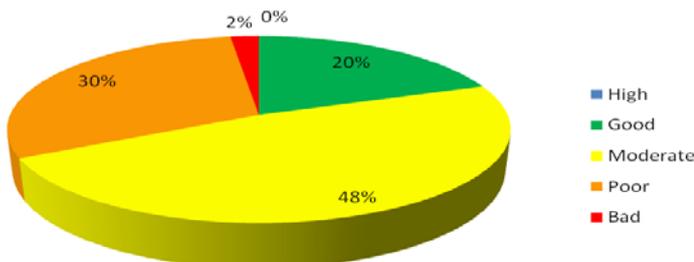
The Water Framework Directive status of water bodies in the South East in 2012 is summarised in Map (1) below.



South East River Basin District ecological status 2012

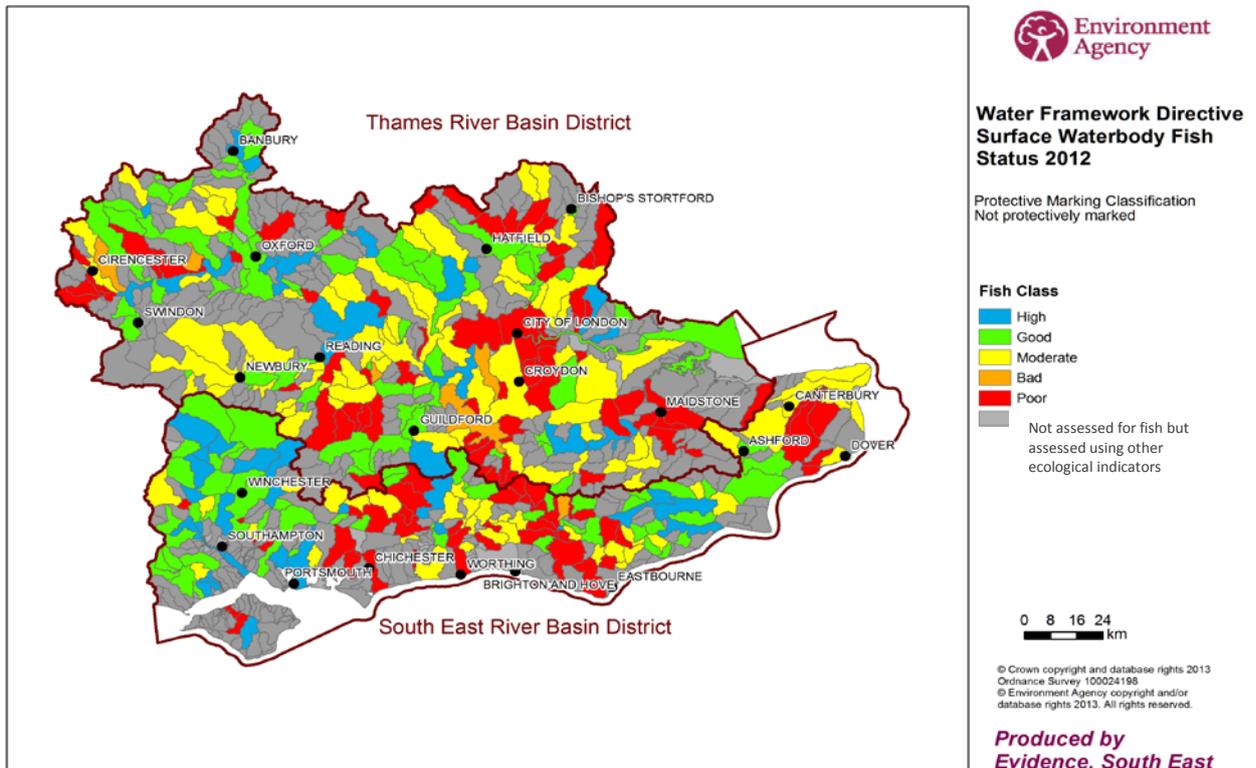


Thames River Basin District ecological status 2012

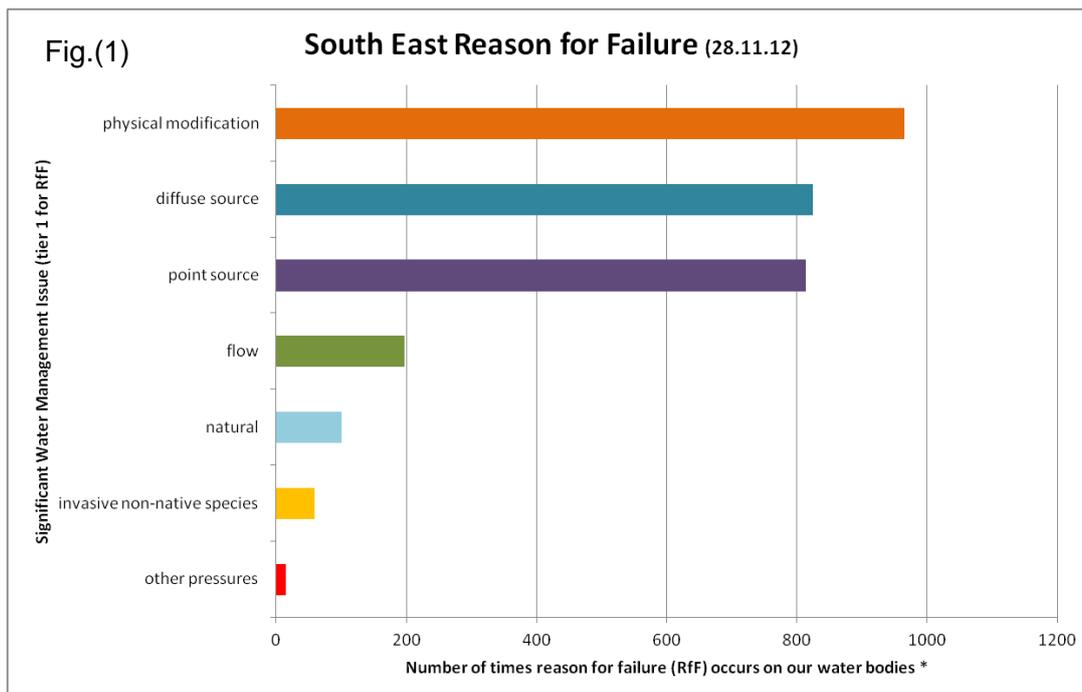


The Water Framework Directive fish status in the South East in 2012 is summarised in Map (2) below.

Map (2) Water Framework Directive fish status 2012



The top reasons for failure in the South East are shown in Fig. (1) below:



To address the reasons for failure and improve the status of water bodies in the South East we have worked with a wide range of partners and in 2012/13 we invested £5.83 million of which £2.2million was ring fenced Defra Water Framework Directive money. In all over 90 projects were delivered, see summary table below and Appendix (1).

Table (1) South East Water Framework Directive Projects 2012/13	
Project type	Environment Agency budget (£million)
Fish passage and eels	£1.37
Habitat restoration	£3.07
Diffuse pollution	£1.22
WFD stillwaters	£0.17
TOTAL	£5.83

Positive ecological outcomes from this investment may well take some time to be realised, however, through our monitoring of fish, invertebrates and other habitat measures we hope to pick up positive changes over time.

Some examples of the work that has been delivered are illustrated below.

Case Study (1) – Improving fish passage on the Itchen Navigation - Hampshire



Bypass channel has created new habitat

Supported by the Heritage Lottery Fund, we constructed a bypass channel at the redundant Malms Lock on the Itchen Navigation to open the river up to the free passage of fish and improve river habitat.

The now-obsolete lock was a complete barrier to fish passage and impounded water, which negatively impacted on the channel's condition and jeopardised the integrity of the Navigation's banks for several hundred meters upstream. A close-to-nature channel was constructed adjacent to the historic waterway to enable fish and other aquatic species to move more freely and improve flows. To facilitate fish movement the bypass channel was designed to provide the appropriate flow conditions by careful use of gradient, channel profile, armouring, planting and positioning of rocks and gravel. To improve the in-channel conditions upstream of the lock, water velocity has been increased and the depth reduced which will ease the pressure on crumbling banks and keep the gravel bed clear of silt.

These works will remedy many of the reasons for failure of this section of the Navigation under the Water Framework Directive.

Case Study (2) – Middle Ouse Restoration of Physical Habitat (MORPH) Sheffield Park meander - Sussex



LEFT: Before MORPH - the river (blue lines) had been straightened, widened and given steep banks for navigation in the past. The old meander (wiggle) in the river is visible in the field. RIGHT: Photo taken during the works. The river has been re-meandered and brought back through the field. This creates different flows and habitats which will bring more wildlife to the river and slow the movement of water through the river.

The Middle Ouse Restoration of Physical Habitat (MORPH) project's aim is to improve the ecological status of the River Ouse in Sussex. To date the project has undertaken work at Sheffield Park, Sharpsbridge, and Buxted Weir. At Sheffield Park we returned the river to its historical course and re-meandered the river. A ford was created to facilitate crossing the river and trees were planted to enhance riparian habitat.

At Sharpsbridge a natural fish pass has been constructed to facilitate fish passage.



LEFT: Smaller rocks being placed by hand into the concrete surface of the rock ramp at Sharpsbridge. RIGHT: Completed rock ramp including downstream rock toe.

Case Study (3) – Loddon Rivers Week 2013 - West Thames



Loddon Rivers Week volunteers from the River Whitewater and the River Blackwater

Over 60 volunteers safely achieved over 40 habitat enhancements, including new pool and riffle sequences, weir modification to allow fish passage, large and coarse woody debris structures to change river morphology, new spawning riffles and some fantastic fish refuges and micro-habitats.

We have produced an Environment Agency Flood Defence Consent advice pack which provides a simple guide to woody debris installation, creating backwaters and adding gravel. It is supplemented with a flood defence consent leaflet and main river map to enable people to see where Environment Agency consent is required by law.

The week was promoted on social media and online and generated a fantastic response, which illustrates the wider public interest in the work that we do to restore rivers. There is lots of interest in having rivers weeks across the region.

Matt Drew Fisheries Officer in West Thames, said: "We did it...again! A big thank you to over sixty enthusiastic volunteers of varied backgrounds, experience and ages for turning up to deliver habitat improvements for Loddon Rivers Week 2013. Thank you also to the land owners and fishing clubs on each stretch of river and our merry band of organisers from the Loddon Champions Group, including the Wild Trout Trust, Blackwater Valley Countryside Partnership, Loddon Fisheries and Conservation Consultative, Hampshire and Isle of Wight Wildlife Trust and my colleagues at the Environment Agency. I would love to see more work carried out by volunteers and others outside of Rivers Week, and if anyone would like help or advice in organising similar practical days, please feel free to get in touch."

Case Study (4) – Olympics – North East Thames



Aeration equipment was used to boost oxygen levels on the River Lee

Ensuring no deterioration in the ecological status of our rivers is an important part of what we do. During the Olympics our fisheries officers were busy helping to deploy mobile aeration units to protect fish populations at sites on the River Lee in East London near the Olympic Park.

The Lee suffers from poor water quality in this area due to the heavily urbanised environment through which it flows, which can cause oxygen levels to sag under certain conditions.

"Our mobile 'doughnut' aerators provide a critical boost to oxygen levels and were deployed at sites such as the Three Mills Marina, where fish tend to congregate", said Rob Pearson fisheries officer.

Case Study (5) – Teston Lock canoe fish pass on the River Medway Kent



Teston Lock canoe fish pass on the River Medway

Since 2009 we have constructed six canoe-fish passes on the River Medway in Kent: at Tonbridge Lock, Porters Lock, Eldridges Lock, East Lock, Oak Weir Teston Lock and a fish pass at Allington Lock.

This major programme of work has delivered both a significant improvement to fish passage on the River Medway, which will contribute to the achievement of good ecological status, but it has opened up the river for canoeing.

Snapshot of further projects carried out in 2012-13

A full list of projects is given in Appendix (1)

TrUck – Using trees for flood alleviation and improving the ecological status of the River Uck – Sussex

As part of the Adur and Ouse Water Framework Directive pilot catchment, we are working in partnership with The Woodland Trust and Sussex Wildlife Trust to identify areas in the River Uck catchment where woodland planting and increasing habitat diversity could alleviate flooding downstream at Uckfield and Lewes. This work will also benefit water quality.

Research has shown that by targeting woodland planting and river enhancement to headwaters this can reduce peak high flows and downstream flooding. A project officer will engage with landowners and farmers, run workshops to meet the local community, raise awareness, find out views and concerns and develop proposals for taking this project forward.



Tree planting in the River Uck catchment

Cotswold rivers receive habitat enhancement boost – West Thames



Gravel habitat being recreated on the River Churn

Between February and March 2012, we completed a number of habitat enhancement projects on Cotswold rivers to improve their ecological status under the Water Framework Directive.

On the River Churn at North Cerney in Gloucestershire, we improved two cattle drinks and created a new spawning riffle for brown trout. This builds on previous work that included fencing 1.1km of river bank to protect the river from damage by cattle.

On the River Ray near Cricklade in Wiltshire, 52 tonnes of gravel was placed in the channel to improve fish spawning habitat on the lower Ray and River Thames. This project is the continuation of a number of enhancements to increase barbel populations on the Upper Thames that have been completed in recent years.

Fobney Island habitat enhanced, Reading – West Thames

Working with Reading Borough Council, Thames Water and the Thames Rivers Restoration Trust Fobney Island in Reading has been enhanced for people and wildlife.

The project, which was managed by ourselves, involved lowering the land to create wetland features, enhancement of the River Kennet and facilitating access to the site for people to enjoy this newly created wetland. The work on the River Kennet included creating riffles, tree management to let more light in, the addition of woody debris and bank side improvements. Together this has created a much more diverse river channel which provides ideal habitat for a variety of fish species at all of their different life stages.

To enable people to enjoy Fobney a circular walk has been created with views across the wetland and two bird hides have been provided.

To maximise gains for wildlife, Reading Borough Council who are the landowners and were in charge of landscaping work, planted a wide variety of native species which will benefit birds, fish, invertebrates, reptiles and amphibians. To help with the ongoing management and maintenance a 'Friends of Fobney Island' group has been established.

To improve angling opportunities Reading and District Angling Club have created a number of new fishing pegs that will be used for club events and competitions.

River enhancement at Godinton on the River Stour – Kent



Bed-raising on the Kentish Stour at Godinton

Working with the Wild Trout Trust, Godinton Piscatorials, the Godinton House Preservation Trust and the Nineveh Trust, half a kilometre of the upper Great Stour in Kent has been restored through the introduction of gravel to shallow the river and enhancement of in-river and marginal habitat.

The section now looks to be ideal for supporting a range of flow loving and gravel spawning fish species as well as being a greatly improved environment for native crayfish.

Primary pupils visit River Uck re-wilding in Sussex



Children visit site where Buxted Weir has been removed on the River Uck

Year 3 pupils aged seven and eight from Blackthorns Community Primary School, Lindfield, enjoyed a unique opportunity to learn about an exciting project to re-naturalise the River Uck.

Under the Middle Ouse Restoration of Physical Habitat project (MORPH) a 1960s weir at Buxted, Uckfield has been removed to improve the River Uck's natural flow and to enable fish to swim up river more easily. Gravel has also been placed in the river to create much needed habitat for fish to spawn on and to support invertebrates.

The project was delivered by ourselves working in partnership Royal Haskoning, the Ouse & Adur Rivers Trust and C. A. Blackwell.

Alexander Lee of Royal Haskoning commented: "The aim of the school visit was to teach the children more about rivers and the wildlife and habitats found in and around them and also to show how construction can affect watercourses."

Mrs Sally Carr who is a teacher, Blackthorns Community Primary School said: "The Year 3 class really enjoyed looking around the site and talking to the team involved in the river project. It was a great chance for them to learn more about the wildlife that lives in and around rivers and to bring classroom-based learning to life."

Launch of the Test and Itchen Restoration Strategy

A strategy for restoring river habitat on the Test and Itchen has been launched by Natural England and the Environment Agency who have worked closely with fisheries, landowners and partner organisations and individuals. At present the Rivers Test and Itchen, which are both Sites of Special Scientific Interest, are not in 'favourable condition'. The strategy, which has been written by the environmental consultant Atkins, is designed to help restore river habitat and target work where it is most needed.



Removing a redundant structure on the River Test, which is a barrier to fish movement.

targeted at birds and wildlife, we hope that the industry will take it upon themselves to protect the environment.

Pollution from Pesticides - We are working in partnership with the water companies and the Metaldehyde Stewardship Group (MSG) to raise awareness regarding the potential risks to drinking water posed by the excessive use of metaldehyde (active ingredient in slug pellets). As a result, the MSG have sent an advice leaflet to all the arable farms in drinking water protected areas and associated safeguard zones that are at risk for metaldehyde.

To reduce the risk of pesticides getting into water we provided training for Environment Agency and Natural England officers on the use of biobeds and other biodigestion processes to treat pesticides and reduce the risk of pesticide contamination coming from yards and pesticide handling areas. The training was provided by Bill Basford, the UK expert on biobeds.

Farm Climate Change and Water Efficiency Advisor project – this is a partnership project set up by ourselves and East Malling Research (and also other partners including Kent County Council, Linking Environment and Farming and Remade). The project has provisional approval from the European Rural Development Fund (ERDF) for funding the 'WATERR' Project, which is designed to support growers and other high use irrigation businesses within the ERDF South East region to 'enhance their competitiveness and profitability by improving their irrigation water availability and use efficiency'.

Improvements to sewage treatment

In the South East River Basin District a number of phosphate removal schemes have been completed at Sewage Treatment Works (STW) since March 2012 to ensure compliance with the Water Framework Directive. These include: Oxted STW (River Eden) – also more stringent ammonia limit; Pulborough STW (River Stor) – also more stringent ammonia limit; Ashington, Cuckfield and Foxhill (closed) in the Adur catchment; Headcorn and Staplehurst on the River Beult; Charing (tighter sanitary limits), Lenham and Sellindge in the Great Stour catchment; Seddlescombe, Westfield, and Brede in the River Brede catchment; Harrietsham and Leeds STW in the River Len catchment; Staplefield in the Ouse catchment; Liss STW in the Sussex Rother catchment; Horsmonden in the Teise; Warnham in the Arun catchment; Tunbridge Wells North STW in the Medway catchment (more stringent BOD too); Handcross STW on the Orange Gill. Wittersham STW in the Kent Rother catchment has a more stringent ammonia limit and Lydd STW in the Romney marshes has more stringent sanitary limits.

In the Thames River Basin District an upgrade at Long Reach STW on the Thames Tideway was completed. Investigations were completed on the Kennet & Avon canal, which looked at the impact of Thames Water's assets on eutrophication of the River Kennet SSSI; and at Tring STW and its impact on SSSI reservoirs. On the lower Lee in London investigations and improvement of Combined Sewer Overflows (CSOs), dual manholes and misconnections is ongoing.

Managing water resources

On the River Darent we have now finalised the changes to the major abstraction licences which were identified as having the most impact on flows.

On the River Itchen we have reduced Portsmouth Water's abstraction but the proposed reduction to the Southern Water's abstraction now looks likely to be delayed. Alternative sources of supply are the critical issue.

On the River Test at Testwood a major investigation is now largely complete. Southern Water have commenced discussions with local landowners on a proposed alteration to the abstraction regime for the lower river.

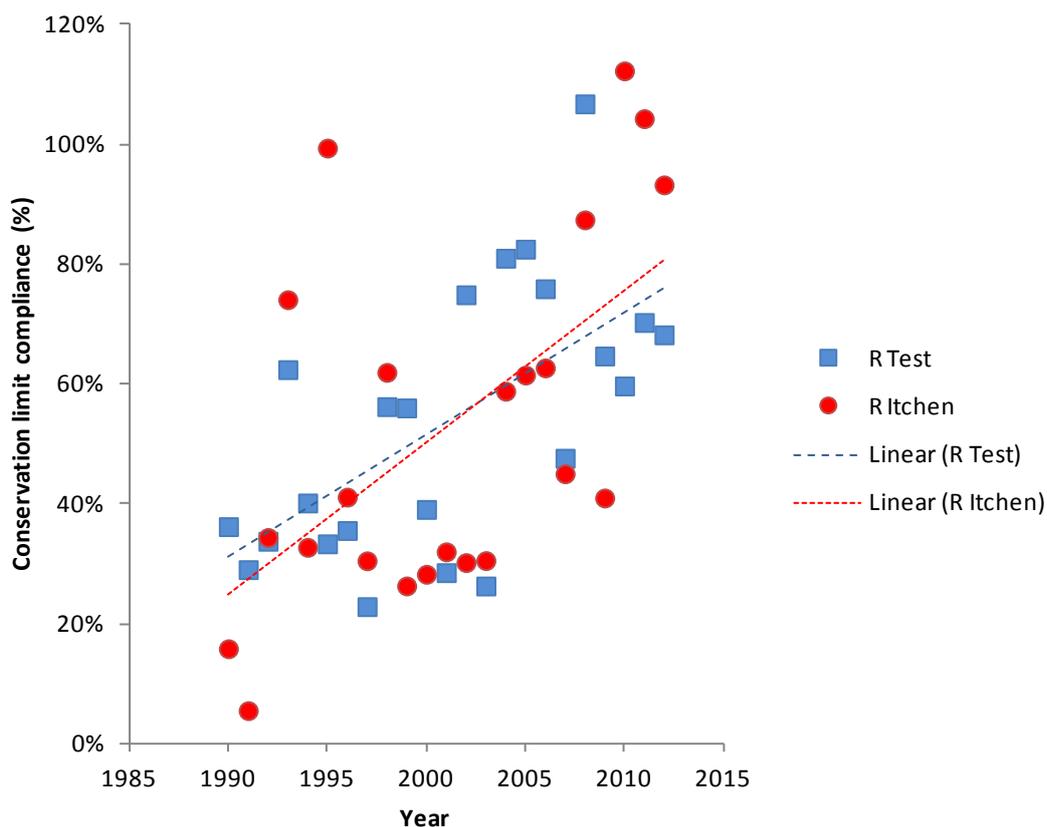
On the River Kennet we have reached agreement with Thames Water on which licence needs to be modified and the next steps that need to be taken although progress has slowed over availability of funds for compensation.

For the Chilterns chalk rivers we are reviewing options under ‘serious damage’ guidance so as to reduce abstraction pressure. Affinity Water are putting their business plan together which includes funding for alternative sources of supply.

1.3 Salmon

There are two principal salmon rivers in the South East: the Rivers Test and Itchen in Hampshire. The status of salmon populations is measured against their conservation limit, which indicates the health of the stock, see Fig.(2) below.

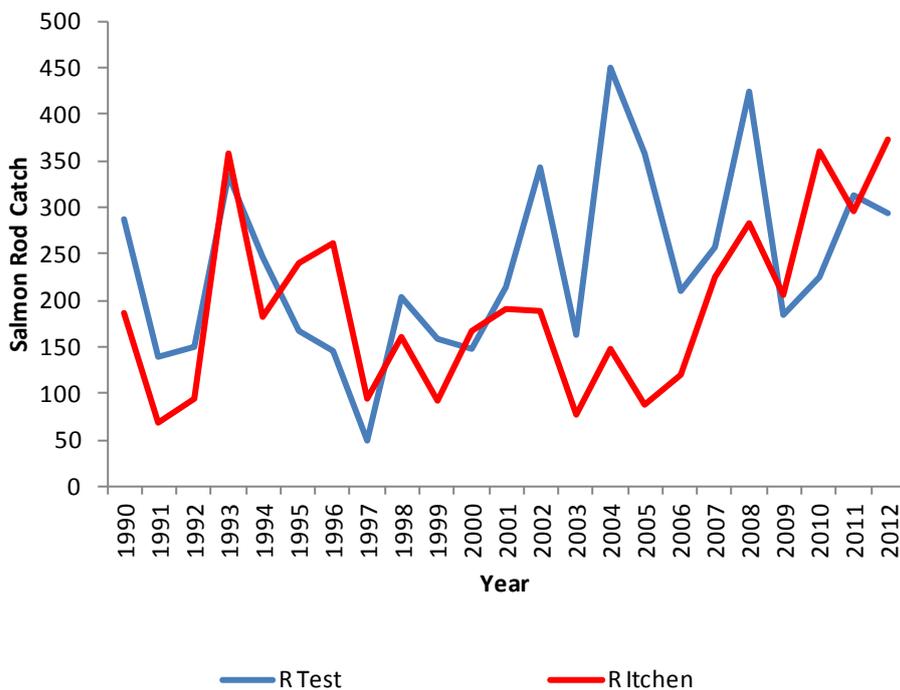
Fig.(2) State of salmon populations on the Rivers Test and Itchen - compliance with their conservation limits



Over the last 20 years after a dramatic decline, the salmon populations on both rivers have been slowly increasing, which is very good news, however the salmon populations vary greatly from year to year.

In 2011 the rod catch was 312 and 295 for the Rivers Test and Itchen respectively. Since 2003 salmon fisheries have practiced 100% catch and release.

Fig.(3) Salmon rod catch on the Rivers Test and Itchen



In addition to the projects outlined in section 1.2 here are some salmon specific projects.

Improved fish passage on the lower River Itchen in Hampshire

A Hatch Operating Protocol has been written for our automated flood gates at Woodmill at the bottom of the River Itchen in Hampshire to assist with fish passage and flood risk management.

The structure has previously caused concern for upstream fisheries with respect to migrating salmon and sea trout and also for Flood Risk Management due to the important role it has in reducing flooding upstream and maintaining water levels. Each party has wanted the sluices to be set to favour their interest. Recognising this, we have worked closely with all of the interests involved and modified the structure and the way it is managed to improve fish passage for both upstream and downstream migrating fish whilst at the same time optimising flood risk and water level management. The work has had the added benefit that trash does not now collect upstream of the structure.

The Hatch Operating Protocol was agreed by all the different parties involved and is now being trialled and has so far had a positive outcome for the environment.



Upstream side of structure



The controls



Downstream side of structure

1.4 Sea trout



Sea trout on the River Hamble

Fish survey shows sea trout upstream of Botley Mill fish pass on the River Hamble – Hampshire

The Botley Mill fish pass was installed three years ago to bypass a mill structure that had prevented sea trout getting up the River Hamble for hundreds of years. A fish survey has now shown that at long last sea trout are able to migrate up stream which is superb news.

Dave Coombs from Portsmouth & District says that a few sea trout have been caught by anglers upstream of the pass. Dominic Longley who carried out the survey said: "It has certainly turned a couple of very dull survey sites into explosively exciting ones!"

Principal sea trout rivers

Nationally 71 principal sea trout rivers have been identified on the basis of having an annual rod catch consistently greater than 50 fish or having a reasonable expectation of achieving this figure. Within the South East the principal sea trout rivers are:

Lymington
Beaulieu
Test
Itchen
Sussex Ouse

Many other rivers along the south coast support sea trout populations including the Meon in east Hampshire, Western and Eastern Rother, Adur and the Stour and Medway in Kent.

To assess the performance of the principal sea trout fisheries two criteria are used: trend in catch per unit effort (CPUE) in the last 10 years and current CPUE relative to the previous 10 years. The results are then put into four categories: 'at risk', 'probably at risk', 'probably not at risk' and 'not at risk'. The assessment is a reflection of how catch per unit effort is changing on sea trout rivers and so it indicates changes in fishery performance, though this is not always a reflection of stock performance. As such these assessments should be considered alongside the Water Framework Directive assessments. Table (2) below, indicates that only one of our principal sea trout rivers is considered to be not at risk.

Region	River	Sea trout fishery assessments		
		2010	2011	2012
South East	Test	Probably at risk	Probably at risk	Probably at risk
	Itchen	At risk	At risk	Probably at risk
	Beaulieu	Not at risk	Not at risk	Probably not at risk
	Sussex Ouse	At risk	At risk	Probably not at risk
	Lymington	Not at risk	Not at risk	Not at risk

In addition to the projects outlined in section 1.2 the following are examples of sea trout work.

Flat-pack fish pass, Anjou Bridge Fish Easement Project – Hampshire

To improve fish passage at a key site on the River Meon in Hampshire we have developed a simple 'self assembly' or flat pack fish pass. The existing structure had a high velocity and a shallow sill which was difficult for small fish to pass.

The flat-pack fish pass has been designed to be suitable for most fish species and a bristle mat was fixed to the structure to aid elver passage.

Most of the construction of the fish pass can be done in the workshop, which saves on cost. All of the parts are light which allows it to be carried to inaccessible sites where vehicle access is difficult. Once on site it can be assembled with the help of a few tools in just a few hours. This approach could serve as a template for structures installed by our partners. For more significant obstructions multiple units could be used.

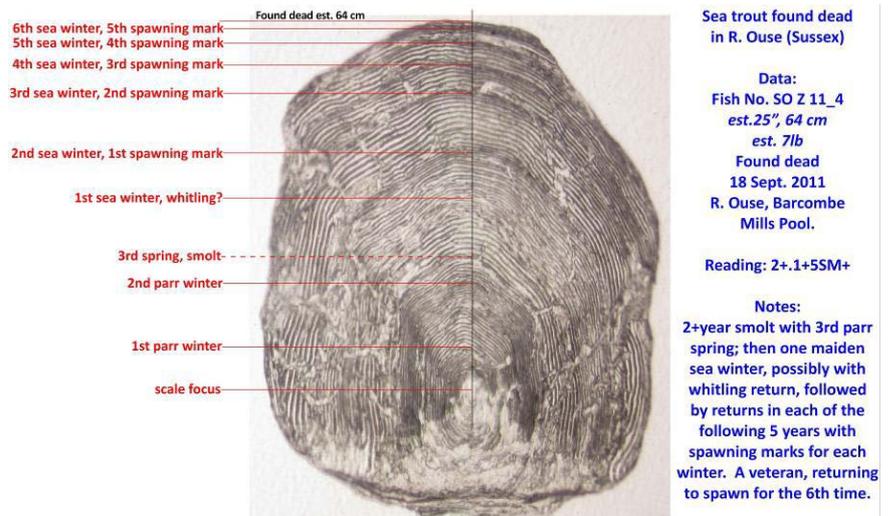


Quick-fit fish pass

Ouse and Adur Rivers Trust - Sussex

The Ouse and Adur Rivers Trust (OART) annual Sea Trout Watch found that sea trout spawned successfully this year with very little mortality despite the low flows and Drought Order on the Ouse. Heavy rainfall in early January came at just the right time to enable sea trout to move upstream. We are particularly pleased that sea trout redds were reported on riffles that had been enhanced by the OART Task Force.

Through the year scale samples were collected to learn more about Ouse and Adur sea trout life history, which included the one shown here which has five spawning marks. For more information go to: www.oart.org.uk



Sea trout found dead in R. Ouse (Sussex)

Data:
Fish No. SO Z 11_4
est. 25", 64 cm
est. 7lb
Found dead
18 Sept. 2011
R. Ouse, Barcombe Mills Pool.

Reading: 2+.1+5SM+

Notes:
2-year smolt with 3rd parr spring; then one maiden sea winter, possibly with whitling return, followed by returns in each of the following 5 years with spawning marks for each winter. A veteran, returning to spawn for the 6th time.

River Ouse Sea trout scale

Improving fish passage on the Ouse



Fish easement put on the Batts Stream Bridge on the Ouse.

The Ouse and Adur Rivers Trust and Wild Trout Trust carried out this fish easement to enable fish to pass through a long culvert under the A272 in East Sussex.

1.5 Eels

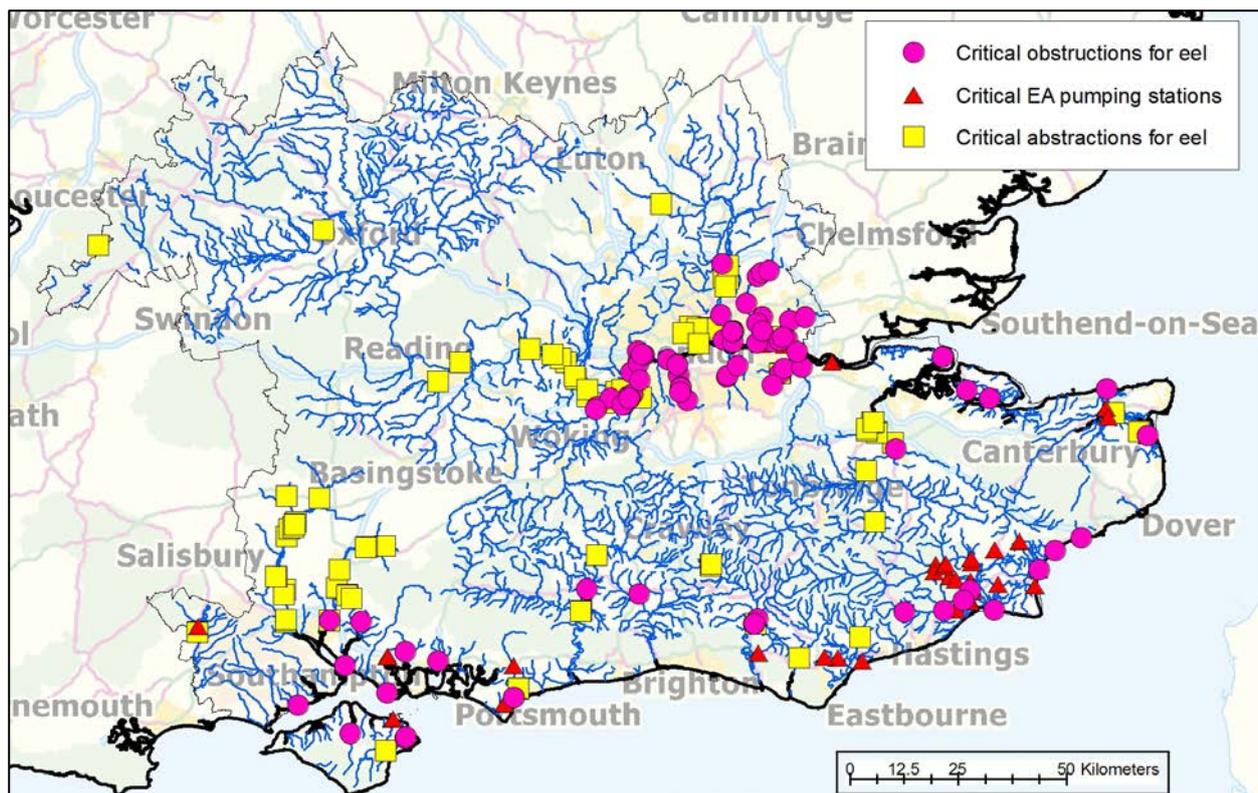


European eel

The Eel (England & Wales) Regulations came into force on 15 January 2010, to support implementation of the EC Council Regulation (1100/2007). Under the European Regulation, the UK must take actions to halt and reverse the decline in the European eel stock. Our commitment is described in the Thames and South East Eel Management Plans.

Actions that we are undertaking to improve eel populations include: addressing obstructions to eel and elver passage such as tidal flaps and weirs, screening of intakes, enhancing habitat and enforcement. To assist in the targeting of resources we have identified priority obstructions, pumping stations and abstractions.

Fig.(4) Critical eel obstructions, pumping stations and abstractions



Here are some examples of work to protect and improve eel populations:

Improving eel passage through culverts

Working with Southampton University we are carrying our research into methods to improve eel passage through culverts whilst not increasing the risk of debris causing blockages.

Initial results have shown that corner baffles with slopes fixed to the base of a culvert increased eel passage success from 28% to 80%, which is a significant improvement.



Culvert with baffles to improve eel passage

Reduced fishery exploitation



Eel rack on the River Test

In recognition of the endangered state of European eel populations, the famous Houghton Club on the River Test has voluntarily reduced the number of eels their racks take. Historically these highly efficient racks could take as many as 1000kg of adult eels per season. The club has now reduced its catch to 90kg with those being caught distributed to club members only. That is about 180 eels.

Heb Leman of the local F&B team said: "This is a great boost for the adult eel population of the River Test and hopefully the actions of the Houghton Club will set an example for others to follow. The action will also improve in river channel habitat as the river will not be diverted through the racks and less boards will be used allowing the river to flow faster in the location of the racks."

Leckford Estate, which is owned by John Lewis partnership no longer operates its eel rack on the River Test in response to the state of the eel population.

Eel enforcement

As an example of fisheries enforcement work, an unlicensed trap was recovered at Teddington thanks to the eagle eyes of a young member of the Thames Angling Conservancy, Oliver, who reported the trap. North East Thames fisheries officer Carl Racey was quick on the scene and immediately seized the trap.

Such unlicensed traps can be a real danger to fish and wildlife including otters and wetland birds as no otter guard was fitted. If you see anything suspicious call our 24hr emergency number 0800 80 70 60



Unlicensed trap recovered at Teddington

Monitoring eel stocks

Eel population status is monitored through WFD fish surveys and through monitoring elver runs on certain water courses.



Elver being measured

1.6 Improving stillwater fisheries

During 2012-13 our programme of stillwater fishery improvements saw £675,000 invested in improving over 10 fisheries across the region, see Appendix (1). Here are a few examples:

New stillwater fishery- West Sussex

As part of a collaborative agreement with Hassocks & District Angling Society we contributed £10,000 towards the construction of a new fishing lake near Hickstead in West Sussex. Incorporated into the site design, which was once an arable field, are scrapes (shallow seasonal ponds) and a native hedgerow and tree planting scheme. The fishery will include swims which will enable access for disabled anglers.



Freshly constructed stillwater in Sussex

Rye Dyke in High Wycombe receives much needed help! – West Thames



The new floating reed islands



Roach and rudd stocked into Rye Dyke

The Rye Dyke Angling Club, Wycombe District Council and ourselves joined forces to improve the habitat of the Rye Dyke in High Wycombe. The Rye Dyke is a popular stillwater fishing venue in the middle of High Wycombe, however, recently fish stocks have suffered due to a loss of aquatic vegetation and cormorant predation.

The Rye Dyke has always been characterised by gin clear water and luxuriant stands of the aquatic plant mare's tail (*Hippus vulgaris*), which provided superb cover from predators and somewhere to spawn for the resident fish population. Unfortunately an 'over enthusiastic' weed cut a number of years ago left the lake somewhat barren with little cover and when a number of

cormorants started to visit the lake the fish numbers began to decline. The mare's tail is beginning to make a welcome return, however, the recolonisation is proving to be a slow process and there are still large areas of the dyke that are totally devoid of cover. To help provide some extra cover a number of floating reed islands have been installed which will help promote aquatic plant growth and refuge from cormorants. Tom Sherwood, Fisheries Officer for the Environment Agency said: "The floating reed islands are designed to provide much needed vegetation and underneath there is a cage structure that allows small and medium size fish to escape from the cormorants."

As the mare's tail carries on its recovery and with the new habitat creation it is hoped fish populations will begin to recover. To aid this recovery we have stocked over a 1000 roach and rudd from our national fish farm at Calverton.

Improving fisheries resilience – Kent & South London



We have been working with local angling clubs to increase the resilience of their fisheries in the event of an incident through funding the purchase of aeration equipment. By having their own equipment the clubs can be more proactive in the event of an environmental stress, such as a drought or pollution incident. Thirty angling clubs across Kent & South London took up this offer and have purchased equipment for their stillwater fisheries.

Aeration equipment

1.7 Promoting angling participation and rod licence sales



Children take part in National Fishing Month

Working with the Angling Trust, fishing clubs, local authorities, charities and many other partners, people from across the region are actively encouraged to try angling through a wide range of initiatives.

At a strategic level we have established a Southern Counties Angling Development Officer, Brian Smart who is on secondment to the Angling Trust from the Environment Agency; supported Grant Fear who is London's Angling Development Officer in partnership with the Angling Trust and Thames 21; and we contribute to the costs of Danny Williams the Angling Trust's South East Angling Development Officer.

Here are some examples of angling projects from across the region.

London Angling Action Group

Working alongside the Angling Trust and Thames 21, we organised and spoke at the first ever London Angling Action Group meeting which was held at Fishmongers' Hall on the 26th September 2012. Over 40 movers-and-shakers of angling in London come together to promote angling in the capital. There were representatives from the Angling Trust, Environment Agency, Thames21, the London Wildlife Trusts, borough councils, schools and angling clubs, along with fishery managers, angling coaches and other stakeholders in the capital.



Grant Fear introduces Londoners to the excitement of fishing

Angling has so much to offer from providing a really positive activity for youngsters to getting people outdoors and enjoying London's many waterways. "There was a real buzz about the meeting and it was the most positive fisheries forum that I have been to for many years", said Lawrence Talks SE Strategic Fisheries Specialist.

National Fishing Month – MBK Leisure Fisheries and Get Activ8'd – Sussex



Children have a go at fishing

MBK Leisure Fisheries in Rake, West Sussex, which is a commercial stillwater, with the support of East Hampshire's Get Activ8'd program, ran angling events throughout the summer to give youngsters a chance to try angling.

The Get Activ8'd programme provides 8 and 16 years old the

opportunity to try new activities for free during school holidays, except Christmas. It has run for five years and every year angling gets even more popular.

At an event on the 23 August run by MBK Leisure, Andy Loble Sussex Fisheries and Biodiversity officer provided coaching alongside Angling Trust coaches to an enthusiastic group of children.

Andy Loble said: "It was a fantastic day with the children learning lots of new skills including fish identification, how to cast, play and land fish, fish handling and much more. I just want to give a huge thank you to the owners of the fishery, Kenny and Kendra for putting on the day and to all those who gave up their time to help. Everyone left with smiles on their faces and were keen to give fishing another go."

Developing angling across Hampshire, Isle of Wight, Sussex and Kent



Brian Smart developing angling across the south

Brian Smart, the Angling Trust and Environment Agency Southern Counties Angling Development Officer has been busy.

Working with partners over 3,000 people were introduced to angling through a programme of fishing events. With the support of trained coaches from the Angling Trust, the Game Anglers Instructors Association and the Professional Anglers Association, events were organised across the south coast including at waters in the New Forest, Southampton, Portsmouth, Andover, Crawley, Hastings, Dartford, the Isle of Sheppey and the Isle of Wight. Most of the events were fully booked, which shows the continued popularity of the sport. If you know of a venue near you that would be suitable for staging an event speak to Brian on 07771624247.

Rod licence sales



We sold 344,062 rod licences in South East in 2012/13. The total number of sales nationally was 1,287,775 (more than half a million licences were sold online). South East accounted for 27% of licences sold across England and Wales. A comparison of how South East compares with other Regions is provided in Appendix (2).

The trend in rod licence sales is shown in Fig.(5) below.

Fig. (5) SE rod licence sales 2000-2012



The trend in South East licence sales shows a steady increase year on year to a peak in 2009 and then a marked decline. The reasons for the fall in sales over the last four years is difficult to link to a single factor; a number of impacts are probably involved:

- The reduction in people's disposable income as a result of the economic problems faced by the country as a whole.
- Government restrictions preventing media advertising.
- Poor weather.
- A trend to move from annual licences to short term licences.

Despite the recent fall in licence sales angling remains a popular sport with our region offering a broad range of fishing options.

1.8 Improving access to the waterside

To enable people of all abilities to enjoy angling we have worked with angling clubs, the Wheelyboat Trust and British Disabled Angling Association and others to improve access to the waterside. Here are some example projects.

Cookham to join lock and weir permit scheme – River Thames

With plans well advanced for Cookham weir stream to be added to the popular lock and weir fishing permit scheme, the British Disabled Angling Association (BDAA) represented by President, Terry Moseley and Access Officer, Carey Sutton were invited to view the proposed site and conduct an audit to review its potential



Terry Moseley and Carey Sutton of the BDAA

for disabled anglers. With disabled toilet facilities already on site it is hoped that Cookham will be a valuable new addition to the permit later this year. For information on current fishing opportunities at our lock and weir sites on the River Thames and details on how to obtain your permit, visit: <http://www.visitthames.co.uk/things-to-do/fishing>

Angling access improvements at Gogmore Farm, Chertsey – River Thames



Tony Babbage OBE (centre) with Runnymede Borough Council's Peter Winfield and Faouzi Saffar at Gogmore Farm, Chertsey.

We teamed up with Runnymede Borough Council to improve and encourage angling access on the River Bourne at Gogmore Farm, Chertsey. Rod licence income was spent on constructing three new fishing swims which, in addition to able bodied anglers, will facilitate access to wheelchair users.

Distinguished local resident Tony Babbage OBE, a lifelong angler and campaigner on community issues, recently attended the site along with Runnymede Parks and Amenities Manager Peter Winfield, Council Engineer, Faouzi Saffar and Fisheries Officer Stuart Keable. The swims were officially opened in the summer.

Isle of Wight fishing club gets a new access path and fishing platforms



Access for all at Isle of Wight stillwater

The Solent Fisheries and Biodiversity team have provided advice and funding to an Island fishing club to provide a much needed new car park and access to three brand new fishing platforms.

The club are excited as they are now able to offer their facilities to all.

1.9 Monitoring the state of fisheries and fisheries science

The state of fisheries is a key element in the way we classify rivers, stillwaters and tidal waters under the Water Framework Directive. Fisheries monitoring also includes assessing the status of eels, detailed assessment of salmon populations on the Test and Itchen, monitoring returns of salmon on the Thames, monitoring sea trout on the River Stour in Kent, and monitoring long term changes in the status of fish stocks amongst other activities.

Complementing our more routine monitoring, fisheries specialists are involved in some pioneering fisheries science research.

The Anglers Monitoring Initiative is an excellent example of citizen science in action and supports our monitoring of macro-invertebrates.



Adrian Bicknell with two Thames salmon at our Molesey fish trap. They were quickly returned to the river after being tagged.

The Thames annual electro fishing boom boat surveys produced some of the best fish numbers of recent years.



The boom boat in action on the Thames

There were 17 different fish species caught on the Thames between Oxford and Hurley and nearly 8000 fish were caught in total. The diversity of fish species on the Thames is excellent, however there is one species that seems to be fin and tails above the other species and that is everyone's real favourite, the roach!

2.0 Disease prevention and control of non-native species

To reduce the spread of fish disease we regulate the movement of fish and promote 'buyer beware' and sustainable fisheries management practice. In the event of a serious disease being detected we work closely with Cefas to control any outbreak.

Non-native species present a real threat to fisheries and we urge all fisheries to consider biosecurity in the way they manage their fishery.

Nipping pennywort in the bud on the Blackwater – West Thames



LEFT: floating pennywort chokes pond. RIGHT: mechanical removal of pennywort

Tackling the invasive species floating pennywort is a priority because it damages aquatic ecosystems and increases flood risk. Once it is established, the costs to control it are significant. A recent report by CABI indicated that floating pennywort control incurs annual costs to the national economy of around £25 million.

Following a report of floating pennywort in a pond on the River Blackwater catchment, we worked with Farnham Anglers and six volunteers from the Blackwater Valley Countryside Partnership to clear the pennywort before it could spread into the river. The pennywort was largely removed from the pond using a long-reach digger and Farnham Anglers will closely monitor the situation.

Catfish removed from a Sussex stillwater



14lb catfish removed from Sussex stillwater

Following concerns about the lack of fish in a lake at Langley in East Sussex, we undertook a fish survey and found that a 14lb Wels Catfish had been eating all their fish! These voracious predators can wreak havoc on a fishery, liking nothing better than eating vulnerable prey species such as roach.

In an autopsy of a different catfish taken from another water, 45 roach and numerous other unidentifiable fish species were found in its stomach, which gives a glimpse as to the impact that just one large catfish can have. Non-native fish pose a significant risk to our native fish and other wildlife as they can out-compete them for food and habitat, change the habitats that they live in, spread disease and parasites and even eat our native fish. To protect native fish stocks, keeping such fish without a licence is an offence under the Import

of Live Fish (England and Wales) Act 1980. When licences are granted, they are subject to strict conditions. The maximum fine under ILFA is £5000 and costs of removing illegally held fish can be considerably higher.

2.1 Incident response



Preventing fish theft through micro tagging carp

We operate a 24/7 emergency response, which can be contacted through our hotline number 0800 80 70 60. Incidents range from pollution, distressed fish to reports of illegal fishing.

Fish and chips - carp tagging to deter theft

In response to a number of reported incidents of carp theft, we worked with Horsham and District Angling Association to microtag a number of carp to deter theft. Rod licence money was used to purchase equipment and to train club members in tagging fish of between 10 and 16lbs.

Each club member received a certificate showing the successful completion of the course and their all important Implanter Code without which they could not buy either the microchips or the implanter tools. This is to ensure untrained people don't get hold of implanting equipment and just 'have a go, which done incorrectly can harm the fish'.

The day caught the media's attention and was featured on BBC radio Sussex and BBC South Today. We are hoping more fisheries see this as a positive way to ensure the safety of their valuable fish stocks.

2.2 Fisheries enforcement

To protect fish stocks from illegal fishing our enforcement officers carry out regular covert and overt patrols across the region and work closely with a wide range of partners including colleagues in our Environmental Crime Teams, police wildlife crime officers, the Inshore Fisheries and Conservation Authorities (IFCAs), fisheries and landowners amongst others.

Fisheries enforcement is a key activity for realising improved ecological status under the Water Framework Directive. All enforcement work is intelligence led, risk based and targeted.

Rod licence enforcement

During 2012/13 our warranted officers undertook 34,359 first time rod licence checks, which was 50% of those checked nationally. We issued 1689 offence reports, which was 44% of those issued nationally. The overall evasion rate was 5.57%.



Rod licence checking

There were 1010 successful rod licence prosecutions last year, which resulted in total fines of £123,173 and £ 116,549 costs. This represents about 39% of successful prosecutions nationally. A comparison of how South East compares with other region's prosecution activity is provided in Appendix (3).

Enforcement patrols

Here are few examples of enforcement activity that our officers carry out:



From left to right, representatives from Elmbridge Security Patrol, our Waterways Enforcement team, Surrey Police and our Fisheries Enforcement team patrolling the banks of the lower non-tidal Thames

salmon watch

Fish crime crackdown

Hampshire's wild salmon need your help

When salmon return to our rivers to spawn they are at risk of being illegally removed by poachers.

How you can help:

- Look out for individuals landing large silver fish using an illegal instrument like the Snatch (a triple-weighted hook as shown). Snatches are used either on a hand-line or a short, stout fishing rod.
- Look out for people standing on bridges or banks making sudden jerking movements to foul hook fish.

You can stop fish crime by reporting what you see as soon as you spot it happening.

Call the Environment Agency's 24-hour incident hotline on 0800 807060

We will respond quickly. Please do not approach anyone you suspect of undertaking illegal activity.

Help protect our threatened salmon stocks

environment-agency.gov.uk

Battle against the poachers in Hampshire

Our High Impact Fisheries Enforcement Officers (HIFE) found a hidden spear gun whilst on routine patrol - Hampshire



Recovered spear gun

During a routine evening patrol at a known vulnerable location two fisheries enforcement officers observed three people walking along the River Itchen in Hampshire at night with torches. The officers decided to carry on watching the individuals using night vision and thermal imaging equipment and realised that they were carrying what appeared to be a fishing rod.

When the people were approached by our officers they were empty handed. The officers then decided to search the immediate area and discovered a spear gun hidden behind a fence. The officers called Hampshire Police to report the incident and to arrange for the equipment to be collected. A police fire arms unit was deployed to the location to de-activate the spear gun.

Paul Newman said: “This is a clear example of the lengths some individuals will go in order to catch and kill wildlife from our rivers. The enforcement work that our HIFE officers carry out is very important and specifically aimed at targeting locations where this type of activity is known to occur. Offences of this nature are very serious and can significantly impact not only fish stocks but on wild fowl too.”

On your bike! – North East Thames



In a new initiative, our North east Thames fisheries enforcement officers are out and about using bicycles to cover miles of ground looking for illegal fishing on London’s waterways. Like the Police they are an efficient way to undertake patrols and they are a visible deterrent to illegal fishing activity.

“Using bikes is a great way to get access the Lower Lee navigation, Grand Union and Regents Canal navigation network, detect illegal fishing and raise our public profile”, said Steve Robinson – North East Thames.

“We’re able to check for illegal nets and traps, which are often found in inner city areas, and the word gets around that we are out and about. We also enforce our fisheries byelaws governing the taking of fish which carries a substantial fine of up to £50k under the new rules.”

Environment Agency Fisheries Enforcement Officers on bike patrol



Boat patrol protects vulnerable sea trout stocks



Mick Cox fisheries officer with seized illegal crayfish trap

2.3 Regulation, licensing and authorisations

Licensing and authorisations

We issued 124 eel net authorisations nationwide in 2012, for a total of 2,939 instruments: a significant proportion of this activity was in South East waters.

The eel catch returns are split into yellow and silver eels. In 2012 the total yellow eel return by weight was 32,596 kg of which it is estimated that 15% or 4,935kg was landed from South East waters. Silver eel returns amounted to 6,447 kg; 10% (693 kg) is apportioned to South East.

New legislation in 2010 has allowed us to change our approach to regulating eel fisheries. We no longer issue eel net fishing licences to anyone who applies, but issue fishery authorisations instead. These come with conditions that manage where, how and when fishing can take place. Authorisations can be refused where fishing would pose an unacceptable risk.

Since the legislative changes brought about by the Marine and Coastal Access Act (2009), in addition to eel, we now also authorise fishing for smelt, lamprey, crayfish and mitten crab. In 2012 there were no applications in South East to catch lamprey, mitten crab or smelt. However there has been a lot of interest in trapping non-native crayfish (most commonly signal crayfish. In 2012 we issued 710 authorisations to trap non-native crayfish (these can run for up to 3 years). For information, we only allow trapping in certain river catchments.

Any person wanting to stock fish into a fishery requires our consent in advance. In South East we issued 888 consents in 2012/13, which is 23% of the consents to introduce fish nationally.

We also issue consents for the removal of fish, allowing people to capture fish from a water to be moved elsewhere. The most common method of removing fish is using a seine net. In 2012 we consented 468 removal activities across South East.

2.4 Engagement and advice

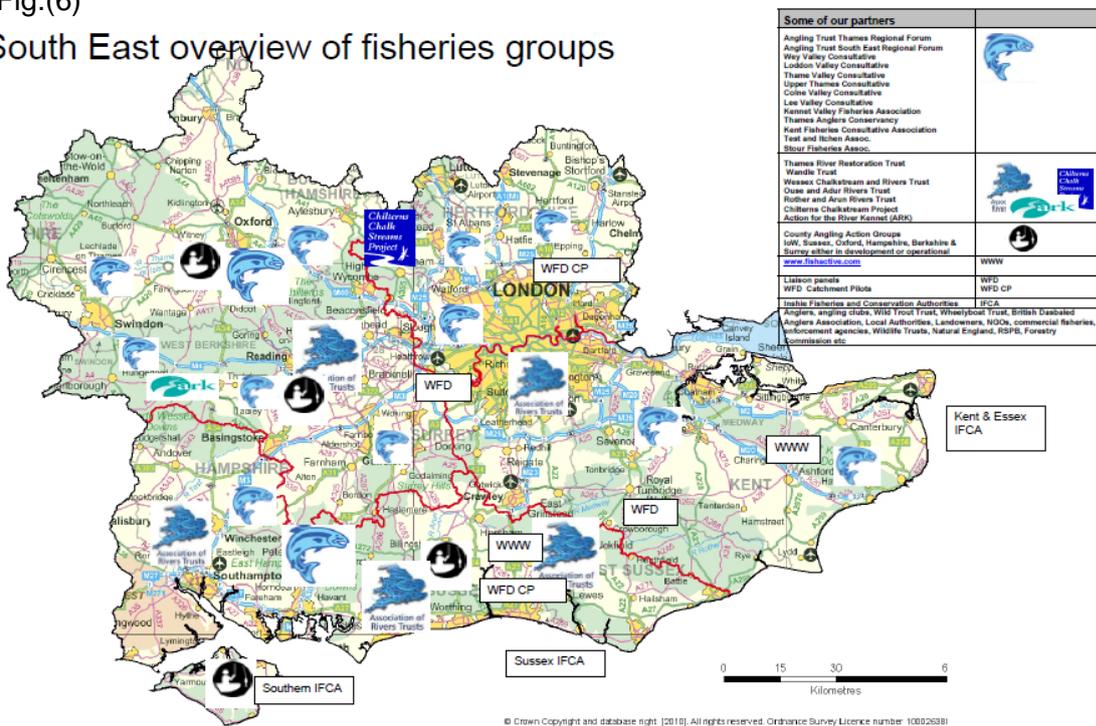
We work with a large number of stakeholders and partners that ranges from angling clubs, enforcement agencies, local authorities to fisheries consultatives, rivers trusts, the Wild Trout Trust, Angling Trust and Environment Agency colleagues including Operations Delivery, Procurement, Finance, Legal, Development and Flood Risk, NEAS and NCPMS. A snapshot of some of the partners we work with is given in Fig.(6).

We are most grateful for all the support that we receive from partners who together help to maintain, improve and develop fisheries and the wider environment.

To keep partners updated on the work that we do we attend many meetings with fisheries interests and others throughout the region and issue regular South East Fisheries and Biodiversity Newsletters.

Fig.(6)

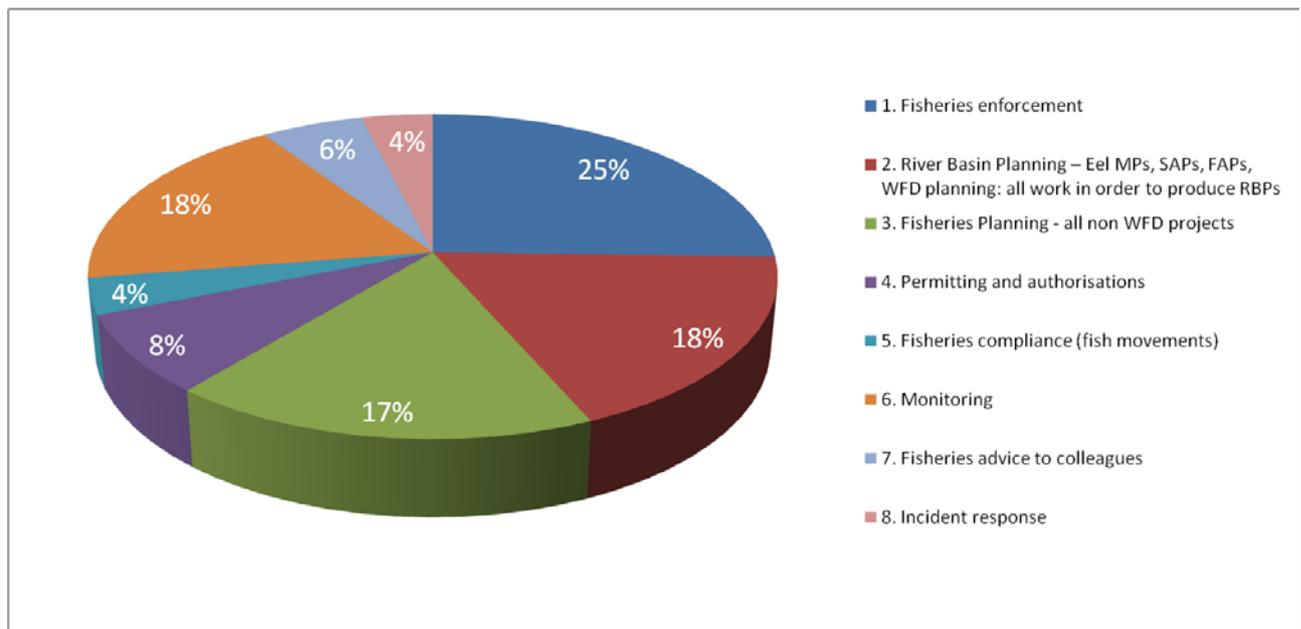
South East overview of fisheries groups



2.5 Funding and resources

- The 344,062 rod licences sold in South East generates an income of just over £5.85 million. Combined with sales from all regions across England and Wales we raised £23 million from licence sales nationally. We set ourselves a target of £24.7M therefore it was necessary to slow or stop a number of national projects (including IT work).
- Our fisheries outcomes are funded through this charging income plus a proportion of the Grant in Aid received from government. There are a range of fisheries financial commitments to national activities and support services (see Appendix (4) for National Allocations and Regional split).
- Our region received £2.434 million in fisheries charges (rod licence income) and £3.081 million in Grant in Aid contributions. Salaries and operational costs were £2.151 million and £3.364 million was invested in projects.
- The number of core fisheries staff in the South East is 60. The outcomes delivered are illustrated below.

Fig.(7) South East fisheries activities



N.B. Estimated split of activities based on time recording information.

APPENDIX South East Annual Fisheries Report 2012/13

Appendix (1) South East projects 2012/13

Area	Project	Type	Budget
Kent & South London	All Ability Access Improvements South London	Access	5,000
West Thames	All Ability Access Improvements	Access	15,000
TOTAL		Access	20,000
Environment & Performance	London Angling Dev Officer	Angling participation	10,000
North East Thames	NEA NE Angling Participation	Angling participation	16,000
West Thames	Angling Participation Prog ADB	Angling participation	15,000
West Thames	Waterways Angling Initiative	Angling participation	20,000
Solent & South Downs	Angling Participation 11/12	Angling participation	10,000
Kent & South London	Angling Participation South London	Angling participation	10,000
Kent & South London	London Youth Games	Angling participation	10,000
Kent & South London	KFCA	Angling participation	1,250
Kent & South London	KSL Angling Participation	Angling participation	10,000
TOTAL		Angling participation	102,250
Kent & South London	Eel & Elver Improvements KSL	Eel	10,000
West Thames	SE Eel Projects	Eel	60,000
TOTAL		Eel	70,000
Solent & South Downs	Chesapeake Mill Fish Pass	Fish passage	10,000
Solent & South Downs	Culvert Flow Velocity	Fish passage	5,000
Solent & South Downs	Titchfield Mill fish pass	Fish passage	15,000
Kent & South London	Westfield Sluice	Fish passage	30,000
North East Thames	NEA Barriers to fish movement	Fish passage	20,000
North East Thames	NEA Fish bypass Passingford	Fish passage	15,000
West Thames	Bray Wick Fish Pass	Fish passage	150,000
West Thames	Church Mill Fish pass	Fish passage	60,000
West Thames	Iffley/Hinksey Weir Bypass	Fish passage	100,000
West Thames	Romney Fish Pass Monitoring	Fish passage	25,000
West Thames	Wey Structures Project	Fish passage	40,000
Solent & South Downs	Arun Structures	Fish passage	100,000
Solent & South Downs	Paulton's Park Fish Pass	Fish passage	150,000
Kent & South London	Fordmill Weir Fish Passage	Fish passage	50,000
Kent & South London	Bletchworth Weir Fish Pass	Fish passage	20,000
Kent & South London	Pledges Mill Weir Improvements	Fish passage	250,000
North East Thames	NEA 1 Abbey Cross Impoundment	Fish passage	70,000
Kent & South London	Glenfield Gate Fish Pass	Fish passage	20,000

Kent & South London	Lenside Fish Pass	Fish passage	20,000
Kent & South London	Stourmouth PS Fish Pass	Fish passage	150,000
TOTAL		Fish passage	1,300,000
North East Thames	NEA Fish Projects - Colne	River restoration	20,000
North East Thames	NEA Fish Projects - Roding	River restoration	70,000
North East Thames	NEA Fisheries Projects - Lee	River restoration	40,000
West Thames	Fisheries Action Plan	River restoration	50,000
Solent & South Downs	Sussex Rivers	River restoration	40,000
Solent & South Downs	Hampshire Chalk Invertebrates	River restoration	20,000
Solent & South Downs	New Forest Non Native Plants	River restoration	50,000
North East Thames	NEA Fish Projects - Colne Hab Enhance	River restoration	20,000
Kent & South London	Kent Fish Restoration	River restoration	35,000
North East Thames	NEA River Action in Herts	River restoration	66,000
West Thames	Cotswold Rivers Project	River restoration	10,000
Kent & South London	Kent Countryside Pships	River restoration	150,000
Kent & South London	KSL WFD Small Projects	River restoration	20,000
Kent & South London	EM South F&B Small Projects	River restoration	10,000
West Thames	Chiltern Chalk Stream Project	River restoration	10,000
West Thames	CWP BAP Project	River restoration	7,000
West Thames	Letcombe Brook Project	River restoration	8,500
West Thames	Loddon & Eversley Heritage	River restoration	15,000
West Thames	Lower Churn Enhancements	River restoration	40,000
Kent & South London	Beverley Brook Wildlife & Wetlands Trust	River restoration	10,000
Kent & South London	Wandle Trust WFD Delivery	River restoration	135,000
Kent & South London	Wandle WFD Habitat Imp	River restoration	10,000
Kent & South London	Deculvert Riverside Gardens	River restoration	25,000
North East Thames	NEA Tokynton Park	River restoration	50,000
North East Thames	NEA WFD Habitat Creation	River restoration	100,000
West Thames	Eastrop Park	River restoration	20,000
West Thames	R.Thames Floodplain Rest	River restoration	45,000
Solent & South Downs	CURE Cuckmere restoration	River restoration	70,000
Solent & South Downs	Becton Bunny Restoration	River restoration	20,000
Solent & South Downs	Fishlake Meadows Restoration	River restoration	10,000
Solent & South Downs	Hermitage Stream restore	River restoration	100,000
Solent & South Downs	Mottisfont River Restoration	River restoration	50,000
Solent & South Downs	River Anton Restoration	River restoration	10,000
Solent & South Downs	River Medina Restore IOW	River restoration	30,000
Solent & South Downs	Test & Itchen Restoration	River restoration	15,000
Solent & South Downs	Fish & WFD Needs	River restoration	30,000
Solent & South Downs	Adur Teville scheme	River restoration	400,000
Solent & South Downs	Arpha	River restoration	300,000
Solent & South Downs	Collaborative	River restoration	120,000
Solent & South Downs	Eels	River restoration	50,000
Solent & South Downs	IFCA sea trout protection	River restoration	40,000

Solent & South Downs	Morph	River restoration	500,000
Solent & South Downs	Morph 3 Weirs	River restoration	100,000
West Thames	River Lambourn at Shaw	River restoration	25,000
Solent & South Downs	River Alver Restoration	River restoration	110,000
North East Thames	NEA River Beane Restoration	River restoration	20,000
TOTAL		River restoration	3,076,500
Solent & South Downs	Billys Lake Enhancement	Stillwater	10,000
Solent & South Downs	Foxcotte & Anton Lakes	Stillwater	30,000
West Thames	WT Stillwater Fisheries Imps	Stillwater	50,000
Solent & South Downs	Sussex Stillwaters	Stillwater	40,000
Kent & South London	N Kent & S Lon Stillwater Enh	Stillwater	50,000
Kent & South London	Kent Stillwater Enhancements	Stillwater	25,000
Solent & South Downs	Fisheries in Sussex	Stillwater	20,000
North East Thames	NEA Luton Hoo Lakes	Stillwater	50,000
West Thames	Fleet Pond Restoration Phase2	Stillwater	100,000
Solent & South Downs	Warnham Mill Pond non-native species removal	Stillwater	75,000
TOTAL		Stillwater	450,000
Solent & South Downs	Landfill WFD Groundwater	Diffuse pollution	30,000
West Thames	WFD targeted PP work	Diffuse pollution	15,000
Kent & South London	Urban Diffuse Pollution - G&SW	Diffuse pollution	30,000
Environment & Performance	Diffuse Pollution Advice Programme	Diffuse pollution	300,000
North East Thames	NEA Chilterns Farm Advice	Diffuse pollution	30,000
North East Thames	NEA Hunsdon Mead DWP plan	Diffuse pollution	35,000
Solent & South Downs	SEWES	Diffuse pollution	50,000
Solent & South Downs	WAG	Diffuse pollution	40,000
North East Thames	NEA Roding Valley Meadows EM	Diffuse pollution	20,000
West Thames	Loddon Farm Advice Project	Diffuse pollution	10,000
West Thames	Ray (Oxon) Partnership Project	Diffuse pollution	15,000
West Thames	Sediment Finger Printing	Diffuse pollution	15,370
Solent & South Downs	Test & Itchen Diffuse	Diffuse pollution	10,000
Kent & South London	Agricultural & Horticultural	Diffuse pollution	45,000
Kent & South London	Burstow Stream - P & Sediment	Diffuse pollution	20,000
West Thames	Cotswold WILD Project	Diffuse pollution	150,000
West Thames	Kennet Improvement Project	Diffuse pollution	11,500
West Thames	Peartree Lock Culvert	Diffuse pollution	41,000
Solent & South Downs	Industrial Drainage Project	Diffuse pollution	40,000
North East Thames	NEA Salmons, Pymmes & Moselle	Diffuse pollution	20,000
London Environment Team	Greenstreets	Diffuse pollution	150,000
London Environment	Reduce UDP -Trans. Infra.	Diffuse pollution	75,000

Team			
Environment & Performance	Diffuse Pollution P/ship	Diffuse pollution	50,000
North East Thames	NEA WFD Sediment surveys	Diffuse pollution	12,000
West Thames	Wey Farm Advice Partnership Pr	Diffuse pollution	10,000
TOTAL		Diffuse pollution	1,224,870
GRAND TOTAL			6,243,620

Appendix (2) National rod licence sales 2012/13

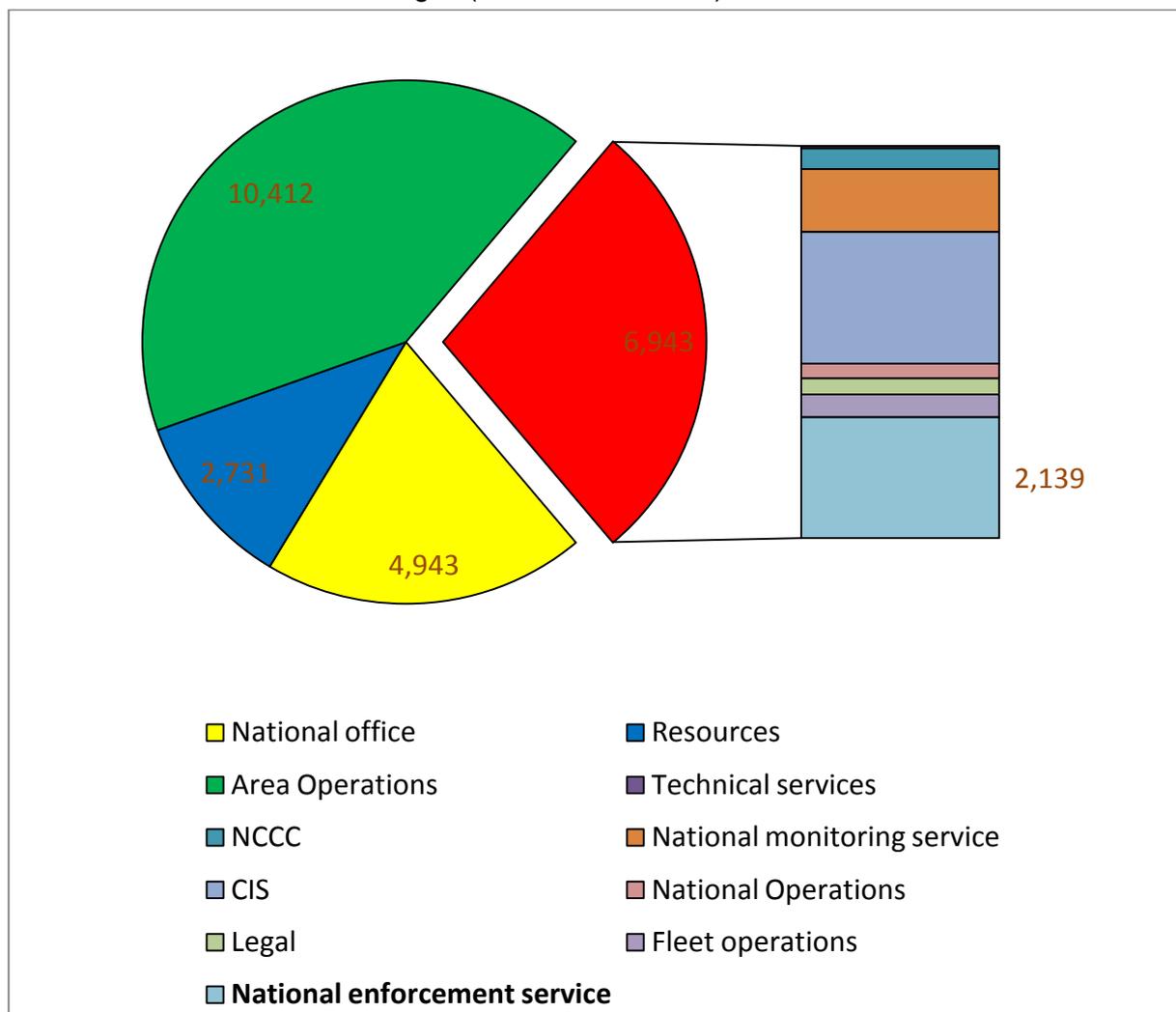
Region	Numbers		Difference	Percentage
	2011	2012		
South East	383,583	344,062	(39,521)	-10.3%
Anglian	234,944	214,168	(20,776)	-8.84%
Midlands	281,921	246,925	(34,996)	-12.41%
Yorkshire &NE	191,785	174,240	(17,545)	-9.15%
North West	168,050	152,512	(15,538)	-9.25%
South West	101,335	91,258	(10,077)	-9.94%
Wales	62,060	56,839	(5,221)	-8.41%
Unknown	8,847	7,771	(1,076)	-12.16%
Total	1,432,525	1,287,775	(144,750)	-10.10%
Region	Income (£)		Difference	Percentage
	2011	2012		
South East	6,350,170	5,847,913	(502,257)	-7.91%
Anglian	4,083,632	3,771,647	(311,985)	-7.64%
Midlands	4,911,710	4,441,462	(470,248)	-9.57%
Yorkshire &NE	3,342,411	3,071,418	(270,993)	-8.11%
North West	3,187,602	2,940,209	(247,393)	-7.76%
South West	1,806,343	1,670,172	(136,172)	-7.54%
Wales	1,245,465	1,164,984	(80,481)	-6.46%
Unknown	112,283	97,308	(14,976)	-13.34%
Total	25,039,616	23,005,111	(2,034,504)	-8.13%

Appendix (3) National prosecution figures 2012/13

Area	Prosecutions Concluded	Successful Prosecutions	Success Rate	Fines	Average Fine	Costs	Average Costs	Cautions
Anglian	192	190	99%	£23,218	£121	£23,521	£123	9
Yorkshire & NE	572	569	99%	£68,410	£120	£67,337	£118	7
North West	202	201	100%	£21,926	£109	£23,633	£117	1
Midlands	437	436	100%	£52,303	£120	£50,250	£115	1
South West	42	41	98%	£5,800	£138	£4,479	£107	0
Wales	161	160	99%	£19,299	£120	£19,622	£122	1
South East	1020	1010	99%	£123,173	£121	£116,550	£114	5
Total	2626	2607	99%	£314,129	£120	£305,392	£116	24

Appendix (4) National fisheries budget allocations 2012/13

The breakdown of fisheries charges (rod licence income) is as follows

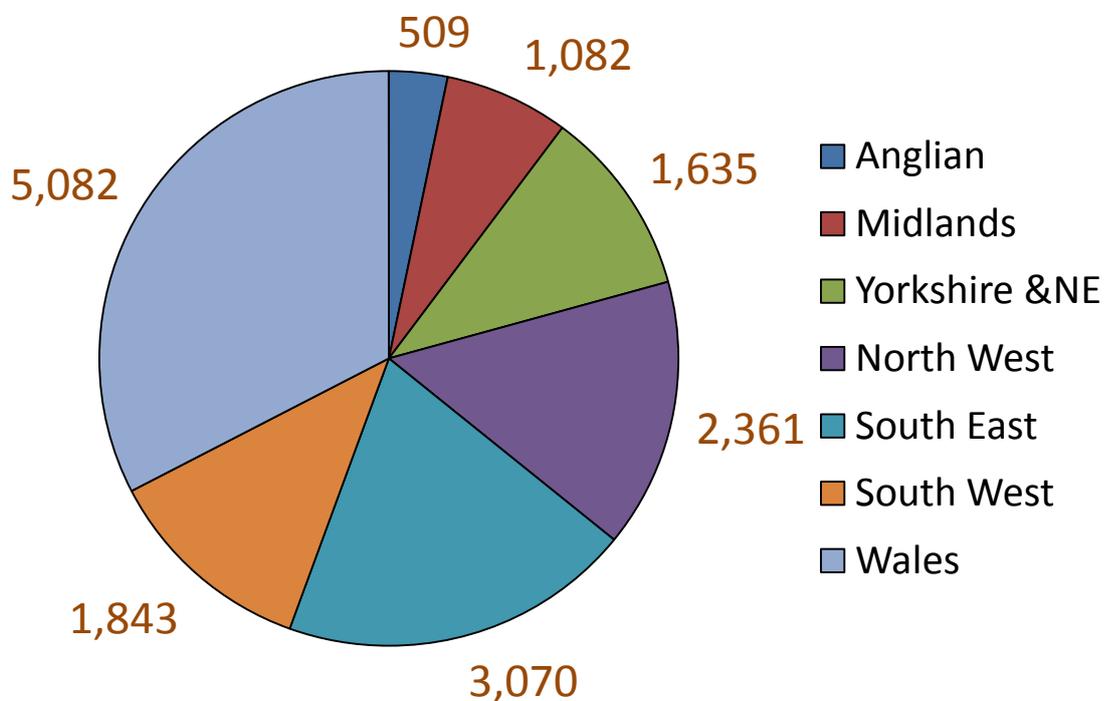


The red sector is a contribution to National Once activities. The standard top-slice of 28% is applied to all budgets, it includes the rod licence contract and the National Fisheries Laboratory. Two of the biggest payments are for IT support and the National Enforcement Service. The yellow sector includes the Chief Executive's Office, the Evidence Directorate, National Environment & Business staff plus national projects such as angling participation and otter fencing etc. The blue sector are the costs associated with buildings and assets etc. The remaining £10.412M to be allocated to operations (Regions). The budget was divided according to a cost-allocation model which included criteria such as Key Performance Indicators or measures such as number of incidents, projects and the level of angler engagement.

Region	12/13 licence allocation £K
Anglian	1964
Midlands	2055
Yorkshire &NE	871
North West	1077
South East	2432
South West	1192
Wales	1072
Total	10412

Our fisheries work is also funded by government Grant in Aid (GiA). It is used to cover the costs of work not covered by rod licence charges income; therefore it pays for salmon enforcement and surveys and some eel work.

The pie chart shows the fisheries GiA per region (£k), it is not necessarily an accurate reflection of fisheries funding because in recent years the GiA includes WFD money for habitat improvement and fish passes. These projects (see Appendix (1)) with a fisheries benefit may or may not have been recorded as Fisheries GiA.



**Would you like to find out more about us,
or about your environment?**

Then call us on

03708 506 506 (Mon-Fri 8-6)

Calls to 03 numbers cost the same as calls to standard geographic numbers (i.e. numbers beginning with 01 or 02).

email

enquiries@environment-agency.gov.uk

or visit our website

www.environment-agency.gov.uk

incident hotline 0800 80 70 60 (24hrs)

floodline 0845 988 1188



Environment first: Are you viewing this on screen? Please consider the environment and only print if absolutely necessary. If you are reading a paper copy, please don't forget to reuse and recycle if possible.