



Thames Annual Fisheries Report 2009-10



Enhancing fisheries for the future.



1. Executive summary

During 2009/10 we worked with a wide range of partners to deliver some really positive improvements to fisheries across Thames Region and in doing so, we achieved or exceeded all of our targets for fisheries outcomes set at the beginning of the period. However we recognise that there is much more that needs to be done.

Within the Thames River Basin Management Plan, approximately one quarter of our rivers are at good ecological status. Fisheries has a major part to play in improving the overall status of our rivers and wetlands.

We completed 47 practical fisheries improvement projects in partnership with local communities, that enhanced river and still water habitat, addressed obstructions to fish passage, protected endangered fish species, created all ability access to the waterside and promoted angling for all. In all £710,000 was invested in on-the-ground projects, of which a third was contributed by external partners. Examples included: building a fish pass on the Windrush at Newbridge; enhancing river habitat at West Overton on the Kennet and installing elver passes on the River Lee. Such habitat improvement work not only directly enhances fish stocks and the wider aquatic environment, it is vital for mitigating and adapting to the impacts of climate change.

We improved all-ability access to the waterside at a number of locations and introduced over 3,000 people to angling and learning about the environment through our angling participation programme, which was run jointly with the Angling Development Board. Example projects include Mount Pond on Clapham Common and Goldsworth Park Lake.

To monitor the status of our fish stocks and to better inform fisheries management decisions, we carried out 291 fish surveys on rivers, still waters and the tideway.

In protecting our fisheries from illegal fishing activity, we worked closely with partner agencies and fisheries to carry out targeted intelligence-led enforcement patrols. For rod licence enforcement we piloted a new way of working that used our evidence base to focus effort on high evasion waters. As a result we checked more licences (23,853), detected more offences in a shorter time and freed up resources to pursue more serious fisheries offences. In 2009/10 rod licence sales were the highest yet recorded, at 256,000, which represents a 12% growth on the previous year.

In communicating what is being achieved for fisheries and the wider environment we issued 76 press releases and achieved coverage on TV, newspapers and radio.

Working with partners and local communities will be a growing theme in the way we carry out our work. Last year we worked with landowners, fishing clubs, Consultatives, Local Authorities, NGOs such as the Angling Trust, Wild Trout Trust and Thames 21, community groups and many more. We want to thank all those who supported our work and helped make a difference.

Through 2010-11 we aim to build on these successes.

2. Overview

KPI's (Key Performance Indicators)

All KPI targets were achieved or exceeded. Of particular note was the high output of fisheries improvement works, that ranged from building fish passes, which are vital for the free migration of fish, to improving all ability access to the waterside.

Table 1. Summary of Fisheries Key Performance Indicators 2009/10.

Action description	% of target - Thames Region	North East Area	South East Area	West Area
Number of salmon, sea trout and eel actions completed	27	2	25	-
Number fisheries & habitat improvement projects (non-salmon)	23	6	4	13
Number of anglers coached	3,484	1,068	1,055	1,361
Press releases submitted	38	7	15	16
We complete our fisheries monitoring programme	224	48	96	80
Rod licence Sales	255,961	97,099	111,634	47,228
We complete our fisheries rod licence checks (excluding repeat checks)	23,853	11,439	6,917	5,497
Number of rod Offence Report Forms placed onto FOPS	1,332	905	270	157
Rod License Checks - Evasion Rate (%)	5.58%	7.91%	3.90%	2.86%
We check high-risk fish introductions in the field	18	5	9	4

Fisheries Budgets.

The funding allocation to Fisheries in Thames Region in 2009-10 was £2,012,000, of which £1,666,000 was for revenue expenditure and £346,000 was for specific projects. This was a significant increase on the allocation for 2008-9, which was £1,542,661 for revenue and £274,000 for projects.

In addition to the above, £350,000 was obtained from DEFRA WFD to fund fisheries projects in water bodies currently failing good status under Water Framework Directive.

Across Thames Region there are 44 fisheries staff. Last year Alan Butterworth, the Regional Fisheries Technical Specialist and a fervent worker for fisheries in the Region for over thirty-five years retired. Lawrence Talks is the Regional Strategic Fisheries Specialist and Darryl Clifton-Dey is the Regional Technical Specialist.

Working with partners.

The Angling Trust was formally accepted as the official national representative body for angling in late 2009. The Salmon and Trout Association remains independent.

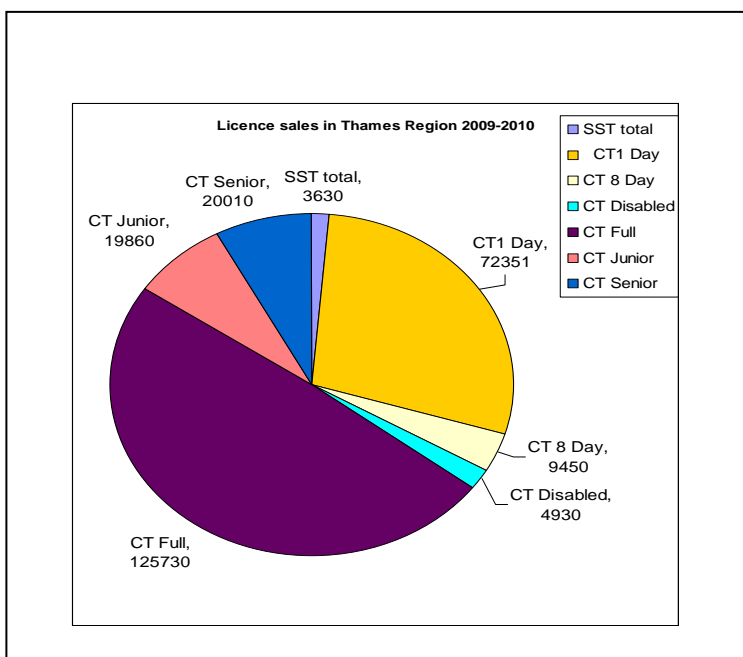
The Thames Fisheries Consultative Committee became the Angling Trust Thames Regional Forum and provided a point of contact for the parent body and a major focus of contact between the Environment Agency and angling groups throughout the Region. These include:

- Wey Valley Consultative
- Loddon Valley Consultative
- Thame Valley Consultative
- Upper Thames Consultative
- Colne Valley Consultative
- Lee Valley Consultative
- Kennet Valley Fisheries Association
- Thames Anglers Conservancy

In addition we are working with two rivers trusts, the Thames River Restoration Trust and the Wandle Trust.

Rod Licence Sales

255,961 fishing licences were sold in Thames Region in 2009-10. Most of these were coarse and trout licences, with full senior licences constituting the majority. This was a 12% increase on 2008/9 sales. The breakdown of rod licence sales is shown below:



In addition to rod licences we issued 22 eel netting licences covering 396 fyke nets used in the tideway.

Legislation

Marine Bill – became law on 15th January 2010. As a consequence of this our responsibility as the Sea Fisheries Committee for the tideway will transfer to new Kent and Essex Inshore Fisheries and Conservation Authority (IFCA) which replaces the

former Sea Fisheries Committee. IFCA's will have a statutory duty to manage fisheries sustainably. We will be represented on the IFCA and will seek greater protection for our migratory fisheries in both estuarine and coastal waters.

The Marine Bill gives us new duties to protect smelt and lampreys and better powers to manage fisheries, which include a new licensing and authorisation scheme; emergency and wider byelaw-making powers; powers to introduce a new live fish movements scheme; and tighter regulation of historic salmon and sea trout fisheries. These powers will be phased in over the next 12 to 18 months. Thames Region already have byelaws in place to control use of fixed engines in tidal waters and these will be passed to the IFCA in 2011.

Eel Regulations became law early in 2010 and give the Agency powers to reduce fishing pressure on vulnerable eel stocks, require installation of screens and eel passes to reduce entrainment and increase access to habitat. The Agency produced Eel Management Plans; these were submitted to Europe in August 2009 and approved in March 2010. The Thames plan includes monitoring of eel and elver stocks, measures to reduce exploitation and emphasis on improving access for eels. By way of examples, we installed elver passes on the Lee at Bow Locks and are working with the Wandle Trust to build elver passes at Butter Hill and Merton Abbey.

3. Water Framework Directive – The Thames River Basin Management Plan.

Status of water bodies.

Currently approximately a quarter of our rivers are at good ecological status and none are classed as high (Figure 2a & 3). For those waterbodies that have been assessed for fish, approximately one third are at good or high status. By 2015 we predict that this will increase and that the number of water bodies at poor and bad status for fish will decrease (Figures 2b & 4).

Figure 2a. Ecological status of water bodies in Thames River Basin District, 2010.

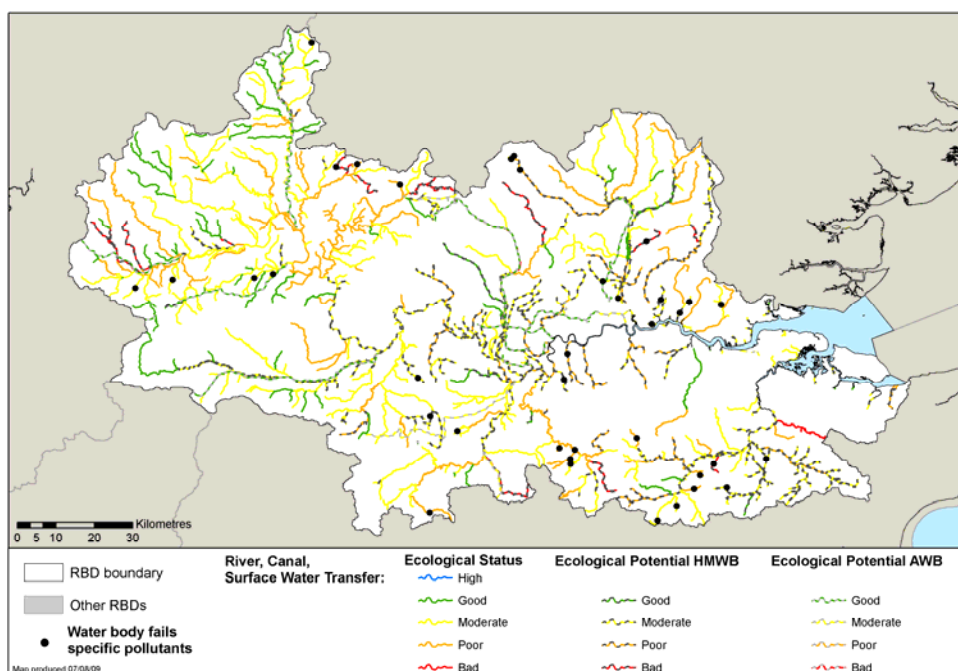


Figure 2b. Expected status of waterbodies in Thames River Basin District in 2015

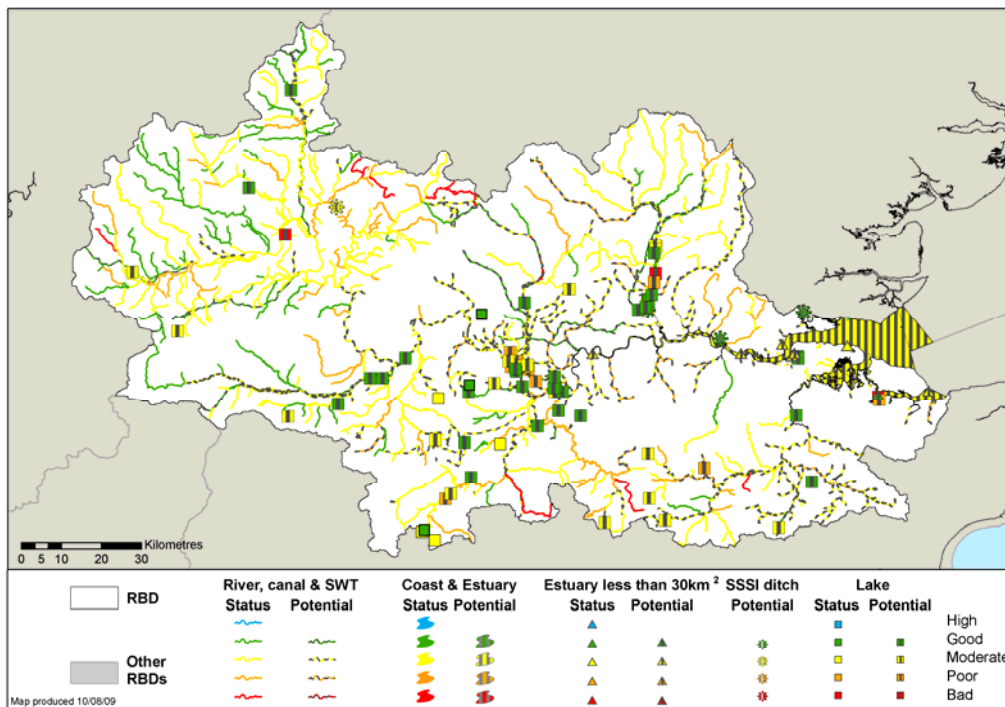


Figure 3. Fish status Thames River Basin District, 2010.

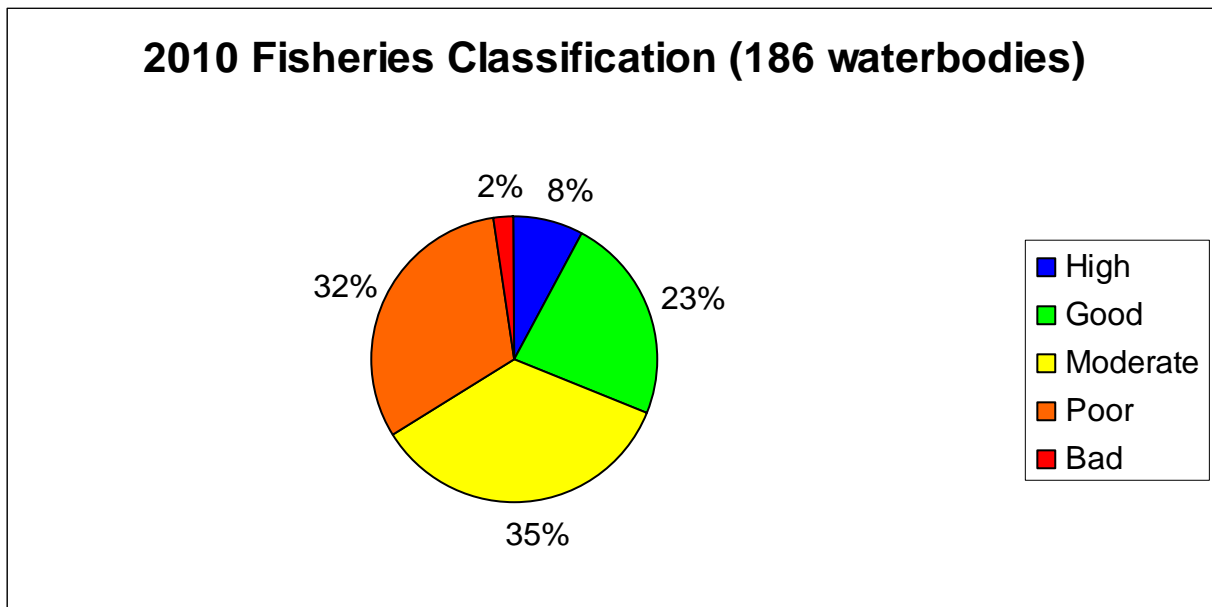
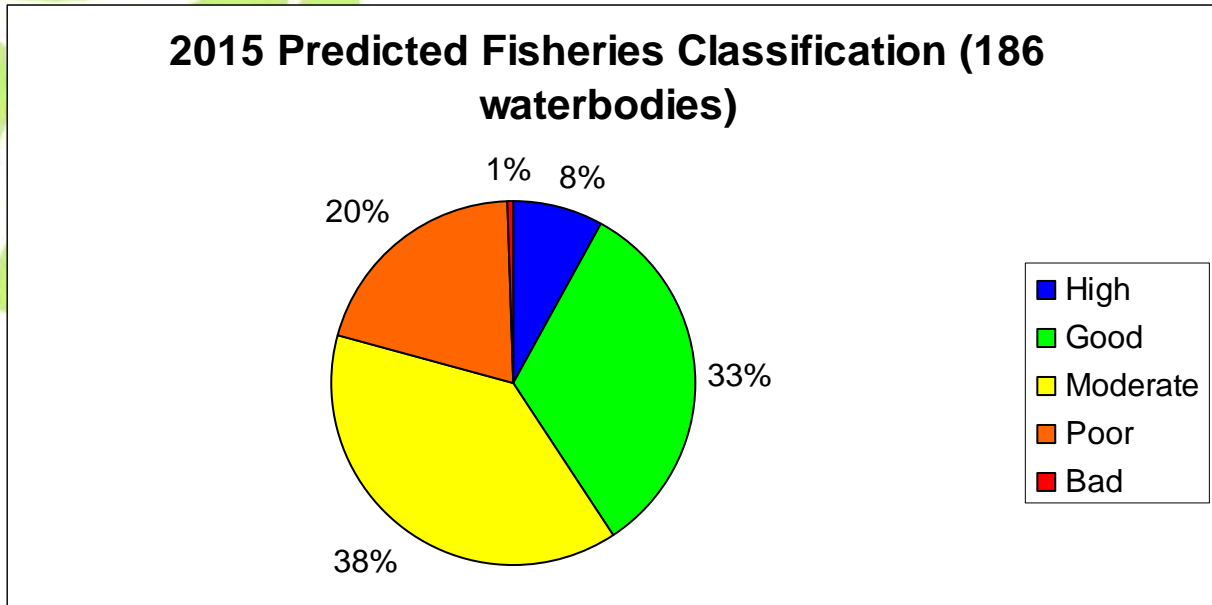


Figure 4. Predicted fish status by 2015.



Our priorities for action.

It will not be possible to improve all water bodies to Good Ecological Status by 2015. Even with unlimited resources the reality is that some improvements will take longer to bring about and in many cases the causes of poor status are not yet fully understood.

Criteria for priority work to improve ecological status of water bodies that are less than “Good” include:

- 1) cases where expert judgement indicated that Good Status could be achieved by 2015 on the basis of improvements already in progress
- 2) water bodies that are less than Good and include protected sites (such as SSSI’s) that are in poor condition
- 3) Water bodies that are at risk of deterioration if measures are not taken
- 4) Waters which are currently classed as Bad.
- 5) Waters which are currently failing good status for just one element (e.g only fish) and by only a single class – potential “easy wins”

In a number of cases, investigative work will be necessary to check the ecological status of water bodies, investigate problems and recommend solutions, before firm action can be taken.

How can we deliver this ?

For a number of years now there has been an awareness that the Environment Agency cannot deliver all these benefits alone, we have to work with others in order to pool resources, knowledge and expertise. The economic and political climate in recent years has accelerated the shift from the Environment Agency’s role as a provider of the resources needed towards that of a leader and facilitator.

For each water body and type of action required we will aim to work with key local groups, such as angling clubs, wildlife groups, consultative associations, community

groups, companies, landowners and, Rivers Trusts, to make the improvements we need to achieve good ecological status.

Two recent examples of this way of working include:

River Cherwell near Hampton Gay, Kidlington. Our good working relationship with landowners and anglings clubs resulted in the creation of two backwaters connected to the river. This work only took a few months to plan and deliver and cost £6,000. These backwaters will provide excellent refuges for juvenile fish during times of high flow and will act as good nursery areas in the summer. This illustrates how working in partnership can deliver environmental improvements quickly and in many cases more cheaply.

Elver passes on the lower River Lee.

Through working in partnership with British Waterways two elver passes were constructed at barriers on the lower Lee, at Bow Locks and Three Mills Weir. These passes will help elvers migrate upstream.



4. A new approach to fisheries law enforcement

Why ?

- To protect fish stocks from illegal fishing activity
- To make best use of scarce resources
- To free up resource so that can be invested in other priority work
- To increase revenue to fund fisheries improvements.

What are we doing differently?

- Focus licence checking on key high evasion waters previously identified – including licence “blitzes” on key waters using entire enforcement teams.
- Reduce overall licence checking activity to spend more time on serious offences – illegal methods etc
- Use signage and promotion to stimulate/remind people to buy licences. This included press releases, visits to tackle shops,
- Pilot commenced August 2009.

Outcomes.

We checked a total of 23,853 anglers for their rod licences, a small increase on the previous year’s numbers, in around 67% of the time taken in 2008-9. This enabled us to spend more time (around 20% of the total spent on enforcement) on more serious fisheries offences, compared to less than 5% in recent years.



Although it is too early to gain a clear picture of the impacts of this approach on licence evasion rates, indications are that evasion rates fell more rapidly through the year in areas where we concentrated our licence enforcement work.

5. Better environments for fish and fishing.

Physical habitat projects are a major action to achieve good status for Water Framework Directive in the Thames basin and to create a better environment for angling. Projects range from building fish passes to improving all ability access to the waterside.

Projects.

Figure 5. Projects planned and completed

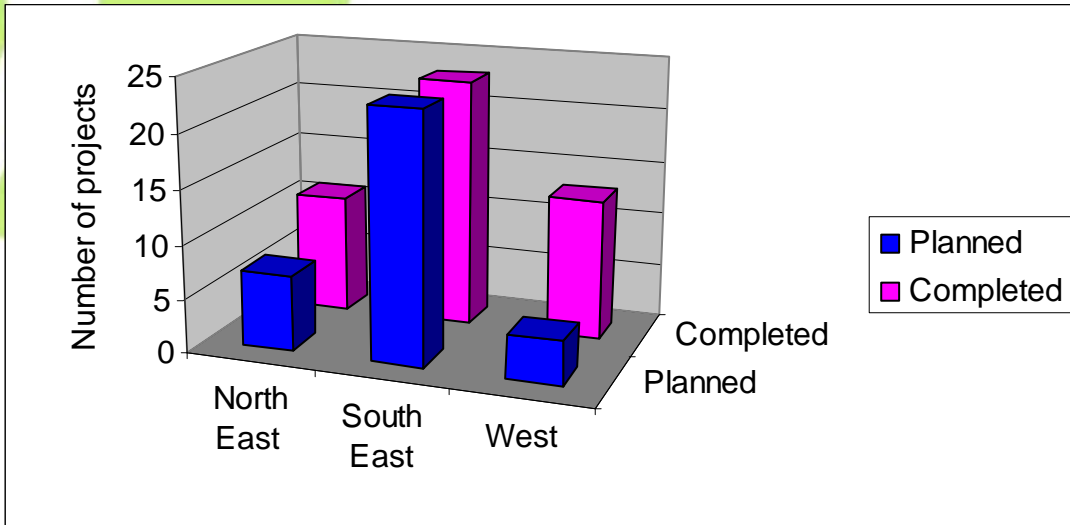


Figure 6. Project Costs

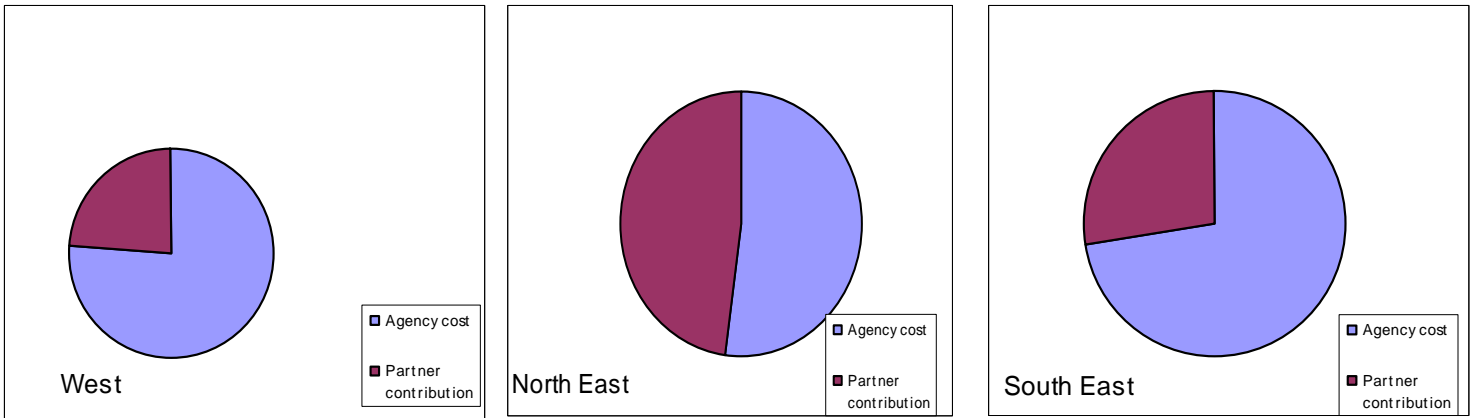
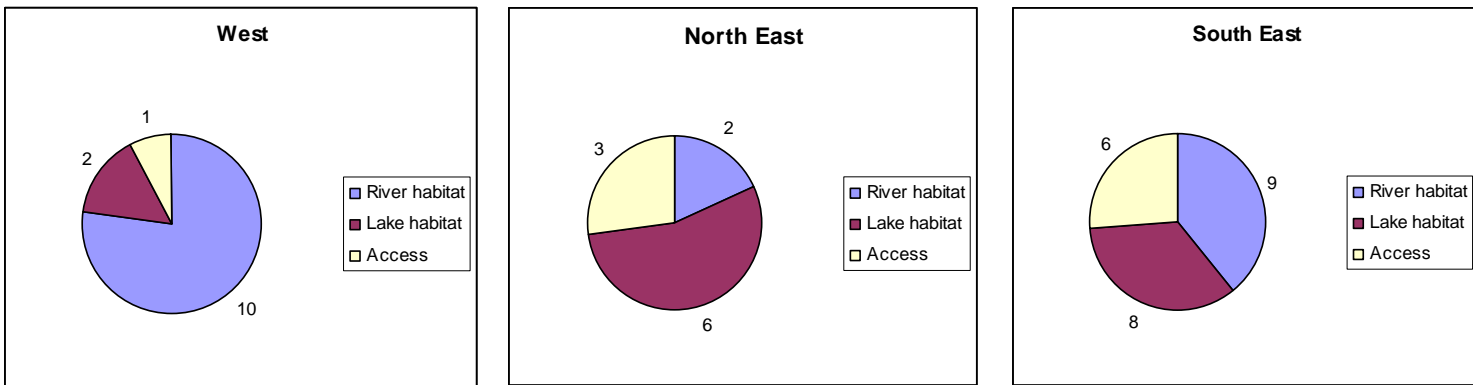



Figure 7. Type of project



Here is a brief summary of some of the projects completed in 2009-10.

West Area

- **Rye Dyke** all-access platforms and reed beds. Jointly-funded £18,000 project between us and Wycombe District Council. The High Wycombe area was




identified as an area of significantly low rod licence sales, especially among juniors. This area has been promoted with local events with 67 new anglers coached in a 2009 event.

- **West Overton, River Kennet.** 400 meters of river restored through reinstating the original channel and creating pools and riffles. The project was done in partnership with a local landowner and has led to enhanced wild trout spawning.
- **River Thames , Abingdon.** A natural river margin was created to repair a length of failing river bank upstream of Abingdon Lock.
- **River Cherwell near Hampton Gay, Kidlington.** In partnership with landowners and angling clubs two backwaters connected to the river were created at a cost of £6,000. These backwaters will provide excellent refuges for juvenile fish during times of high flow and will act as good nursery areas in the summer.
- **River Lambourn SSSI restoration** - the second phase of River Lambourn SSSI restoration work through Newbury was completed.
- **River Windrush Bypass Channel** A fish pass bypass channel on the River Windrush, will enable fish to pass Newbridge Mill, which is the most downstream barrier to fish migration on the River Windrush. The project created 190m of new habitat, and reconnected over 5km of main river channel. The reinstated bypass channel will provide the perfect breeding ground for fish as well as an ideal habitat for other wildlife to thrive. At the top end of the bypass channel a lariner fish pass will ensure fish passage over a full range of flows.
- **River Wye, Wooburn Green, High Wycombe.** Urban chalk stream habitat enhancement project involving the local community engagement. Attracted positive publicity.

South East Area

- **Goldsworth Park Lake Improvements.** Eight new platforms and enhanced habitat for wildlife such as dragonflies, damsel flies and frogs also wildfowl such as grebes, ducks, coots and moorhen.
- **River Whitewater phase (1).** The first phase of restoration works over a 200m section of the River Whitewater has been consented and completed as part of the Greywell to North Warnborough Management Plan. This plan was formed between the EA Fisheries and the landowner aiming to restore 1.1km of degraded chalk stream habitat. This first phase includes seven flow deflectors using large woody debris and brushwood mattress. Work included the creation of an in-stream sunken brushwood island.
- **River Whitewater phase (2).** March 2010 saw the completion of the second phase of works to restore over 2km of River Whitewater habitat. This work came from an EA Fisheries and Farnborough and District Angling Society management plan to restore the river through Holdshott Farm and Heckfield and was supported by £10k of EA FRM funding.

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- **Hogsmill eel ladder.** An eel ladder has been deployed on a gauging weir on the River Hogsmill.
 - **Mount Pond on Clapham Common.** Construction work is completed on the first phase of a major new partnership project between the Agency and London Borough of Lambeth. Mount Pond on Clapham Common is an important local recreational and ecological resource. The 150k funding for the project includes £25k from the Agency's Fisheries team. Work included desilting, creation of reedbeds, improvements to water supply, installing purpose built platforms for anglers of all levels of mobility and improved footpaths around the lake. The project attracted very positive PR in the local media
 - **Barnett Pond Improvement Project.** This project was carried out in conjunction with Shamley Green AS. Conditions had deteriorated at this once popular local fishery. Specific improvements achieved: bank regrading/re-profiling, planting of marginal vegetation, construction of fishing platforms, repaired eroded banks, restored and improved fishing swims, installation of fish refuges
 - **Gatwick Lake** is leased by Horley Piscatorials. It is on the edge of an urban area and has suffered from incidents of anti social behaviour and fish theft. Work has included: shrub clearance and the stocking of small carp.

North East Area

- **River Colne** Construction of two fish refuges and a by-pass channel will provide important spawning and juvenile habitat for fish in 1.5 km of the River Colne. The completed scheme has been well received by all parties. The feasibility for further habitat enhancement phases is currently being assessed. Effective working in partnership with external parties in addition to cross functional working played an influential role in successfully delivering this work.

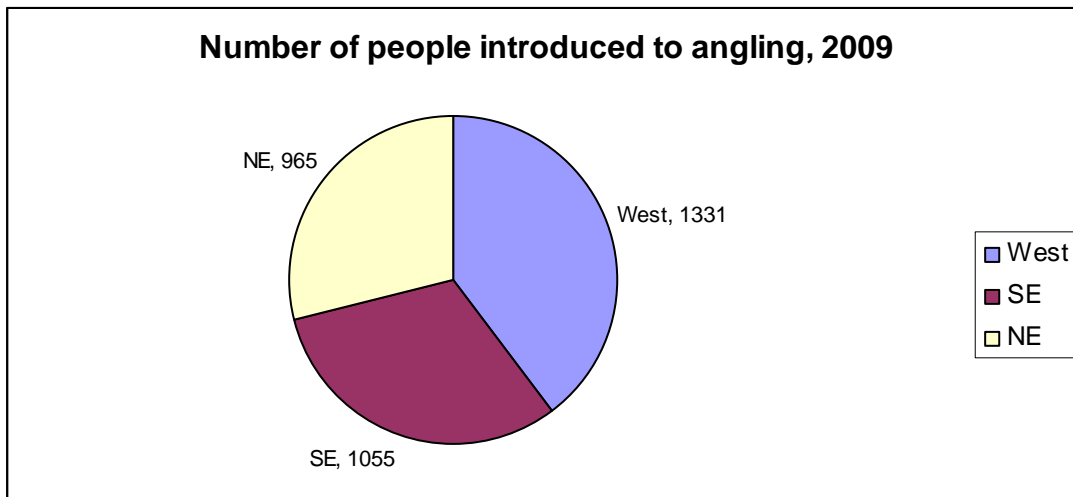
Two new Elver passes on the lower river Lee Partnership with British Waterways has enabled the construction of two elver passes at barriers on the lower Lee, at Bow Locks and Three Mills Weir.

- **Angling access and Enhancement** Thames North East area is continuing to work closely with local councils to improve access to free and day ticket council owned waters. This work meets several of our corporate objectives and participating Councils' social objectives. Project partners have included Hillingdon Council, Epping Forest District Council, City of London Corporation, East Hertfordshire District Council, Enfield Council and Ealing Council,
- **Pincey Brook River Restoration** The Agency in-house workforce realigned 1.7km of the brook back into the valley floor, reconnect the brook with its natural floodplain. The watercourse is now able to inundate the floodplain naturally and the valley floor has been converted to 17 hectares of rare floodplain grazing marsh which is a BAP priority habitat. A reduction of pollution risk due to arable land being converted to pasture. Increased flood storage giving some protection to downstream properties.



6. **More people from all backgrounds taking part in angling**

Figure 8. Angling Participation projects, 2009



In 2009-10 Thames Region exceeded its target of introducing 3000 new people to angling through its Angling Participation Programme.

The bulk of this programme is now progressed by angling clubs, councils and other local groups, with qualified coaches supplied by the Angling Development Board, though Agency staff still lead a small number of events.

Each year the Environment Agency supports the angling events in the London Youth Games in order to encourage young people especially those from deprived inner city areas to take up angling.

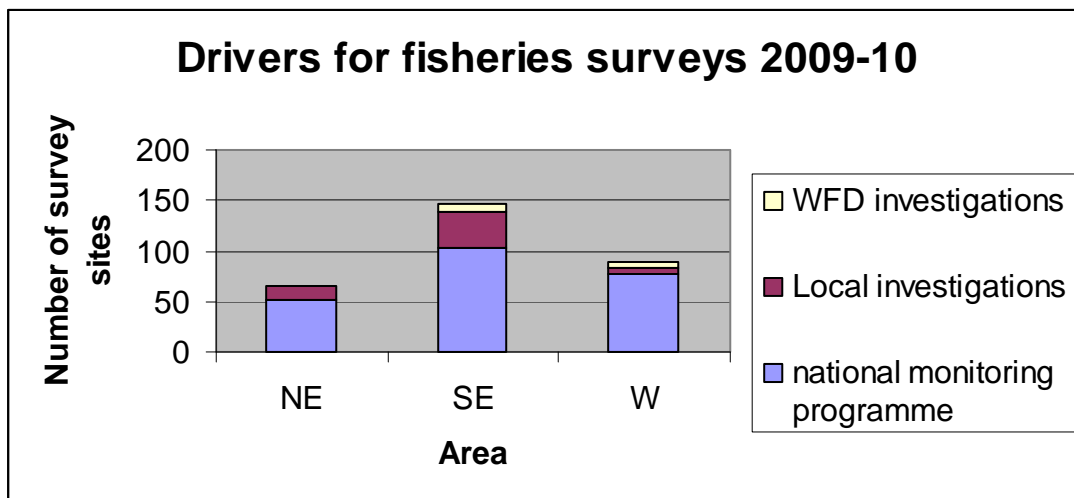


The London Youth Games provides a great chance for children to take part in the sport, even if they lack suitable angling and coaching facilities in their home boroughs. It is Europe’s largest annual youth sports event. In 2009 around 47,000 kids took part in 30 sports from all 33 London boroughs and the event presents a good opportunity to showcase angling.

7. Fisheries Surveys.

All planned surveys were completed, a total of 291 sites were surveyed in 2009-10. Figure 9 highlights the various drivers for these surveys, and table 2 provides specific site details for these surveys. In the future, monitoring for Water Framework Directive is likely to increase and change the shape our fisheries survey programme.

Figure 9. Drivers for fishery surveys



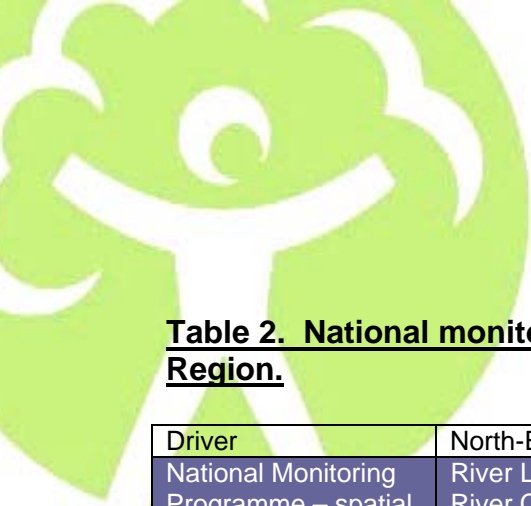


Table 2. National monitoring, special and WFD surveys (rivers & lakes) in Thames Region.

Driver	North-East	South East	West
National Monitoring Programme – spatial and temporal	River Lee River Colne River Roding	Main River Thames (non tidal) Thames (tidal) Thames minor tributaries. Thames juvenile coarse fish survey Wey Wandle Loddon Mole	River Kennet and tributaries River Thames River Windrush River Pang River Cherwell River Thame
Special/local investigations	River Gade; River Colne; River Lee Flood Relief; River Stort backloop; Lake at Staines; Mayesbrook Lake; Lower River Lee; River Brent at Tokynton Park;	River Loddon River Whitewater Main non-tidal Thames Thames tributaries Beverley Brook Ravensbourne Jubilee River.	River Thames Various lakes in Swindon Area
WFD investigations	None	Wey Tributaries	River Lambourne River Coln, River Windrush, River Dikler

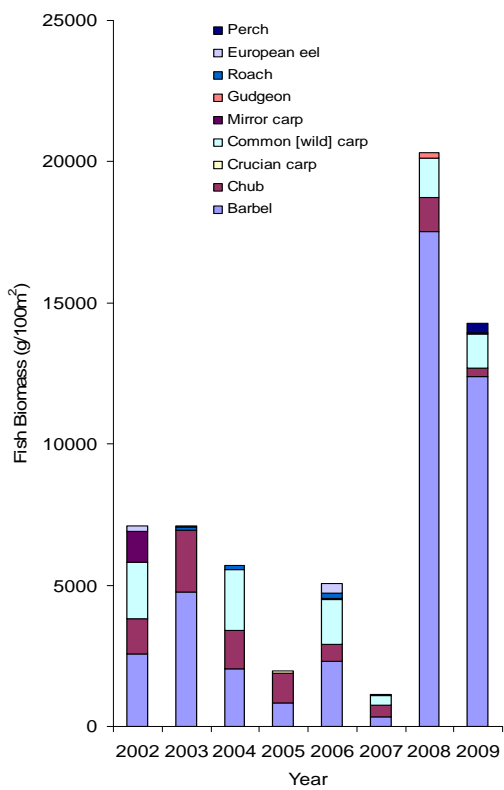
Some highlights from this year’s surveys are shown below:

Upper River Lee, surveyed as part of National Monitoring Survey

This survey showed that the Upper Lee has improved as a fishery since 2002 though with significant fluctuations from year to year. When compared with the situation 20-30 years ago the improvement has been huge and the Upper Lee now supports very high biomasses and high species richness: one of the more prolific sites is Hyde Mill (pictured below) which in 2009 supported in excess of 150 g m⁻² (equivalent to a five-ounce fish for every square metre of water space). This situation is largely related to improvements in water quality; some challenges still remain in the form of many weirs which are mostly impassable to fish and further improvements in numbers and diversity of fish along the river could be achieved if these barriers could be made passable.



Figure 10. Estimated biomass of fish (g/100m²) at Hyde Mill from surveys undertaken between 2002 and 2009



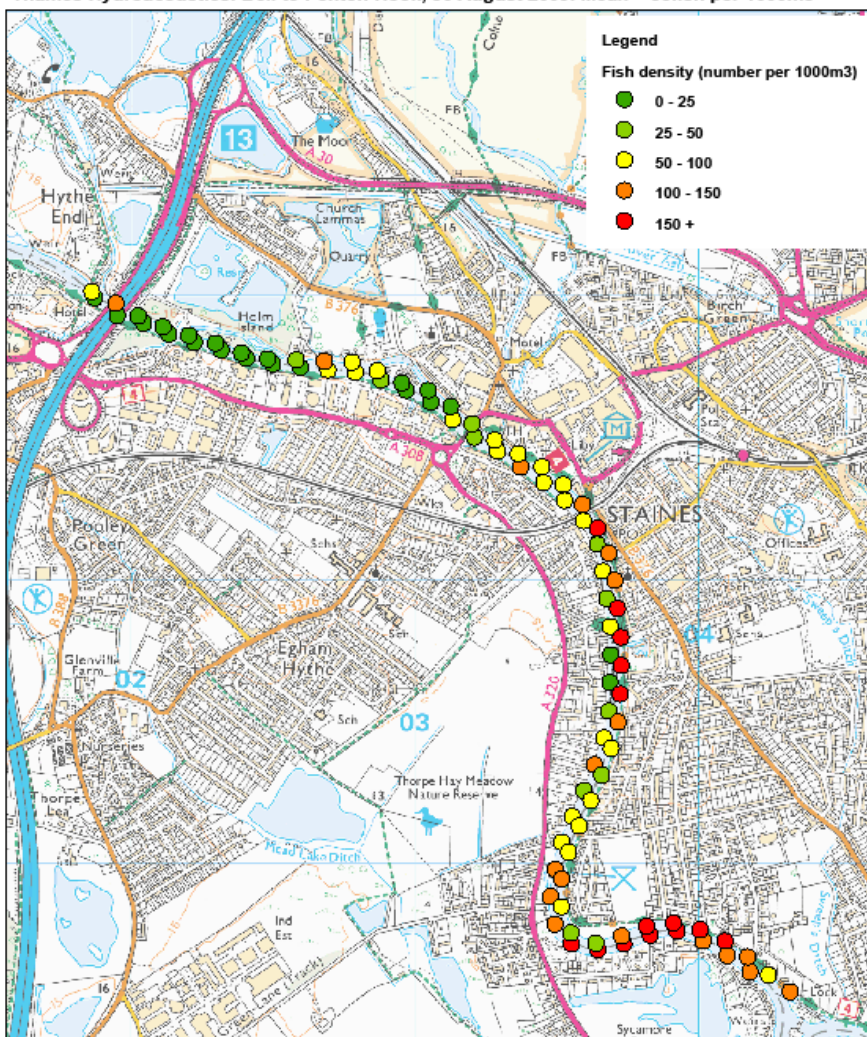
Lower Thames Hydroacoustic Survey.

2009 hydroacoustic surveys produced a mean relative abundance value of 76fish 1000m⁻³, and values ranged from 15fish 1000m⁻³ at Molesey to Teddington to 134fish 1000m⁻³ at Chertsey to Shepperton. This is below the long term mean for this reach of 119fish 1000m⁻³, however this latter value is skewed somewhat by extremely high numbers in 2005 and 2006. Mean reach densities in previous surveys ranged from 24 to 159 fish 1000m⁻³ in 2008, and 9 to 76 fish 1000m⁻³ in 2007, with a general trend of decreasing density further downstream.

The relative abundance of fish in the lower River Thames compares favourably with other large, lowland rivers, such as the Trent (67 fish) and the Ouse (53 fish). Mean values from other, less similar rivers include the Warwickshire Avon (168 fish), Ancholme (87 fish), Ely Ouse (80 fish) and the Severn (24 fish).

An example of the results is shown below for the Staines to Penton Hook section of the Thames. Note higher fish abundances in the areas downstream of Staines railway bridge and above Penton Hook Weir.

Thames Hydroacoustics: Bell to Penton Hook, 30 August 2009. Mean = 88fish per 1000m³

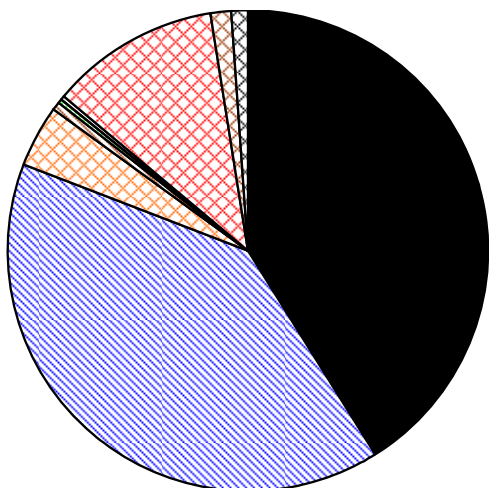


River Kennet Survey.

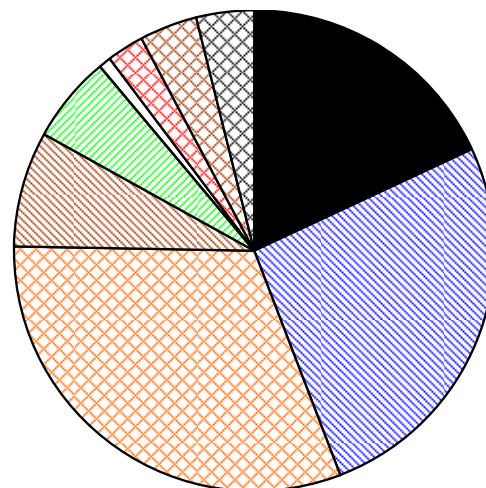
18 sites were surveyed on the Kennet as part of the National Monitoring Programme. Fish numbers and densities appeared were similar to those found in recent years with notable catches particularly at Speen Moor (mostly large bream) and at Hambridge (Newbury) where there were good stocks of dace, chub and barbel – results shown below.

River Kennet at Hambridge- Biomass and Density

	Species	Biomass (g m ⁻²)	Density (n m ⁻²)
	Barbel	9.1	0.010
	Chub	8.8	0.014
	Dace	0.9	0.017
	Gudgeon	0.1	0.004
	Roach	0.1	0.003
	Perch	0.1	0.000
	Pike	2.6	0.001
	Brown trout	0.3	0.002
	Grayling	0.2	0.002
	Total	22.1	0.053



Biomass (g m⁻²)



Density (n m⁻²)

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Environment Agency Fisheries service

Maintaining, improving and developing fisheries through working in partnership:

- 1. Emergency incident response**
- 2. River and stillwater habitat enhancement and improving fish passage**
- 3. Promote good water quality and appropriate flows**
- 4. Disease prevention and control of non-native species**
- 5. Expert advice and scientific monitoring of the status of fish stocks**
- 6. Freshwater and coastal enforcement to combat illegal fishing**
- 7. Protection of marine estuarine species**
- 8. Protection of endangered species**
- 9. Technical advice on planning and development**
- 10. Promotion of angling participation and the provision of all-ability access to the waterside**