

# Water for life and livelihoods

River Basin Management Plan  
Thames River Basin District

Annex C: Actions to deliver  
objectives

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## C.1 Introduction

This annex sets out tables of the actions (the programmes of measures) that are proposed for each sector. Actions are the on the ground activities that will be implemented to manage the pressures on the water environment and achieve the objectives of this plan.

Further information relating to these actions and how they have been developed is given in:

- Annex B Objectives for waters in the Thames River Basin District  
*This gives information on the current status and environmental objectives that have been set and when it is planned to achieve these*
- Annex D Protected area objectives (including programmes for Natura 2000)  
*This gives details of the location of protected areas, the monitoring networks for these, the environmental objectives and additional information on programmes of work for Natura 2000 sites*
- Annex E Actions appraisal  
*This gives information about how we have set the water body objectives for this plan and how we have selected the actions*
- Annex F Mechanisms for action  
*This sets out the mechanisms - that is, the policy, legal, financial and voluntary arrangements - that allow actions to be put in place*

## Tables of actions

The actions are set out in tables for each sector. For the purposes of this plan this is the sector that may be causing the pressure or is being affected by an action. 'Being affected' may mean that the sector is the one taking action or that the sector's activities are affected by an action implemented by others. Some actions will be noted against more than one sector, as one sector may be implementing action that requires another to take action in response.

The sectors are set out in table C1a below.

The tables set out the list of actions established at the outset of this plan period. It is expected that further measures will be identified during the implementation period for this plan. The plan includes many investigations that will help identify future actions, where it has not yet been possible to define these (see annex E). In some cases investigations are needed to confirm the pressure that is causing a problem, even before it will be possible to define an action. We also encourage sectors to put forward other measures so that these can be considered during the period of this plan.

Table C1b sets out an explanation of the headings in the actions tables. The subsequent tables set out specific actions relevant to each sector.

Table C1a: **Sectors**

Standard list of sectors			
Sector	Activity included	Sector	Activity included
Agriculture and rural land management	Dairy / beef, sheep, pig and poultry (including outdoor pigs) Mixed and Arable Horticulture Forestry Land drainage (including Inland Drainage Boards) Other rural land development Private water supplies (potable supplies) protection Private sewage management (incl. septic tanks and private sewage systems)	Local Government	Local and regional government including planning authorities and national parks (including local authority urban drainage not covered by Water Industry) Private water supplies - (potable supplies - water quality and sufficiency) Contaminated land
Angling & conservation	Fisheries (angling) management Other habitat management (including conservation)	Mining and quarrying	Active mines and quarries Abandoned coal mines Abandoned other mines
Central Government	Defra Natural England Other central government organisations and agencies	Navigation	Ports / marinas Maritime shipping / boating Inland navigation
Environment Agency		Urban and transport	Private water supplies (potable supplies) protection Private sewage management (inc. caravan parks etc) Road, air & rail transport Contaminated land Flood risk management Other development activities
Industry, manufacturing & other business	Power generation Chemical industry Oil industry SMEs / Industrial estates Construction Aquaculture Commercial fisheries (fresh, transitional & coastal waters – not angling) Waste management Retail industry Food & drink industry Recreation & tourism (not covered by boating or angling e.g. parkland / amenity)	Water industry	Sewage - treatment Sewage - collection (including intermittent discharges from combined sewage overflows) Sewage - other drainage (inc flooding & leaking sewers) Sewage - trade effluent management Sludge recycling to land Potable supply – treatment Potable supply – storage & transfer (inc. leakage) Potable supply - planning

Table C1b: **Example table of headings and descriptions**

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
<i>This a unique identification number for the measure</i>	<i>The pressure being managed</i>	<i>The action that will be taken</i>	<i>The location or geographical extent of the action</i>	<i>This is the date by which the action will be put in place. ("Implemented" means that the action is already in place and able to have a beneficial effect)</i>	<i>The organisation responsible for delivering the action and other organisations that may be involved</i>
<b>Investigations</b>					
<i>Sets out investigations measures that will be put in place</i>					
<b>Natura 2000 protected areas and SSSIs</b>					
<i>Sets out measures that will be put in place for Natura 2000 protected areas and Sites of Special Scientific Interest</i>					

## Strategic environmental assessment and actions

The purpose of the River Basin Management Plan is to improve the ecological status and potential of water bodies and so the environmental effects of the plan are predominantly positive. A Strategic Environmental Assessment was carried out that also considered the wider environment and identified potential adverse effects associated with some of the actions, as well as enhancements to add value to the measures included in the plan. Whilst many of the proposals to mitigate negative impacts are specific to the proposed action, others are applicable across a range of actions and will be considered at a project level. These generic mitigation measures are described in the table below. Further information is included in the statement of particulars – see <http://www.environment-agency.gov.uk/research/default.aspx> and go to Water Framework Directive..

Table 1c: **Generic mitigation to be applied when implementing actions**

Impact	Mitigation
Population and human health	Avoid adversely affecting existing routes of public access to the countryside and water bodies.
	Identify opportunities to improve public access to the countryside, water bodies or water based recreation
Biodiversity	Target any actions designed to improve biodiversity to those locations where the gains can be maximised.
	Identify opportunities to link with existing ecological networks, sites or features or proposed improvements.
	Identify opportunities where biodiversity improvements can also benefit local populations.
Cultural heritage	Before undertaking an action, determine whether there are any historical features that are likely to be adversely affected and undertake an appropriate level of project level assessment and mitigation.
Sustainability	Adopt a sustainable procurement policy
	Reuse materials or use recycled materials or those from renewable sources where possible
	Implement a waste management plan to minimise waste directed to landfill.
	Take steps to minimise the 'carbon footprint' of the action by reducing energy demand and the 'embedded energy' of any materials used.
Agriculture & biodiversity	Align agri-environment schemes to achieve biodiversity benefits and complement other biodiversity initiatives.

## Habitats Regulations Assessment

A Habitats Regulations Assessment of this Plan was carried out by the Environment Agency in 2009. Natural England were consulted on the assessment and we have had regard to their advice.

Many of the measures in the Plan, most specifically those in Annex D, are designed to improve the water environment and help to maintain or restore Natura 2000 habitats and species at favourable conservation status. The overall purpose of the plan is to ensure no deterioration of the water environment and deliver the objectives

of individual water bodies (normally 'good ecological status'). However, the Habitats Regulations Assessment has identified certain types of measure in the plan with potential to negatively effect Natura 2000 sites. Whether a negative effect is likely depends on the exact location, spatial scale, nature and timing of the measure. The details necessary to make reasonable predictions about the effects on Natura 2000 sites will not be developed until the measures are progressed towards implementation.

We have concluded that the plan itself is unlikely to have any significant negative effects on any Natura 2000 sites. The Plan itself does not require further assessment under the Habitats Regulations. This conclusion is reliant on the fact that before any measures in the plan are implemented they must be subject to the requirements of the Habitats Regulations. Any plans, project or permissions required to implement the measures must undergo an appropriate assessment if they are likely to have a significant effect.

Responsibility for Habitats Regulations Assessment of plans, projects or permissions required to implement the measures in this Plan remains with the relevant competent authority, for example if the measure requires planning permission the Local Authority will be the relevant competent authority. In most circumstances, a competent authority can only agree to a plan, project or permission when it has ascertained that it will not adversely effect the integrity of a Natura 2000 site. Changes to the measures in this plan may be required to avoid adverse effects on the integrity of any Natura 2000 sites.

## C. 2 Actions we can all take

There are actions that we can all take to help protect and improve the water environment.

Table C2: **Actions we can all take**

Pressure	What will happen
Prevent pollution	Check that household appliances are connected to the foul sewer, not the surface water drain.
Prevent pollution	Adopt-a-beach to help keep beaches clean and stop litter at source.
Prevent pollution	Ensure household oil storage is in good condition, with an up-to-date inspection record.
Prevent pollution	Ensure septic tanks or private sewage treatment plants are well maintained and working effectively.
Prevent pollution	Put cotton buds and other litter in the bin, not down the toilet. It may end up in the sea where it can harm wildlife.
Prevent pollution	Take waste oil and chemicals such as white spirit to a municipal recycling facility: don't pour them down the sink or outside drains.
Prevent pollution	Use kitchen, bathroom and car cleaning products that don't harm the environment, such as phosphate-free laundry detergents, and use as little as possible. This helps prevent pollution at source.
Prevent pollution	Report pollution or fly-tipping to the Environment Agency on 0800 807060.
Prevent pollution, protect wildlife	Join a river group to spot pollution, invasive non-native species, and take part in practical tasks.
Protect wildlife	Eat fish from sustainable sources, caught using fishing methods that don't cause damage to marine wildlife and habitats.
Protect wildlife	Seek expert advice to eliminate invasive non-native species from gardens, disposing of them responsibly. Do not buy, plant or release invasive non-native species.
Save water: in your garden	Choose plants that tolerate dry conditions. To help lawns through dry periods, don't cut them too short.



Save water: in your garden	To save water in gardens, collect rain in a water-butt, water at the beginning or end of the day, mulch plants, and use watering cans where possible instead of sprinklers or hosepipes.
Save water: in your house or office	Purchase low energy and water use appliances
Save water: in your house or office	Ask water companies to fit a meter. On average, this can reduce household water consumption.
Save water: in your house or office	Fix dripping taps, and lag pipes to avoid them bursting in freezing weather.
Save water: in your house or office	Hand wash cars
Save water: in your house or office	Consider installing a greywater harvesting system in homes, blocks or workplaces. This can save one third of domestic mains water usage.
Save water: in your house or office	Install a 'hippo' or 'save-a-flush' in toilet cisterns.
Save water: in your house or office	Install a low-flush toilet, put flow regulators on taps and showers, and install waterless urinals at work. Install aerating shower heads and tap inserts, which save up to 50% of the water used by conventional showers and taps.
Save water: in your house or office	Run dishwashers or washing machines with a full load on economy setting, and boil the minimum amount of water needed in kettles or saucepans.
Save water: in your house or office	Turn off the tap when brushing teeth, and take short showers rather than baths.
Save water: in your house or office	Wash fruit and vegetables in a bowl rather than under the running tap - and use the remainder on plants.
Save water: in your house or office	Ensure extensions or conservatories have their roof water draining into a soakaway or sustainable drainage system and are not connected to the combined sewer.
Save water: in your house or office	Ensure that any off-road parking or patio around the house use permeable materials so rain can soak into the soil.

## C.3 All sectors

Many actions will apply to all sectors.

Table C3: **Actions for all sectors**

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0444	Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Where appropriate, subject to the Environment Agency carrying out a 12 week public consultation and making an appropriate case to the Secretary of State, designate a limited number of Water Protection Zones. Regulatory tool to control diffuse pollution in high risk areas where other mechanisms are not working or are unlikely to work Initially around 8 candidate locations across England. Potential for designation from 2010 with possibility of further WPZs by 2012.	Thames RBD	2012	Environment Agency
TH0319	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Local Campaign: Southfleet Pesticide Impact	North Kent Medway Chalk	2015	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0068	Microbiology; Nitrate; Radioactivity; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Designation of Safeguard Zones - develop pollution action plan to identify specific measures to address known causes of impact on drinking water abstractions leading to failure/risk of failure of WFD Article 7.3 objective.	Basingstoke Chalk; Berkshire Downs Chalk; Burford Jurassic; Chiltern Chalk Scarp; Chipping Norton Jurassic; Dorking North Downs Chalk; Epsom North Downs Chalk; Godalming Lower Greensand; Greenwich Tertiaries; Kent Greensand Middle; Kent Weald Western - Medway; Lower Thames Gravels; Maidenhead Chalk; Mid-Chilterns Chalk; North Kent Medway Chalk; North Kent Swale Chalk; North Kent Tertiaries; South-West Chilterns Chalk; Upper Lee Chalk; Vale of White Horse Chalk; West Kent Darent and Cray Chalk	2010	Environment Agency
TH0235	Microbiology; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Influence Town and Country Planning Act authorisation process to help minimise risk of diffuse pollution from new developments (e.g. implement SUDs and use of Water Resource Act Planning Guidance)	Thames RBD	Implemented	Local Authorities

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0001	Physical modification	A central spatially-enabled hydromorphological database will be created, this will provide a system that will quickly and reliably, supply data to better understand hydromorphological impacts of modifications to water bodies. it will be used to provide available hydromorphological data as an input into the approval/assessment processes for new physical modifications to ensure compliance with WFD requirements, especially those related to Article 4(7).	Thames RBD	2010	Environment Agency
TH0343	Physical modification	Plans, processes and programmes (such as the Environment Agency Navigation and Recreation strategies) will be aligned to the requirements of hydromorphology to achieve WFD objectives (especially ecological potential). This will be two fold i) Mitigation measures required to reach good ecological potential will be delivered through such plans will be identified and ii) the prioritisation of environmental improvements will be influenced by the specific requirements to reach WFD objectives	Thames RBD	Implemented	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
Investigations					
TH0307	Abstraction and other artificial flow pressures	Investigations at sites identified under the Restoring Sustainable Abstraction Programme (where funded)	Thames RBD	2012	Environment Agency
TH0392	Abstraction and other artificial flow pressures	Review and improve Environmental Flow Indicators	Thames RBD	2012	Environment Agency
TH0162	Ammonia; Faecal indicator organisms; Hazardous substances and non-hazardous pollutants; Nitrate; Phosphate; Priority Substances & Specific Pollutants	Further investigation - 3D conceptual model of this Chalk groundwater body - Sittingbourne Groundwater Rise Study	North Kent Swale Chalk	2015	Environment Agency
TH0194	Faecal indicator organisms; Hazardous substances and non-hazardous pollutants; Ammonia; Nitrate; Phosphate; Priority Substances & Specific Pollutants	Improved monitoring in groundwater body	Kent Greensand Western; Kent Weald Western - Medway; North Kent Tertiaries; West Kent Tertiaries	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0161	Hazardous substances and non-hazardous pollutants; Faecal indicator organisms; Nitrate; Ammonia; Phosphate; Priority Substances & Specific Pollutants	Further investigation - 3D conceptual model of Chalk groundwater beneath this groundwater body	North Kent Tertiaries	2015	Environment Agency
TH0069	Microbiology; Hazardous substances and non-hazardous pollutants; Nitrate; Radioactivity; Priority Substances & Specific Pollutants	Designation of Safeguard Zones - investigation of source-pathway-target linkages to support development of a pollution action plan to identify specific measures	Basingstoke Chalk; Berkshire Downs Chalk; Burford Jurassic; Chiltern Chalk Scarp; Chipping Norton Jurassic; Dorking North Downs Chalk; Epsom North Downs Chalk; Godalming Lower Greensand; Greenwich Tertiaries; Kent Greensand Middle; Kent Weald Western - Medway; Lower Thames Gravels; Maidenhead Chalk; Mid-Chilterns Chalk; North Kent Medway Chalk; North Kent Swale Chalk; North Kent Tertiaries; South-West Chilterns Chalk; Upper Lee Chalk; Vale of White Horse Chalk; West Kent Darent and Cray Chalk	2010	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0013	Nitrate; Hazardous substances and non-hazardous pollutants; Faecal indicator organisms; Ammonia; Phosphate; Priority Substances & Specific Pollutants	Ashdown Beds investigation	Kent Weald Western - Medway	2010	Environment Agency
TH0331	Physical modification	Monitoring and investigation into mitigation measures techniques to establish the effectiveness of these measures and improve understanding of hydro-morph-ecological interactions. Outcomes will have a national application.	Thames RBD	2011	Environment Agency
TH0020	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients	Carry out investigative monitoring and field work into the origins, causes of and solutions to pollution where we need to improve certainty.	Thames RBD	Implemented	Environment Agency

## C.4 Agriculture and rural land management

The Thames River Basin District covers an area of 16,000 km<sup>2</sup>, from its source in Gloucestershire through London to its estuary in Essex and Kent. There are 6,645km of 'Main River' in the Basin. Even though Thames Region is one of the most densely populated and urbanised parts of the UK, agriculture is one of the most important industries. In 2004, 33% of the region was classified as arable, 18% grassland, 12% rough grazing and 11% wood. A sustainable agricultural industry is vital to maintaining a high class environment and vibrant rural economy.

Agricultural activities can and do impact upon the environment. Farming has always been a balancing act between economic profitability and what is good for the environment. It is hoped that in the future with an improving relationship between agriculture and the environment: best practice will be the accepted standard. Agriculture will continue to improve its environmental performance as farmers identify cost-effective alternatives that improve the environment. Agriculture will show resilience to climate change and will support society with its adaptation to and mitigation of the effects of the changing climate. This will contribute to achieving good overall status for the Water Framework Directive.

Please note that measures relating to commercial fisheries can be found within the Industry, manufacturing, and other business sector.

Table C4: **Actions for the agriculture and rural land management sector**

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0123	Abstraction	Extension of abstraction control to include previously exempt uses as new legislation introduced	Thames RBD	2012	Environment Agency



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0092	Abstraction and other artificial flow pressures	Encourage all rural businesses to adopt water efficiency measures, such as rainwater harvesting and recycling and use of storage reservoirs to support summer irrigation.	Cherwell Catchment; Colne Catchment; Cotswolds Catchment; Kennet and Pang Catchment; Loddon Catchment; Medway Catchment; Mole Catchment; Roding, Beam & Ingrebourne Catchment; Thame and South Chilterns Catchment; Upper Lee Catchment; Wey Catchment	2012	Natural England; Water companies; Environment Agency; Local Authorities; Abstractors; Developers; Regional Development Agencies
TH0387	Abstraction and other artificial flow pressures	Registration for previously exempt activity: abstraction of water within water meadow systems	Thames RBD	2012	Environment Agency
DrWPA0118	Carbetamide	Address issue as priority action within this VI Pilot Catchment. Consider site as candidate Water Protection Zone	Sor Brook (Broughton to Adderbury)	2010	Pesticides Voluntary Initiative
DrWPA0101	Carbetamide	Address issue as priority action within these VI Pilot Catchments	Thames (Egham to Teddington); Salmons Brook; Lee (from Woolens Brook down to Tottenham Locks); Lee Navigation (Hertford and Ware)	2010	Pesticides Voluntary Initiative

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
DrWPA0021	Chlortoluron	Re-direct existing England Catchment Sensitive Farming Initiative resource to address issue.	Bewl Water	2010	Natural England
TH0423	Cypermethrin	UK-wide suspension (temporary) on use as sheep-dip	Thames RBD	Implemented	Veterinary Medicines Directorate
TH0085	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Development planning structure plans - influence location of development to protect groundwater	Thames RBD	Implemented	Environment Agency; Water companies
TH0026	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Comply with Environment Agency Notice (WRA S86 and S161, Groundwater Regulations, SSAFO). Make use of site specific notices to remove agri-chemical risks to groundwater	Thames RBD	Implemented	Land managers and owners
TH0028	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Comply with new EC Sustainable Use of Pesticides Directive to control use of Plant Protection Products	Thames RBD	2012	Land managers and owners

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0098	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Enforcement of Groundwater Regulations to control agri-chemicals through Cross Compliance	Thames RBD	Implemented	Environment Agency
TH0106	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Environmental Permitting – disposal of sheep dip and pesticides	Thames RBD	Implemented	Environment Agency
TH0107	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Environmental Permitting – effluent discharges to ground	Thames RBD	Implemented	Environment Agency
TH0119	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	EU review of approvals for Plant Protection Products	Thames RBD	Implemented	EU
TH0154	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow Pesticides Statutory Code of Practice - comply with published advice for operators	Thames RBD	Implemented	Land managers and owners

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0156	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow Sheep Dip Statutory Code of Practice - comply with published advice for operators	Thames RBD	Implemented	Land managers and owners
TH0173	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Groundwater protection advice to Chemicals Regulation Directorate (formerly the Pesticides Safety Directorate) approvals process	Thames RBD	Implemented	Central Government; Environment Agency
TH0174	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Groundwater protection advice to Veterinary Medicines Directorate products approvals process	Thames RBD	Implemented	Central Government
TH0184	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Implement pesticides statutory Code of Practice - comply with published advice for operators on control of plant protection products	Thames RBD	Implemented	Land managers and owners
TH0311	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Local agricultural partnerships e.g. LEAF, NGOs such as Rivers Trusts, Landcare, Farming & Wildlife Advisory Group – advice on use of agri-chemicals	Thames RBD	Implemented	Land managers and owners

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0419	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	These substances, mecoprop and isoproturon have been withdrawn from use in the UK. No further measures are required for these substance. However the presence of these pesticides in groundwater demonstrates it is vulnerable to pesticides and preventative measures are required.	Vale of White Horse Chalk	2010	Environment Agency
DrWPA0094	MCPA	Address issue as priority action within this VI Pilot Catchment	Thames (Egham to Teddington)	2010	Pesticides Voluntary Initiative
TH0079	Metaldehyde	Develop detailed 5-year Catchment Action Plan for Safeguard Zone. Proactive implementation of Metaldehyde Stewardship Group 'Get Pelletwise' measures	Lee Navigation Subsidiary A; Salmons Brook; Lee (from Woolens Brook Down To Tottenham Locks); Thames (cookham To Egham); Kennet And Foudry Brook And Clayhill Brook In Reading; Lee Navigation (Hertford And Ware); Lee (from Tottenham Locks To The Tideway); Thames (Egham To Teddington); North Mymms Tertiaries; MidChlterns Chalk	2010	Metaldehyde Stewardship Group

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
DrWPA0092	Metaldehyde	Develop detailed 5-year Catchment Action Plan for Safeguard Zone. Water industry catchment scheme to address diffuse pollution in the catchment. Consider site as candidate Water Protection Zone. Proactive implementation of Metaldehyde Stewardship Group 'Get Pelletwise' measures	Cherwell (Cropredy to Nell Bridge); Sor Brook (Broughton to Adderbury)	2010	Metaldehyde Stewardship Group
TH0349	Metaldehyde	Proactive implementation of Metaldehyde Stewardship Group 'Get Pelletwise' measures. Water industry scheme to address diffuse pollution in the catchment	Bough Beech Reservoir	2010	Metaldehyde Stewardship Group
TH0351	Microbiology; Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Organic pollutants	Progress delivery of Cross-compliance inspection and enforcement	Thames RBD	2010	Defra; Environment Agency; Rural Payments Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0352	Microbiology; Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients	Progress the Entry Level Stewardship Scheme offering farmers an incentive to achieve environmental benefits on agricultural land. Entry Level Stewardship is open to all those farming in England and aims to reward good land management and address some of the environmental issues affecting the wider countryside including diffuse pollution, soil erosion and the conservation of farmland birds	Thames RBD	Implemented	Defra; Natural England
TH0023	Nitrate	Comply with Environment Agency Notice (WRA S86 and S161, Groundwater Regulations, SSAFO). Make use of site specific notices to remove nitrate pollution risk to groundwater	Thames RBD	Implemented	Land managers and owners
TH0099	Nitrate	Enforcement of Sludge Regulations through Cross compliance	Thames RBD	Implemented	Environment Agency; Land managers and owners
TH0152	Nitrate	Follow advice on controlling nitrate releases to land and water	Thames RBD	Implemented	Land managers and owners

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0180	Nitrate	Implement DCLG Planning Policy Guidance Statement 23 (PPS23) on controlling pollution of groundwater that may arise from development of land	Thames RBD	Implemented	Local Authorities
TH0191	Nitrate	Implementation of site specific notices to remove nitrate pollution risk to groundwater. (WRA S86 and S161, Groundwater Regulations, contaminated land legislation)	Thames RBD	Implemented	Local Authorities
TH0312	Nitrate	Local agricultural partnerships e.g. LEAF, NGOs such as Rivers Trusts, Landcare, Farming & Wildlife Advisory Group - Advice to farmers on nitrate control	Thames RBD	Implemented	Land managers and owners
TH0314	Nitrate	Local campaign to decrease input of nitrates to groundwater body	Kent Greensand Middle	2015	Environment Agency
TH0437	Nitrate	Use of statutory notice powers (WRA S86 and S161, Groundwater Regulations, Silage Slurry and Agricultural Fuel Oils Regulations)	Thames RBD	Implemented	Environment Agency



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0159	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow The Code of Good Agricultural Practice - Published advice for operators on nitrate control and agri-chemicals	Thames RBD	Implemented	Land managers and owners
TH0182	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Implement Groundwater Protection: Policy & Practice - External education on groundwater pollution prevention	Thames RBD	Implemented	Environment Agency; Land managers and owners
TH0335	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	NetRegs (Environmental Guidance to Business) - External education on groundwater pollution legislation	Thames RBD	Implemented	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0356	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Promote and support resource protection driven agri-environment schemes in priority water bodies	See below	Implemented	Land managers and owners; Natural England
<p>TH0356 – Where it will happen:</p> <p>Ash (from confluence with Bury Green Brook to Lee); Baldhorns Brook; Beane (from confluence with Stevenage Brook to Lee); Beane (from Roe Green to confluence with Stevenage Brook); Berrick Stream and Lady Brook; Beult; Bourne; Bulbourne; Burstow Stream; Cerney Wick Brook (source to Thames); Childrey Brook and tributaries; Cranleigh Waters; Derry Brook and Leighfield Brook; Dorn (Source to Glyme); Eden at Bough Beech; Evenlode (Compton Bk to Bledington Bk) &amp; 4 Shires; Evenlode (Source to Four Shires S) and Longborough Stream; Ewelme Stream (Source to Thames); Fleet Marston Brook, Denham Brook, Pitchcott Brook west; Frilford and Marcham Brook; Gade (from confluence with Bulbourne to Chess); Gallos Brook (Source to Bletchingdon Stream); Glyme (Dorn confluence to Evenlode); Gubbinshole and Broadmoor ditch to Ray (Oxon); Hilden Brook; Key (Source to Thames); Langford Brook (source to downstream A41); Leigh Brook; Lower Enborne; Ludgershall Brook and Muswellhill Brook; Mimram (from Welwyn to confluence with Lee); Misbourne ; Mole (Crawley to Gatwick Airport); Mole at Gatwick Airport; Moor Ditch and Ladygrove Ditch; Pipp Brook; Ray and tributaries NorthEast of Grendon Underwood; Redhill Brook; Rib (from confluence with Quin to Lee Navigation); Salfords Stream (Salfords to River Mole confluence); Scotsgrove Brook (upstream Kingsey Cuttle Brook); Stoke Brook Aylesbury; Summerstown Ditch and Launton and Cutters Brook ; Thame upstream of Aylesbury; Thames (Evenlode to Thame); Thames (Leach to Evenlode); Thames Wallingford to Caversham; Tributary of Eden Brook ; Upper Eden; Ver</p>					
TH0385	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Re-engineer existing discharges to avoid direct discharges of pollutants to groundwater	Thames RBD	Implemented	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0112	Nutrients	Establish and enforce Nitrate Vulnerable Zones in catchments at a high risk from nitrate pollution, requiring farmers to follow a programme of measures to reduce nitrate entering the water from farmland. (see map D6 in annex D)	Thames RBD	Implemented	Environment Agency; Defra
TH0357	Nutrients	Promote good land management practice amongst equine community	Colne Catchment; Kennet and Pang Catchment; Wey Catchment	Implemented	Environment Agency
TH0007	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Advise on reduction of nitrate and other pollutant inputs through the England Catchment Sensitive Farming Initiative	Berkshire Downs Chalk		Land managers and owners; Environment Agency
TH0408	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Support the "Campaign for the Farmed Environment" targeting set-aside to tackle diffuse pollution	Cherwell Catchment; Cotswolds Catchment; Kennet and Pang Catchment; Loddon Catchment; Thame and South Chilterns Catchment	2010	Land managers and owners; Natural England

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0450	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Work with the Forestry Commission to use trees and woodland to deliver resource protection	Colne Catchment; Mole Catchment; Upper Lee Catchment; Wey Catchment	2011	Forestry Commission
TH0355	Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Nitrate; Phosphate	Promote and support resource protection driven agri-environment schemes in priority water bodies	See below	Implemented	Natural England

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0355 – Where it will happen					
Ash (from confluence with Bury Green Brook to Lee); Baldhorns Brook; Beane (from confluence with Stevenage Brook to Lee); Beane (from Roe Green to confluence with Stevenage Brook); Berrick Stream and Lady Brook; Beult; Bourne; Bulbourne; Burstow Stream; Cerney Wick Brook (source to Thames); Childrey Brook and tributaries; Cranleigh Waters; Derry Brook and Leighfield Brook; Dorn (Source to Glyme); Eden at Bough Beech; Evenlode (Compton Bk to Bledington Bk) & 4 Shires; Ewelme Stream (Source to Thames); Fleet Marston Brook, Denham Brook, Pitchcott Brook west; Frilford and Marcham Brook; Gade (from confluence with Bulbourne to Chess); Gallos Brook (Source to Bletchington Stream); Glyme (Dorn confluence to Evenlode); Gubbinshole and Broadmoor ditch to Ray (Oxon); Hilden Brook; Key (Source to Thames); Langford Brook (source to downstream A41); Leigh Brook; Lower Enborne; Ludgershall Brook and Muswellhill Brook; Mimram (from Welwyn to confluence with Lee); Misbourne ; Mole (Crawley to Gatwick Airport); Mole at Gatwick Airport; Moor Ditch and Ladygrove Ditch; Pipp Brook; Ray and tributaries NorthEast of Grendon Underwood; Redhill Brook; Rib (from confluence with Quin to Lee Navigation); Salfords Stream (Salfords to River Mole confluence); Scotsgrove Brook (upstream Kingsey Cuttle Brook); Stoke Brook Aylesbury; Summerstown Ditch and Launton and Cutters Brook ; Thame upstream of Aylesbury; Thames (Evenlode to Thame); Thames (Leach to Evenlode); Thames Wallingford to Caversham; Tributary of Eden Brook ; Upper Eden; Ver					
TH0448	Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Nitrate; Phosphate	Work with local authorities to establish a cost effective way of recycling green domestic waste on agricultural land to increase soil organic content	Thames RBD	Implemented	Local Authorities; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0325	Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Nutrients; Microbiology	Maintain the Higher Level Stewardship Scheme offering farmers an incentive to achieve environmental benefits over and above those required under the Entry Level Stewardship Scheme. Higher Level Stewardship is targeted by Natural England to maximise environmental and other public benefits in targeted areas within the RBD	Thames RBD	Implemented	Natural England; Defra
TH0354	Physical modification	Promote and encourage appropriate sediment, vegetation and channel maintenance strategies to minimise impacts from land drainage activities on farmland.	Thames RBD	2012	Stour Internal Drainage Board; Environment Agency; National Farmers' Union; Natural England; Romney Marshes Internal Drainage Board
TH0405	Physical modification	Support River Ray Landscape Restoration Project	Cherwell Catchment	2012	Thames River Restoration Trust; Environment Agency; Natural England; Environmental NGOs

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0095	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Encourage uptake of Voluntary Initiative best practice advice by farmers and agronomists.	Cherwell Catchment; Colne Catchment; Cotswolds Catchment; Upper Lee Catchment	2012	Farmers; Agronomists; Natural England; Environment Agency; Water companies
TH0096	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Encourage uptake of Voluntary Initiative best practice advice on pesticide use by land managers within the agricultural and amenity sectors (e.g. golf courses, parks, highways, railways).	Thames RBD	Implemented	Environment Agency
TH0171	Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve Pesticide use through the Voluntary Initiative	Thames RBD	Implemented	Voluntary Initiative Partnership
TH0402	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Specific, targeted guidance in high risk catchments to improve Pesticide use through the Voluntary Initiative	Cherwell Catchment	Implemented	Voluntary Initiative Partnership
TH0114	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Sediments (as a direct pollutant); Organic pollutants	Establish and maintain local advice led partnerships to improve farm and land management practices, to reduce diffuse pollution from agriculture.	Thames RBD	2011	National Farmers' Union; Natural England; Land managers and owners; Environment Agency; Local Authorities

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0362	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Promote partnership work to tackle diffuse rural pollution and including roads, highways, public rights of way and farm tracks. Promote initiatives such as Landcare Schemes.	Thames RBD	2012	Environment Agency; Farmers; Highways Agency; Local Authorities; Natural England
TH0360	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Organic pollutants; Nitrate; Phosphate	Promote importance of soil quality, structure and organic matter	Thames RBD	Implemented	Environment Agency
TH0345	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Organic pollutants; Nutrients	Pollution Prevention advice and local campaigns to provide targeted advice and enforcement in high risk areas on all rural diffuse pollution issues: farm & land management, domestic oil storage, septic tanks.	Thames RBD	Implemented	Voluntary Initiative Partnership; Wildlife Trusts
TH0353	Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Promote "Best Farming Practice", including the use of soil and nutrient management plans.	Thames RBD	Implemented	Environment Agency; Natural England; Land managers and owners



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0229	Sediments (as a direct pollutant); Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients	Influence the future targeting of England Catchment Sensitive Farming Initiative activities and agri-environment schemes to ensure adoption of best farming practices.	Thames RBD	Implemented	Environment Agency; Natural England
TH0412	Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Organic pollutants	Target high risk farms and undertake regulatory farm visits using, pollution prevention notices and advisory letters where necessary	Cherwell Catchment; Cotswolds Catchment; Darent Catchment; Kennet and Pang Catchment; Loddon Catchment; Medway Catchment; Mole Catchment; Vale of White Horse Catchment; Wey Catchment; Thames (Maidenhead to Sunbury)	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0113	Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Organic pollutants; Microbiology	Establish and maintain a nationally funded advice-led partnership under the England Catchment Sensitive Farming Initiative to reduce diffuse water pollution from agriculture in at risk catchments.	Cherwell Catchment; Colne Catchment; Cotswolds Catchment; London Catchment; Medway Catchment; Mole Catchment; Upper Lee Catchment; Vale of White Horse Catchment; Wey Catchment; Thames (Maidenhead to Sunbury)	2010	Environment Agency; Natural England
DrWPA0103	Simazine	Address issue as priority action within this VI Pilot Catchment	Thames (Egham to Teddington)	2010	Pesticides Voluntary Initiative
<b>Investigations</b>					
TH0401	Ammonia	Specific local investigation into sources of ammonia	Kemble Forest Marble; South Essex Thurrock Chalk	2012	Environment Agency
TH0333	Ammonia; Phosphate	National R&D on fate and transport of phosphorus in groundwater to determine impact on surface water, investigation and assessment. Apply findings locally and assess.	Alton Upper Greensand; Bicester-Otmoor Cornbrash; Lower Thames Gravels; North Mymms Tertiaries; Reigate Lower Greensand; Shrivenham Corallian; South-West Chilterns Chalk	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
THD002	Carbendazim; Chlortoluron; Dalapon; Linuron; Propyzamide; Trichloroacetic Acid	Further monitoring/investigations to confirm risk of failure of WFD Article 7	Medway at Maidstone	2010	Environment Agency; Water companies
DrWPA0106	Carbetamide	Further monitoring to confirm risk of failure of WFD Article 7	Thames (Egham to Teddington); Cherwell (Cropredy to Nell Bridge); Lee Navigation Subsidiary A	2010	Environment Agency; Water companies
DrWPA0023	Chlortoluron	Further monitoring to confirm risk of failure of WFD Article 7	Medway at Maidstone; Thames (Egham to Teddington); Lee Navigation Subsidiary A; Lee (from Woolens Brook down to Tottenham Locks); Lee Navigation (Hertford and Ware)	2010	Environment Agency; Water companies
DrWPA0115	Chlortoluron; Nitrate	Further monitoring to confirm risk of failure of WFD Article 7. Consider site as candidate Water Protection Zone	Sor Brook (Broughton to Adderbury)	2010	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
THD005	Diuron	This substance has been banned/shortly to be withdrawn from use in the UK. No further measures should be required although surveillance monitoring will be done to confirm this.	Medway at Maidstone	2010	Environment Agency
DrWPA0096	Fluroxypyr; Bentazone; 2,4-D; Isoproturon; Metazachlor; Terbutryn	Further monitoring to confirm risk of failure of WFD Article 7	Thames (Egham to Teddington)	2010	Environment Agency; Water companies
TH0160	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow up 1990s report using recent data and knowledge of groundwater-surface water inter-relationship, including use of groundwater modelling .	Mid-Chilterns Chalk	2010	Environment Agency
DrWPA0026	Isoproturon	This substance has been banned/shortly to be withdrawn from use in the UK. No further measures should be required although surveillance monitoring will be done to confirm this.	Medway at Maidstone	2010	Central Government; Environment Agency
DrWPA0017	Mecoprop	Further monitoring to confirm risk of failure of WFD Article 7	Bough Beech Reservoir; Medway at Maidstone; Thames (Egham to Teddington)	2010	Environment Agency; Water companies
DrWPA0107	Mecoprop	Further monitoring to confirm risk of failure of WFD Article 7. Consider site as candidate Water Protection Zone	Cherwell (Cropredy to Nell Bridge); Sor Brook (Broughton to Adderbury)	2010	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0163	Nitrate	Further investigation - Assessment of annual algal impact on lakes near West Malling and links to high nitrate concentrations in groundwater.	Kent Greensand Middle	2012	Environment Agency
TH0272	Nitrate; Hazardous substances and non-hazardous pollutants; Phosphate; Priority Substances & Specific Pollutants	Investigation of Groundwater Dependent Terrestrial Ecosystems (GWDTEs) to assess if they have been significantly damaged as a result of groundwater pollution	Thames RBD	Implemented	Environment Agency
TH0249	Nutrients; Nitrate	Investigate sources of ground water nitrate, take action on a prioritised basis.	Kennet Catchment	2012	Environment Agency
TH0257	Nutrients; Nitrate; Sediments (as a direct pollutant); Phosphate	Investigate whether lack of ditch maintenance and consequential saturated land and flooding contributes to diffuse pollution in catchment through runoff of forcing bad practice	Cerney Wick Brook (source to Thames); Churn (Baunton to Cricklade); Key (Source to Thames); Thames (Waterhaybridge to Cricklade) and Chelworth Brook	2011	Environment Agency
TH0247	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigate improvements to sewage treatment works that could be integrated into the 2009 periodic review (PR09), or put into PR14.	Thames RBD	2012	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0369	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Promote the targeted mapping of land drainage discharges (fields, highways, rural roads) to better assess their impact on water quality and adopt appropriate control measures.	Thames RBD	2012	Environment Agency; Environmental NGOs; Land managers and owners; Local Authorities; Highways Agency
TH0290	Pressures on groundwater (GW) balance	Investigation to improve confidence in groundwater quantitative status result	Chobham Bagshot Beds	2011	Environment Agency
TH0305	Pressures on groundwater dependent ecosystems	Investigation to verify risk of deterioration in groundwater quantitative status	Chobham Bagshot Beds; Farnborough Bagshot Beds	2011	Environment Agency
TH0251	Priority Hazardous Substances, Priority Substances and Specific Pollutants; chemicals other (unspecified); Sediments (as a direct pollutant)	Investigate the impact of road gully pollution further, particularly off major highways	Colne Catchment; Upper Lee Catchment	2012	Local Authorities; Environment Agency
DrWPA0019	Propyzamide	Further monitoring to confirm risk of failure of WFD Article 7	Bough Beech Reservoir; Medway at Maidstone; Lee Navigation Subsidiary A	2010	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
DrWPA0113	Propyzamide; Chlortoluron; Nitrate	Further monitoring to confirm risk of failure of WFD Article 7. Consider site as candidate Water Protection Zone	Cherwell (Cropredy to Nell Bridge)	2010	Environment Agency; Water companies
TH0186	Salinity; Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Implement programmes of research and local investigations to improve evidence base to enable effective targeting of actions	Thames RBD	2012	Environment Agency
TH0019	Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Carry out investigative monitoring and field work into the origins, causes and solutions to sedimentation (Non-tidal waters).	Thames RBD	2012	Environment Agency; Water companies; Natural England; Local Authorities
TH0449	Sediments (as a direct pollutant); Organic pollutants	Work with riparian owners to identify and manage areas of bankside erosion from livestock and associated impacts.	Thames RBD	2012	Environment Agency; National Farmers' Union; Natural England; Riparian owners

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0420	Simazine; Isoproturon	This substance has been banned/shortly to be withdrawn from use in the UK. No further measures should be required although surveillance monitoring will be done to confirm this.	Lee (from Woolens Brook down to Tottenham Locks); Lee Navigation (Hertford and Ware); Medway at Maidstone; Salmons Brook	2010	Central Government; Environment Agency
<b>Natura 2000 protected areas and SSSIs</b>					
TH0053	Abstraction and other artificial flow pressures; Nutrients	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas by revoking or amending abstraction licences (See Annex D)	Thames RBD	2012	Environment Agency
TH0056	Direct biological pressures; Nutrients; Sediments (as a direct pollutant)	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through existing local projects (See Annex D)	Thames RBD	2010	Natural England
TH0064	Nutrients; Direct biological pressures; Physical modification; Abstraction and other artificial flow pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through SSSI Management Agreement (See Annex D)	Thames RBD	2012	Natural England



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0060	Nutrients; Sediments (as a direct pollutant)	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Regulatory Investigation into diffuse pollution (See Annex D)	Thames RBD	2012	Environment Agency; Natural England
TH0050	Nutrients; Sediments (as a direct pollutant);	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas by developing a pollution action plan for protected areas (See Annex D)	Thames RBD	2012	Environment Agency; Natural England
TH0045	Physical modification	Contribute to achievement of favourable condition on River Kennet SSSI by implementing river restoration project	Kennet and Pang Catchment	2010	Environment Agency
TH0054	Nutrients; Sediments (as a direct pollutant)	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas by revoking or amending Discharge/PPC Consents (See Annex D)	Thames RBD	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0055	Physical modification; Nutrients; Sediments (as a direct pollutant)	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through England Catchment Sensitive Farming Initiative (See Annex D)	Thames RBD	Implemented	Natural England
TH0052	Physical modification; Sediments (as a direct pollutant); Abstraction and other artificial flow pressures; Direct biological pressures; Nutrients	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas by implementing agri-environment scheme (See Annex D)	Thames RBD	2010	Natural England

## C.5 Angling and conservation

The Thames River Basin supports a wide range of fish habitats. These include, chalkstream tributaries, hundreds of kilometres of main river and canal, tidal rivers and estuaries, and a large number of stillwaters. The Thames river Basin is the most crowded in the country, with over 12 million people, representing 25% of the population resident in the UK. The Environment Agency sells rod licences to over 250,000 anglers, which is indicative of the degree to which the water environment contributes to the quality of life and the economy within the river basin.

The River Thames and its estuary are home to over 125 different fish species, and this makes it the most diverse river in the UK. The non-tidal river contains a great range and number of fish species throughout its length. The weirpools and weir streams tend to support species such as barbel, chub dace and brown trout, while the slower impounded sections contain species more associated with stillwaters such as bream, tench and carp. Throughout the river, populations of chub and barbel support fisheries of national importance.

The estuaries are home to some species of international importance, including twaite shad and sea lamprey, and are recognised as a particularly important habitat for smelt. Sea trout are becoming increasingly common in the Thames estuary, whereas salmon are now rare, their presence being due to restocking of juveniles upstream, or strays from other rivers.

Table C5: Actions for the angling and conservation sector

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0123	Abstraction	Extension of abstraction control to include previously exempt uses as new legislation introduced	Thames RBD	2012	Environment Agency
TH0387	Abstraction and other artificial flow pressures	Registration for previously exempt activity: abstraction of water within water meadow systems	Thames RBD	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0073	Direct biological pressures	Develop and disseminate buyer beware fish stocking advice.	Thames RBD	2012	Environment Agency; Angling Trusts
TH0078	Direct biological pressures	Develop and share best practice on invasive non-native species control	Thames RBD	2012	Non Native Invasive Species Forum; Environment Agency; Local Authorities; Environmental NGOs
TH0116	Direct biological pressures	Establish invasive non-native species fora to coordinate action across Thames RBD and produce a non-native species management plan.	Thames RBD	2012	water users; Wildlife Trusts; Water companies; Road Transport Industry; Partnership for Action against Wildlife Crime (PAW); Natural England; Environmental NGOs; Environment Agency; Developers

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0359	Direct biological pressures	Promote greater public awareness through the production of identification guides for key species, including aquatic invasive non-native species. Target the guides at river users, garden centres and other commercial outlets.	Thames RBD	2012	Natural England; Non Native Invasive Species Forum; Environmental NGOs; Environment Agency
TH0398	Direct biological pressures	Set up a strategic, robust and reliable network of volunteer 'spotters' to assist with the management of invasive non-native species, impacts of litter and notification of environmental issues.	Thames RBD	2012	water users; Environmental NGOs; Fisheries and Angling Interests; Local Authorities; Land managers and owners; Countryside Management Service (CMS); Environment Agency
TH0346	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Pollution Prevention advice and local campaigns to provide targeted advice and enforcement in high risk areas on all rural diffuse pollution issues: farm & land management, domestic oil storage, septic tanks.	Thames RBD	Implemented	Local industry associations; Environment Agency; Local Authorities; Natural England

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0115	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Establish and maintain local advice led partnerships to improve farm and land management practices, to reduce diffuse pollution from agriculture.	Eden Brook; Eden Brook East of Lingfield; Mid Medway from Eden Confluence to Yalding; Tudeley Brook; Ulcombe Stream; White Drain	2011	Natural England; National Farmers' Union; Local Authorities; Land managers and owners; Environment Agency
TH0230	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Influence the future targeting of England Catchment Sensitive Farming Initiative activities and agri-environment schemes to ensure adoption of best farming practices.	Thames RBD	Implemented	Natural England; Environment Agency
TH0368	Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Promote the 'River Fly Partnership' monitoring programme to assess the status of river health.	Thames RBD	2012	Salmon and Trout Association (Environment Agency; Natural History Museum; Fisheries and Angling Interests)
TH0008	Organic pollutants; Sediments (as a direct pollutant)	Agree and implement protocol with British Waterways to manage canal discharges and abstractions.	Thames RBD	2012	Environment Agency; British Waterways

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0034	Physical modification	Continue to promote the River Wye Strategy with the local authority to implement physical habitat restoration.	Thame and South Chilterns Catchment	2012	Natural England; Chiltern AONB; Environment Agency; Local Authorities
TH0072	Physical modification	Develop and communicate best practice guidance on habitat management and working near water courses.	Thames RBD	2012	Local Authorities; Natural England; Wild Trout Trust; Environment Agency; Association of Rivers Trusts; Angling Trusts
TH0075	Physical modification	Develop and implement a regional fish pass strategy which identifies and prioritises opportunities to improve fish migration	Thames RBD	2010	Environment Agency; Land managers and owners; Rivers Trusts
TH0083	Physical modification	Develop strategic plans to improve ecology through habitat creation and enhancement	Darent Catchment; London Catchment; Medway Catchment; North Kent Catchment	2012	Natural England; Environment Agency
TH0101	Physical modification	Enhancement work to create/improve salmonid spawning habitat.	Kennet and Pang Catchment	Implemented	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0193	Physical modification	Improved access and habitat for eels, installation of eel/elver passes, assessment of need for passes/other action at obstructions, development and installation of passage at tidal gates/hatches.	Thames RBD	2012	Environment Agency; Natural England; Environmental NGOs; Local Authorities; Land managers and owners; Land managers and owners
TH0236	Physical modification	Install elver passage at Allington Lock	Medway	2010	Environment Agency
TH0238	Physical modification	Install elver passage at Teddington Locks.	Mole (Hersham to R. Thames conf at East Molesey); Thames (Egham to Teddington)	Implemented	Environment Agency
TH0239	Physical modification	Install fish bypass channel at Newbridge Mill sluices	Thames RBD	Implemented	Environment Agency
TH0240	Physical modification	Install fish pass at Arborfield	Loddon (Swallowfield to River Thames confluence)	Implemented	Environment Agency
TH0241	Physical modification	Instigate channel restoration projects to improve flow regime and habitat creation	Wandle (Carshalton Branch at Carshalton); Wandle (Croydon to Wandsworth) and the River Graveney	2012	Environment Agency; Water companies; Abstractors; Local Authorities; Developers; The Wandle Trust



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0324	Physical modification	Maintain and enhance river corridor through support for Letcombe Chalkstream Project	Letcombe Brook	2012	Environment Agency
TH0327	Physical modification	Make progress on implementing Public Service Agreement/Water Level Management Plan physical habitat restoration programme	Kennet and Pang Catchment	2012	Natural England; Environment Agency
TH0354	Physical modification	Promote and encourage appropriate sediment, vegetation and channel maintenance strategies to minimise impacts from land drainage activities on farmland.	Thames RBD	2012	Stour Internal Drainage Board; Environment Agency; National Farmers' Union; Natural England; Romney Marshes Internal Drainage Board
TH0406	Physical modification	Support River Ray Landscape Restoration Project	Cherwell Catchment	2012	Thames River Restoration Trust; Environment Agency; Environmental NGOs; Natural England

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0446	Physical modification	Work with anglers, fishing clubs, boat users and riparian owners to identify areas of bankside erosion, causes and the associated impacts.	Colne Catchment; London Catchment; Roding, Beam & Ingrebourne Catchment; Upper Lee Catchment	2012	Land managers and owners; Natural England; Fisheries and Angling Interests; Environment Agency
TH0237	Physical modification	Install elver passage at Bow lock.	River Lee Navigation, tidal section	Implemented	Environment Agency
TH0253	Physical modification; Direct biological pressures	Investigate the opportunity to develop a commercial fisheries and sea angling code of conduct.	Thames Coastal North; Medway Catchment; Thames Estuary	2012	Sea Fisheries Committee (Local Authorities; Marine Stewardship Council; Shellfish Association of Great Britain; Inshore Fisheries and Conservation Authorities; Angling Trusts)
TH0096	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Encourage uptake of Voluntary Initiative best practice advice on pesticide use by land managers within the agricultural and amenity sectors (e.g. golf courses, parks, highways, railways).	Thames RBD	Implemented	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0362	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Promote partnership work to tackle diffuse rural pollution and including roads, highways, public rights of way and farm tracks. Promote initiatives such as Landcare Schemes.	Thames RBD	2012	Environment Agency; Farmers; Highways Agency; Local Authorities; Natural England
TH0361	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Nutrients; Organic pollutants	Promote land management best practice at commercial, agricultural and amenity sites, including golf courses, playing fields, parks and railway lines	Thames RBD	2012	Environment Agency; Wildlife Trusts; Water companies; Network Rail; Land managers and owners; Local Authorities; Natural England
TH0185	Sediments (as a direct pollutant)	Implement programme of gravel cleaning to improve fish spawning success.	Thames RBD	2012	Environment Agency; Land managers and owners; Wild Trout Trust; Angling Trusts; Association of Rivers Trusts; Fisheries and Angling Interests

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
Investigations					
TH0244	Direct biological pressures	Investigate and consider stocking of glass eel.	Thames RBD	2012	Land managers and owners; Environment Agency; Environmental NGOs; Local Authorities; Natural England
TH0330	Direct biological pressures	Monitor eel populations at monitoring sites, including 10 eel specific sites. Glass eel monitoring at least one site, investigation into remote monitoring methods, monitoring of commercial fisheries.	Thames RBD	2012	Land managers and owners; Environment Agency; Environmental NGOs; Local Authorities; Natural England
TH0247	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigate improvements to sewage treatment works that could be integrated into the 2009 periodic review (PR09), or put into PR14.	Thames RBD	2012	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0308	Organic pollutants; Nutrients; Abstraction and other artificial flow pressures; Physical modification; Microbiology; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Salinity; Acidification; Direct biological pressures	Investigations into causes of declining fish stocks	Thames RBD	2012	Environment Agency
TH0165	Organic pollutants; Physical modification	Further investigations to improve understanding of habitat restoration required to achieve GES. Improve understanding of the scale of habitat restoration required to achieve GES / GEP	Thames RBD	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0245	Physical modification	Investigate fish pass options and feasibility at Duxford Loop.	Thames (Churn to Coln); Thames (Coln to Leach); Thames (Cookham to Egham); Thames (Egham to Teddington); Thames (Evenlode to Thame); Thames (Kemble to Waterhay Bridge); Thames (Leach to Evenlode); Thames (Reading to Cookham); Thames (Source to Kemble); Thames (Waterhaybridge to Cricklade) and Chelworth Brook; Thames Lower; Thames Middle; Thames Upper; Thames Wallingford to Caversham; Thames, Creekhead, Trinity, Wylees Sewers	2010	Environment Agency
TH0246	Physical modification	Investigate fish passage, options and feasibility at 30 structures on the river Wandle.	Wandle (Carshalton Branch at Carshalton); Wandle (Croydon to Wandsworth) and the River Graveney	2010	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0252	Physical modification	Investigate the need to screen intakes and discharges to prevent loss or damage to fish populations. Ensure screening on priority sites.	Thames RBD	2012	Business and Industry; Fisheries and Angling Interests; Land managers and owners; Environment Agency; Water companies; trout farms; Angling Trusts
TH0248	Physical modification; Direct biological pressures	Investigate priority actions to improve sea trout populations.	Medway; Thames Coastal North; Thames (tidal) Catchment	2012	Fisheries and Angling Interests; Land managers and owners; Environment Agency; Wild Trout Trust; Atlantic Salmon Trust
TH0256	Physical modification; Direct biological pressures	Investigate then implement priority actions to improve sea trout populations.	Thames RBD	2012	Fisheries and Angling Interests; Environment Agency; Wild Trout Trust; Atlantic Salmon Trust; Land managers and owners

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0186	Salinity; Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Implement programmes of research and local investigations to improve evidence base to enable effective targeting of actions	Thames RBD	2012	Environment Agency
TH0449	Sediments (as a direct pollutant); Organic pollutants	Work with riparian owners to identify and manage areas of bankside erosion from livestock and associated impacts.	Thames RBD	2012	Environment Agency; National Farmers' Union; Natural England; Riparian owners



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
Natura 2000 protected areas and SSSIs					
TH0039	Nutrients	Contribute to achievement of favourable condition on Coate Water SSSI Fleet Pond SSSI, River Kennet SSSI, River Beult SSSI, Basingstoke Canal SSSI, Godstone Ponds SSSI, Puttenham & Crooksbury Commons SSSI and Whitmoor Common SSSI by developing a pollution action plan	Kennet and Pang Catchment; Loddon Catchment; Medway Catchment; Vale of White Horse Catchment; Wey Catchment	2012	Environment Agency; Natural England

## C.6 Central government

Defra (Department for Environment, Food and Rural Affairs) is a UK Government Department and is responsible for the Water Framework Directive in England. Defra champions sustainable development, and helps Government as a whole to deliver economic, social and environmental sustainability. Defra is also the focal point for rural policy. Defra has several delivery partners that have important actions in the River Basin Management Plan, including the following:

- Marine and Fisheries Agency
- Centre for the Environment, Fisheries and Aquaculture Science (CEFAS)
- Rural Payments Agency
- Environment Agency (see separate section)
- Forestry Commission
- National Park Authorities

### Other Government Departments

- Department of Communities and Local Government (CLG)
- Office of Government Commerce (OGC) - an independent office of HM Treasury
- Health and Safety Executive (part of the Department of Work and Pensions), which includes the Pesticides Safety Directorate
- Highways Agency (part of Ministry for Transport)
- Defence Estates (part of Ministry of Defence)

The Crown Estate is a government organisation with a property portfolio encompassing many of the UK's cityscapes, ancient forests, farms, parkland, coastline and communities. It has an important role as influencer, manager, guardian and facilitator. Working in partnership with others, the Crown Estate enables and nurtures productive commercial opportunities, protects vulnerable environments, and enables social integration.

Table C6: **Actions for central government**

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0077	Abstraction and other artificial flow pressures	Develop and provide approved sustainable water management planning guidance to ensure that the impacts of development on the water environment are fully understood. Where possible this should be linked to recognised existing and emerging guidance.	Thames RBD	2012	Regional Planning Authorities; Royal Town Planning Institute; Department for Communities and Local Government; Environment Agency; Natural England
TH0066	Alien species	Contribute to the development of any EU level initiatives to improve legislation and controls relating to invasive non-native species.	Thames RBD	2012	Central Government
TH0071	Alien species	Develop a national early warning system with contingencies for rapid response control measures to eradicate new invasions of non-native species	Thames RBD	2012	Central Government
TH0076	Alien species	Develop and implement codes of practice to reduce the spread of invasive non-native species	Thames RBD	2012	Central Government; Environment Agency
TH0087	Alien species	Draw together a database of projects to facilitate better information sharing and increase opportunities for partnership working	Thames RBD	2012	Central Government

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0088	Alien species	Draw up Individual Species Action Plans for species identified as presenting particular risk levels, to minimise the risks associated with them	Thames RBD	2012	Central Government; Environment Agency
TH0111	Alien species	Establish a central repository for holding data on invasive non-native species distribution.	Thames RBD	2012	Central Government
TH0117	Alien species	Establish National Invasive Non-Native Species Forums to plan, prioritise and coordinate action	Thames RBD	Implemented	Central Government
TH0224	Alien species	Increase awareness of the importance of the 'preventative approach' in addressing the threats posed by invasive non-native species. This would include 'horizon scanning' for new potentially invasive species.	Thames RBD	2010	Central Government
TH0242	Alien species	Integrate invasive non-native species control measures across all policy areas	Thames RBD	2012	Environment Agency; Central Government

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0326	Alien species	Make appropriate use of existing legislative powers eg prohibit the sale of high-risk species; Salmon and freshwater fish act (S30); Import of live fish act; Wildlife & Countryside Act 1981; Environment Agency Fisheries byelaws; Convention on biological diversity; NERC Act; Habitats Directive; IMO convention on ballast water)	Thames RBD	2012	Central Government; Environment Agency
TH0372	Alien species	Provide advice and training on identification, control and disposal of invasive non-native species to all relevant groups and encourage monitoring schemes.	Thames RBD	2012	Central Government; Environment Agency
TH0400	Alien species	Set up and maintain a website that acts as a "one stop shop" for information and advice on invasive non-native species.	Thames RBD	Implemented	Central Government
TH0404	Alien species	Support established local fora by providing advice and guidance and support control actions by selected local fora	Thames RBD	2012	Central Government; Environment Agency
TH0445	Alien species	Work to raise awareness of the risks transferring non-native species to the wild amongst the public and target groups	Thames RBD	2010	Central Government

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
DrWPA0021	Chlortoluron	Re-direct existing CSF resource to address issue.	Bewl Water	2010	Natural England
TH0116	Direct biological pressures	Establish invasive non-native species fora to coordinate action across Thames RBD and produce a non-native species management plan.	Thames RBD	2012	water users; Wildlife Trusts; Water companies; Road Transport Industry; Partnership for Action against Wildlife Crime (PAW); Natural England; Environmental NGOs; Environment Agency; Developers
TH0346	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Pollution Prevention advice and local campaigns to provide targeted advice and enforcement in high risk areas on all rural diffuse pollution issues: farm & land management, domestic oil storage, septic tanks.	Thames RBD	Implemented	Local industry associations; Environment Agency; Local Authorities; Natural England
TH0396	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Urban Diffuse Pollution project targeting potentially polluting industrial estates in water bodies at high or moderate risk of urban diffuse pollution	London Catchment	2010	Environment Agency; Defra

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0115	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Establish and maintain local advice led partnerships to improve farm and land management practices, to reduce diffuse pollution from agriculture.	Eden Brook; Eden Brook East of Lingfield; Mid Medway from Eden Confluence to Yalding; Tudeley Brook; Ulcombe Stream; White Drain	2011	Natural England; National Farmers' Union; Local Authorities; Land managers and owners; Environment Agency
TH0417	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Microbiology	Thames Groundwater Pollution Prevention project	Burford Jurassic; Greenwich Tertiaries; Maidenhead Chalk; Mid-Chilterns Chalk; Reigate Lower Greensand; Upper Lee Chalk	2010	Environment Agency; Defra
TH0418	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Microbiology	Thames Oil Care Pollution Prevention project	Thames RBD	2010	Environment Agency; Defra

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0323	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Microbiology	Lower Lee Pollution Prevention project	Lee (from Tottenham Locks to the Tideway)	2010	Environment Agency; Defra
TH0033	Physical modification	Continue to develop and implement a programme of river habitat improvement works to improve ecology by addressing physical morphology and flow pressures (including culverts, closed watercourses, pinch points and in-channel structures).	Thames RBD	2012	Thames River Restoration Trust; Riparian owners; Natural England; Environmental NGOs; Local Authorities; Environment Agency; Fisheries and Angling Interests; Developers
TH0035	Physical modification	Continue to promote the River Wye Strategy with the local authority to seek physical habitat restoration.	Thame and South Chilterns Catchment	2012	Chiltern AONB; Natural England; Environment Agency; Local Authorities
TH0083	Physical modification	Develop strategic plans to improve ecology through habitat creation and enhancement	Darent Catchment; London Catchment; Medway Catchment; North Kent Catchment	2012	Natural England; Environment Agency



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0327	Physical modification	Make progress on implementing Public Service Agreement/Water Level Management Plan physical habitat restoration programme	Kennet and Pang Catchment	2012	Natural England; Environment Agency
TH0354	Physical modification	Promote and encourage appropriate sediment, vegetation and channel maintenance strategies to minimise impacts from land drainage activities on farmland.	Thames RBD	2012	Stour Internal Drainage Board; Environment Agency; National Farmers' Union; Natural England; Romney Marshes Internal Drainage Board
TH0406	Physical modification	Support River Ray Landscape Restoration Project	Cherwell Catchment	2012	Thames River Restoration Trust; Environment Agency; Environmental NGOs; Natural England
TH0446	Physical modification	Work with anglers, fishing clubs, boat users and riparian owners to identify areas of bankside erosion, causes and the associated impacts.	Colne Catchment; London Catchment; Roding, Beam & Ingrebourne Catchment; Upper Lee Catchment	2012	Land managers and owners; Natural England; Fisheries and Angling Interests; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0096	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Encourage uptake of Voluntary Initiative best practice advice on pesticide use by land managers within the agricultural and amenity sectors (e.g. golf courses, parks, highways, railways).	Thames RBD	Implemented	Environment Agency
TH0362	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Promote partnership work to tackle diffuse rural pollution and including roads, highways, public rights of way and farm tracks. Promote initiatives such as Landcare Schemes.	Thames RBD	2012	Environment Agency; Farmers; Highways Agency; Local Authorities; Natural England
TH0228	Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients	Influence the future targeting of England Catchment Sensitive Farming activities and agri-environment schemes to ensure adoption of best farming practices.	Bourne; Tributary of Beult at Sutton Valance; Tudeley Brook; Upper Beult	Implemented	Environment Agency; Natural England
<b>Investigations</b>					
TH0397	Alien species	Seek sustainable and cost-effective methods for managing established invasions, such as biological control	Thames RBD	2012	Central Government; Environment Agency
TH0424	Alien species	Undertake risk assessments to identify priority invasive species for mitigation and control action at GB and national levels	Thames RBD	2012	Central Government

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
DrWPA0026	Isoproturon; Simazine; Diuron	These substances have been banned/shortly to be withdrawn from use in the UK. No further measures should be required although surveillance monitoring will be done to confirm this.	Medway at Maidstone	2010	Central Government; Environment Agency
TH0369	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Promote the targeted mapping of land drainage discharges (fields, highways, rural roads) to better assess their impact on water quality and adopt appropriate control measures.	Thames RBD	2012	Environment Agency; Environmental NGOs; Land managers and owners; Local Authorities; Highways Agency
TH0336	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Microbiology	Newbury water quality investigation	Kennet (Lambourn confluence to Enborne confluence); Middle Kennet (Marlborough to Newbury)	2010	Environment Agency; Defra
TH0449	Sediments (as a direct pollutant); Organic pollutants	Work with riparian owners to identify and manage areas of bankside erosion from livestock and associated impacts.	Thames RBD	2012	Environment Agency; National Farmers' Union; Natural England; Riparian owners

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
Natura 2000 protected areas and SSSIs					
TH0110	Alien species	Eradication and control at selected SSSIs and Natura 2000 sites	Thames RBD	2012	Countryside council of Wales; Natural England
TH0051	Direct biological pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas by developing an Invasive species control programme for protected areas (See Annex D)	Thames RBD	2012	Natural England; Environment Agency
TH0056	Direct biological pressures; Nutrients; Sediments (as a direct pollutant)	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through existing local projects (See Annex D)	Thames RBD	2010	Natural England
TH0040	Direct biological pressures	Contribute to achievement of favourable condition on Cotswold Water Park SSSI by implementing invasive species control programme	Cotswolds Catchment	2010	Natural England
TH0049	Direct biological pressures	Contribute to achievement of favourable condition on Whitmoor Common SSSI by implementing agri-environment scheme	Wey Catchment	2010	Natural England

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0447	Direct biological pressures	Work with landowners and amenity bodies to improve marginal habitats and water quality at sites that support the integrity of SW London Water bodies SPA, in order to protect the interest features (wintering wildfowl populations) of the SPA/Ramsar. Refer to recommendations from "The use of water bodies in SW London by Gadwall and Shoveler; implications for nature conservation" - D Phil Thesis by Brian Briggs	On non-designated water bodies which are known to support the integrity of South West London Water bodies SPA/Ramsar.		Natural England; Environment Agency
TH0036	Direct biological pressures; Physical modification	Contribute to achievement of favourable condition on Basingstoke Canal SSSI and Heath Lake SSSI by undertaking specific management works	Loddon Catchment; Wey Catchment	2012	Environment Agency; Environmental NGOs; Local Authorities; Natural England
TH0038	Nutrients	Contribute to achievement of favourable condition on Coate Water SSSI Fleet Pond SSSI, River Kennet SSSI, River Beult SSSI, Basingstoke Canal SSSI, Godstone Ponds SSSI, Puttenham & Crooksbury Commons SSS and Whitmoor Common SSSI by developing a pollution action plan	Kennet and Pang Catchment; Loddon Catchment; Medway Catchment; Vale of White Horse Catchment; Wey Catchment	2012	Environment Agency; Natural England

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0041	Nutrients	Contribute to achievement of favourable condition on Ockham and Wisley Commons SSSI and Whitmoor Common SSSI by implementing lake restoration projects	Wey Catchment	Implemented	Natural England
TH0037	Physical modification	Contribute to achievement of favourable condition on Basingstoke Canal SSSI, Mucking Flats and Marshes SSSI, West Thurrock Lagoon & Marshes SSSI and Basingstoke Canal SSSI by implementing SSSI management agreement	Loddon Catchment; South Essex Catchment; Wey Catchment	2012	Natural England
TH0043	Physical modification	Contribute to achievement of favourable condition on River Kennet SSSI and River Beult SSSI by implementing river restoration project	Medway; Kennet and Pang Catchment	2012	Environment Agency; Natural England
TH0061	Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through River Restoration Programme for Protected Areas (See Annex D)	Thames RBD	2012	Environment Agency; Natural England

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0062	Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through River Restoration Scheme (See Annex D)	Thames RBD	2012	Natural England; Environment Agency
TH0063	Physical modification; Direct biological pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Specific Management Works to address morphology and invasive species issues (See Annex D)	Thames RBD	2011	Central Government; Local Authorities; Natural England
TH0005	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification	Adoption of the Maintenance Dredging Protocol, to ensure no deterioration and contribute to achieving good status/good ecological potential within Natura 2000 sites, and off-site where necessary to maintain the integrity of the European site network	Thames RBD	2012	Defra; Environment Agency; Natural England; Ports and Harbours Authorities
<b>Investigation - Natura 2000 protected areas and SSSIs</b>					
TH0059	Nutrients	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Investigation into water quality pressures (See Annex D)	Thames RBD	2012	Environment Agency; Natural England

## C.7 Environment Agency

The Environment Agency was established by the 1995 Environment Act and became fully operational on 1 April 1996. The Agency is a Non-Departmental Public Body of the Department for Environment, Food and Rural Affairs. The Secretary of State for Environment, Food and Rural Affairs has the lead sponsorship responsibility for the Agency as a whole and the Agency is accountable to the Secretary of State for its day to day operations in England.

The Agency's principal aim is to protect and enhance the environment and in doing so to contribute towards achieving sustainable development. In support of this aim, the Agency was identified as the "competent authority" for the implementation of the Water Framework Directive, a role which complements its broad range of functions which include Integrated Pollution Prevention and Control, Integrated Pollution Control, Waste Management, Water Quality, Land Quality, Water Resources, Conservation, Recreation, Fisheries, Flood Risk Management, Navigation and Radioactive Substances Regulation.

The Agency's structure in the Thames River Basin District is split across three Regions (Thames, Southern and Anglian) with management of the plan based out of the Thames Regional office in Kings Meadow House, Reading. This, in turn, covers 5 Areas at the operational level. The North East Area includes North London, Hertfordshire and west Essex; South East Area covers South London (including the Thames Estuary), Surrey and parts of Hampshire; West Area covers Berkshire, Oxfordshire and Buckinghamshire; Kent and East Sussex Area (Southern Region) includes North Kent; and the Eastern Area (Anglian Region) covers South West Essex. Regions and Areas ensure national priorities are delivered at a local level while taking account of the needs of local communities and stakeholders. Head Office is responsible for corporate management of the Agency, including policy development, strategic and operational objective setting and performance management.



Table C7: **Actions for the Environment Agency**

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0074	Abstraction and other artificial flow pressures	Develop and implement a demand management campaign for Southern and Thames Regions including targeting specific non-household sectors (e.g. "Ensuring water for all" project).	Thames RBD	2010	Environment Agency
TH0093	Abstraction and other artificial flow pressures	Encourage more water companies to achieve universal water metering more rapidly and to implement variable tariffs.	Thames RBD	2012	Environment Agency
TH0226	Abstraction and other artificial flow pressures	Influence reduction in per capita consumption towards meeting Regional Economic Strategy target of 135 l/p/d by 2016.	Thames RBD	2012	Environment Agency
TH0370	Abstraction and other artificial flow pressures	Promote water efficiency and water saving measures through site inspections of abstraction licences	Thames RBD	Implemented	Environment Agency
TH0451	Abstraction and other artificial flow pressures	Work with the water companies in the South East to encourage them to share existing and future resources including consideration of transfers and interconnectivity of supply systems.	Thames RBD	Implemented	Environment Agency
TH0076	Alien species	Develop and implement codes of practice to reduce the spread of invasive non-native species	Thames RBD	2012	Central Government; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0088	Alien species	Draw up Individual Species Action Plans for species identified as presenting particular risk levels, to minimise the risks associated with them	Thames RBD	2012	Central Government; Environment Agency
TH0242	Alien species	Integrate invasive non-native species control measures across all policy areas	Thames RBD	2012	Environment Agency; Central Government
TH0326	Alien species	Make appropriate use of existing legislative powers eg prohibit the sale of high-risk species; Salmon and freshwater fish act (S30); Import of live fish act; Wildlife & Countryside Act 1981; Environment Agency Fisheries byelaws; Convention on biological diversity; NERC Act; Habitats Directive; IMO convention on ballast water)	Thames RBD	2012	Central Government; Environment Agency
TH0372	Alien species	Provide advice and training on identification, control and disposal of invasive non-native species to all relevant groups and encourage monitoring schemes.	Thames RBD	2012	Central Government; Environment Agency
TH0404	Alien species	Support established local fora by providing advice and guidance and support control actions by selected local fora	Thames RBD	2012	Central Government; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0445	Alien species	Work to raise awareness of the of the risks transferring non-native species to the wild amongst the public and target groups	Thames RBD	2010	Central Government
TH0073	Direct biological pressures	Develop and disseminate buyer beware fish stocking advice.	Thames RBD	2012	Environment Agency; Angling Trusts
TH0414	Microbiology; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Targeted education and awareness of the impact that small discharges to ground and surface water have on water quality of the receiving waters, with a view to advising residents of the need to connect to the mains sewer system	Thames RBD	2010	Environment Agency
TH0396	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Urban Diffuse Pollution project targeting potentially polluting industrial estates in water bodies at high or moderate risk of urban diffuse pollution	London Catchment	2010	Environment Agency; Defra

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0231	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Influence the future targeting of England Catchment Sensitive Farming Initiative activities and agri-environment schemes to ensure adoption of best farming practices.	Bourne; Tributary of Beult at Sutton Valance; Tudeley Brook; Upper Beult; Cherwell Catchment; Colne Catchment; Cotswolds Catchment; Loddon Catchment; Medway Catchment; Mole Catchment; Upper Lee Catchment; Vale of White Horse Catchment; Wey Catchment; Thames (Maidenhead to Sunbury)	Implemented	Environment Agency; Natural England
TH0413	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Target high risk farms and undertake regulatory farm visits using, pollution prevention notices and advisory letters where necessary	Cherwell Catchment; Colne Catchment; Cotswolds Catchment; Kennet and Pang Catchment; Loddon Catchment; Medway Catchment; Mole Catchment; North Kent Catchment; Upper Lee Catchment; Vale of White Horse Catchment; Wey Catchment; Thame	2012	Environment Agency; Natural England; Land managers and owners; National Farmers' Union; Local Authorities

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0323	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Microbiology	Lower Lee Pollution Prevention project	Lee (from Tottenham Locks to the Tideway)	2010	Environment Agency; Defra
TH0417	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Microbiology	Thames Groundwater Pollution Prevention project	Burford Jurassic; Greenwich Tertiaries; Maidenhead Chalk; Mid-Chilterns Chalk; Reigate Lower Greensand; Upper Lee Chalk	2010	Environment Agency; Defra
TH0418	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Microbiology	Thames Oil Care Pollution Prevention project	Thames RBD	2010	Environment Agency; Defra

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0368	Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Promote the 'River Fly Partnership' monitoring programme to assess the status of river health.	Thames RBD	2012	Salmon and Trout Association (Environment Agency; Natural History Museum; Fisheries and Angling Interests)
TH0008	Organic pollutants; Sediments (as a direct pollutant)	Agree and implement protocol with British Waterways to manage canal discharges and abstractions.	Thames RBD	2012	Environment Agency; British Waterways
TH0033	Physical modification	Continue to develop and implement a programme of river habitat improvement works to improve ecology by addressing physical morphology and flow pressures (including culverts, closed watercourses, pinch points and in-channel structures).	Thames RBD	2012	Thames River Restoration Trust; Riparian owners; Natural England; Environmental NGOs; Local Authorities; Environment Agency; Fisheries and Angling Interests; Developers
TH0083	Physical modification	Develop strategic plans to improve ecology through habitat creation and enhancement	Darent Catchment; London Catchment; Medway Catchment; North Kent Catchment	2012	Natural England; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0126	Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate channel maintenance strategies and techniques e.g. minimise disturbance to channel bed and margins	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes	2011	Environment Agency
TH0127	Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate channel maintenance strategies and techniques e.g. remove woody debris only upstream of, or within, areas of urban flood risk	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes	2011	Environment Agency
TH0128	Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate techniques (invasive species)	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Roding (Cripsey Brook to Loxford Water); Thames Middle	2011	Environment Agency
TH0129	Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate timing (vegetation control)	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Roding (Cripsey Brook to Loxford Water); Thames Middle	2011	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0130	Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate vegetation control technique	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Lee Navigation (Hertford and Ware); Roding (Cripsey Brook to Loxford Water); Thames Middle	2011	Environment Agency
TH0131	Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate water level management strategies, including timing and volume of water moved	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater	2011	Environment Agency
TH0132	Physical modification	Flood/Coastal Erosion Risk Management Measure - Bank rehabilitation / reprofiling	Lee Navigation (Hertford and Ware); Thames Middle	2011	Environment Agency
TH0133	Physical modification	Flood/Coastal Erosion Risk Management Measure - Flow manipulation (e.g. construct structures to normalise flow; realign frontage)	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Wey (Shalford to River Thames confluence at Weybridge)	2011	Environment Agency



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0134	Physical modification	Flood/Coastal Erosion Risk Management Measure - Flow manipulation (e.g. construct structures to normalise flow; realign frontage)	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Wey (Shalford to River Thames confluence at Weybridge)	2027	Environment Agency
TH0135	Physical modification	Flood/Coastal Erosion Risk Management Measure - Improve floodplain connectivity	Roding (Cripsey Brook to Loxford Water)	2011	Environment Agency
TH0136	Physical modification	Flood/Coastal Erosion Risk Management Measure - Increase in-channel morphological diversity	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Lee Navigation (Hertford and Ware)	2011	Environment Agency
TH0137	Physical modification	Flood/Coastal Erosion Risk Management Measure - Indirect / offsite mitigation (offsetting measures)	Dry valley at Bluewater; Roding (Cripsey Brook to Loxford Water)	2011	Environment Agency
TH0138	Physical modification	Flood/Coastal Erosion Risk Management Measure - Managed realignment of flood defence	Thames Middle	2011	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0139	Physical modification	Flood/Coastal Erosion Risk Management Measure - Operational and structural changes to locks, sluices, weirs, beach control, etc	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Ebbsfleet; Kennet and Holy Brook; Lower Cray; Thames Wallingford to Caversham; Wey (Shalford to River Thames confluence at Weybridge)	2011	Environment Agency
TH0140	Physical modification	Flood/Coastal Erosion Risk Management Measure - Operational and structural changes to locks, sluices, weirs, beach control, etc	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Ebbsfleet; Kennet and Holy Brook; Lower Cray; Thames Wallingford to Caversham; Wey (Shalford to River Thames confluence at Weybridge)	2027	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0142	Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve (e.g fencing) and where possible enhance ecological value of marginal aquatic habitat, banks and riparian zone	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Lee Navigation (Hertford and Ware); Roding (Cripsey Brook to Loxford Water); Thames Middle	2027	Environment Agency
TH0141	Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve (e.g fencing) and where possible enhance ecological value of marginal aquatic habitat, banks and riparian zone	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Lee Navigation (Hertford and Ware); Roding (Cripsey Brook to Loxford Water); Thames Middle	2011	Environment Agency
TH0143	Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve and where possible enhance ecological value of marginal aquatic habitat, banks and riparian zone	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Lee Navigation (Hertford and Ware); Roding (Cripsey Brook to Loxford Water); Thames Middle	2011	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0144	Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve and, where possible, restore historic aquatic habitats	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Lee Navigation (Hertford and Ware); Roding (Cripsey Brook to Loxford Water); Thames Middle	2011	Environment Agency
TH0145	Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve and, where possible, restore historic aquatic habitats	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Lee Navigation (Hertford and Ware); Roding (Cripsey Brook to Loxford Water); Thames Middle	2027	Environment Agency
TH0146	Physical modification	Flood/Coastal Erosion Risk Management Measure - Remove obsolete structure	Kennet and Holy Brook; Thames Wallingford to Caversham	2011	Environment Agency
TH0147	Physical modification	Flood/Coastal Erosion Risk Management Measure - Retain marginal aquatic and riparian habitats (channel alteration)	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Dry valley at Bluewater; Roding (Cripsey Brook to Loxford Water); Thames Middle; Wey (Shalford to River Thames confluence at Weybridge)	2011	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0148	Physical modification	Flood/Coastal Erosion Risk Management Measure - Sediment management strategies (develop and revise) which could include a) substrate reinstatement, b) sediment traps, c) allow natural recovery minimising maintenance, d) riffle construction, e) reduce all bar necessary management in flood risk areas	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes	2011	Environment Agency
TH0149	Physical modification	Flood/Coastal Erosion Risk Management Measure - Selective vegetation control regime	Beverley Brook (Motspur Park to Thames) and Pyl Brook at West Barnes; Roding (Cripsey Brook to Loxford Water); Thames Middle	2011	Environment Agency
TH0150	Physical modification	Flood/Coastal Erosion Risk Management Measure - Set-back embankments (a type of managed retreat)	Roding (Cripsey Brook to Loxford Water); Thames Middle	2011	Environment Agency
TH0151	Physical modification	Flood/Coastal Erosion Risk Management Measure - Structures or other mechanisms in place and managed to enable fish to access waters upstream and downstream of the impounding works.	Dry valley at Bluewater; Kennet and Holy Brook; Lower Cray	2011	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0193	Physical modification	Improved access and habitat for eels, installation of eel/elver passes, assessment of need for passes/other action at obstructions, development and installation of passage at tidal gates/hatches.	Thames RBD	2012	Environment Agency; Natural England; Environmental NGOs; Local Authorities; Land managers and owners; Land managers and owners
TH0354	Physical modification	Promote and encourage appropriate sediment, vegetation and channel maintenance strategies to minimise impacts from land drainage activities on farmland.	Thames RBD	2012	Stour Internal Drainage Board; Environment Agency; National Farmers' Union; Natural England; Romney Marshes Internal Drainage Board
TH0443	Physical modification	WFD mitigation measures manual for flood and coastal erosion risk management and land drainage activities. This manual will set out best practice options for measures to mitigate against the impacts of such activities upon ecology. This will be used to ensure that new and existing schemes and management activities will take into consideration WFD requirements and will results in minimal ecological damage.	Thames RBD	2010	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0103	Physical modification; Organic pollutants; Abstraction and other artificial flow pressures; Nutrients	Ensure that planning policies and spatial planning documents take into account the objectives of the Thames River Basin Management Plan.	Thames RBD	2012	Regional Planning Authorities; Environment Agency; Local Authorities
TH0096	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Encourage uptake of Voluntary Initiative best practice advice on pesticide use by land managers within the agricultural and amenity sectors (e.g. golf courses, parks, highways, railways).	Thames RBD	Implemented	Environment Agency
TH0373	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Provide advice to small and medium sized businesses on obligations in relation to priority substances, priority hazardous substances and specific pollutants through NetRegs website	Thames RBD	2012	Environment Agency
TH0097	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Enforce REACH Annex 17 restrictions	Thames RBD	Implemented	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0415	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients; Microbiology; Sediments (as a direct pollutant)	Targeted management of surface water systems to reduce contaminants in discharges, including consideration of gully cleaning, trapping fats, oils and grease.	Thames RBD	Implemented	Environment Agency; Local Authorities; Water companies
TH0361	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Nutrients; Organic pollutants	Promote land management best practice at commercial, agricultural and amenity sites, including golf courses, playing fields, parks and railway lines	Thames RBD	2012	Environment Agency; Wildlife Trusts; Water companies; Network Rail; Land managers and owners; Local Authorities; Natural England
TH0233	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Physical modification	Influence the local planning authority as they develop or revise any Design Guide Policy Documents to ensure that opportunities to improve the water environment are maximised	Thames RBD	2012	Environment Agency



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0105	Sediments (as a direct pollutant); Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Environment Agency to provide tailored advice to key bodies - Regional Development Agencies/Government Offices for Regional Spatial Strategy and Local Authorities for Local Development Frameworks.	Medway; Thames (tidal) Catchment	2012	Environment Agency
TH0328	Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients	Measures to address key water quality issues will be identified and implemented by projects under the Lower Lee Water Quality Programme. Projects include: Weed control trials; Phase 1 sediment removal; Peroxide investigations and trials.	London Catchment	2012	Lower Lee Water Quality Board; British Waterways; Thames Water; Olympic Development Authority; Local Authorities; Greater London Authority; London Organising Committee of the Olympic Games; Environment Agency; Government Office for London
TH0080	Temperature	Develop guidance for the assessment of applications to discharge cooling water in order to manage the risk of GEP failure due to rising water temperature.	Thames Lower; Thames Middle; Thames Upper; London Catchment; Thames (tidal) Catchment; Upper Lee Catchment	2012	Environment Agency; Industry leads

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
Investigations					
TH0011	Abstraction and other artificial flow pressures	Appraise new public water supply resource options including investigating role of different generic option types (e.g. desalination, effluent reuse, transfers and reservoirs) in context of likely regional supply-demand need.	Thames RBD	Implemented	Environment Agency; Water companies
TH0399	Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Salinity	Set up an academic knowledge exchange network to identify collaborative areas of research and investigation.	Thames RBD	2010	University of Westminster; Environment Agency
TH0397	Alien species	Seek sustainable and cost-effective methods for managing established invasions, such as biological control	Thames RBD	2012	Central Government; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0244	Direct biological pressures	Investigate and consider stocking of glass eel.	Thames RBD	2012	Land managers and owners; Environment Agency; Environmental NGOs; Local Authorities; Natural England
TH0330	Direct biological pressures	Monitor eel populations at monitoring sites, including 10 eel specific sites. Glass eel monitoring at least one site, investigation into remote monitoring methods, monitoring of commercial fisheries.	Thames RBD	2012	Land managers and owners; Environment Agency; Environmental NGOs; Local Authorities; Natural England
TH0247	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigate improvements to sewage treatment works that could be integrated into the 2009 periodic review (PR09), or put into PR14.	Thames RBD	2012	Environment Agency; Water companies
TH0369	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Promote the targeted mapping of land drainage discharges (fields, highways, rural roads) to better assess their impact on water quality and adopt appropriate control measures.	Thames RBD	2012	Environment Agency; Environmental NGOs; Land managers and owners; Local Authorities; Highways Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0336	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Microbiology	Newbury water quality investigation	Kennet (Lambourn confluence to Enborne confluence); Middle Kennet (Marlborough to Newbury)	2010	Environment Agency; Defra
TH0015	Physical modification	Assessment of abstraction points, hydropower proposals, pumping stations for impacts on eel populations, and ensure appropriate screening in place.	Thames RBD	2012	Water companies; Environment Agency
TH0252	Physical modification	Investigate the need to screen intakes and discharges to prevent loss or damage to fish populations. Ensure screening on priority sites.	Thames RBD	2012	Business and Industry; Fisheries and Angling Interests; Land managers and owners; Environment Agency; Water companies; trout farms; Angling Trusts

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0309	Physical modification	Investigations into the ecological outcomes of measures to mitigate against effects of FCERM activities, improving the understanding of the cost/benefit and technical feasibility of such measures and developing understanding of the underlying processes, ecological responses and applicability. Will use case studies, but outcomes will have a national application.	Thames RBD	2010	Environment Agency
TH0248	Physical modification; Direct biological pressures	Investigate priority actions to improve sea trout populations.	Medway; Thames Coastal North; Thames (tidal) Catchment	2012	Fisheries and Angling Interests; Land managers and owners; Environment Agency; Wild Trout Trust; Atlantic Salmon Trust
TH0256	Physical modification; Direct biological pressures	Investigate then implement priority actions to improve sea trout populations.	Thames RBD	2012	Fisheries and Angling Interests; Environment Agency; Wild Trout Trust; Atlantic Salmon Trust; Land managers and owners

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0390	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Research into locations of non-agricultural pesticide problem areas and their solutions, such as pesticide used on highways.	Thames RBD	2012	Environment Agency
TH0186	Salinity; Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Implement programmes of research and local investigations to improve evidence base to enable effective targeting of actions	Thames RBD	2012	Environment Agency
TH0019	Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Carry out investigative monitoring and field work into the origins, causes and solutions to sedimentation (Non-tidal waters).	Thames RBD	2012	Environment Agency; Water companies; Natural England; Local Authorities

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0449	Sediments (as a direct pollutant); Organic pollutants	Work with riparian owners to identify and manage areas of bankside erosion from livestock and associated impacts.	Thames RBD	2012	Environment Agency; National Farmers' Union; Natural England; Riparian owners
<b>Natura 2000 protected areas and SSSIs</b>					
TH0047	Abstraction and other artificial flow pressures	Contribute to achievement of favourable condition on River Kennet SSSI by revoking or amending abstraction licences	Kennet and Pang Catchment	2012	Environment Agency
TH0065	Abstraction and other artificial flow pressures; Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Water Level Management Plans (See Annex D)	Thames RBD	2010	Environment Agency; Farmers; Land managers and owners
TH0036	Direct biological pressures; Physical modification	Contribute to achievement of favourable condition on Basingstoke Canal SSSI and Heath Lake SSSI by undertaking specific management works	Loddon Catchment; Wey Catchment	2012	Environment Agency; Environmental NGOs; Local Authorities; Natural England
TH0051	Direct biological pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas by developing an Invasive species control programme for protected areas (See Annex D)	Thames RBD	2012	Natural England; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0038	Nutrients	Contribute to achievement of favourable condition on Coate Water SSSI Fleet Pond SSSI, River Kennet SSSI, River Beult SSSI, Basingstoke Canal SSSI, Godstone Ponds SSSI, Puttenham & Crooksbury Commons SSS and Whitmoor Common SSSI by developing a pollution action plan	Kennet and Pang Catchment; Loddon Catchment; Medway Catchment; Vale of White Horse Catchment; Wey Catchment	2012	Environment Agency; Natural England
TH0041	Nutrients	Contribute to achievement of favourable condition on Ockham and Wisley Commons SSSI and Whitmoor Common SSSI by implementing lake restoration projects	Wey Catchment	Implemented	Natural England
TH0043	Physical modification	Contribute to achievement of favourable condition on River Kennet SSSI and River Beult SSSI by implementing river restoration project	Medway; Kennet and Pang Catchment	2012	Environment Agency; Natural England
TH0048	Physical modification	Contribute to achievement of favourable condition on West Thurrock Lagoon & Marshes SSSI by implementing flood management programme	South Essex Catchment	2012	Environment Agency



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0057	Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Flood Management Programme (See Annex D)	Thames RBD	2012	Environment Agency
TH0061	Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through River Restoration Programme for Protected Areas (See Annex D)	Thames RBD	2012	Environment Agency; Natural England
TH0062	Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through River Restoration Scheme (See Annex D)	Thames RBD	2012	Natural England; Environment Agency
<b>Investigation - Natura 2000 protected areas and SSSIs</b>					
TH0059	Nutrients	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Investigation into water quality pressures (See Annex D)	Thames RBD	2012	Environment Agency; Natural England

## C.8 Industry, manufacturing and other business

The Thames River Basin District includes London which is the home to the headquarters of more than half the UK's top 100 listed companies. Whilst there is a relatively low incidence of large scale manufacturing, the sector retains a strategic importance both regionally and nationally. The South East of England is a very prosperous area with the second largest regional economy in the UK (after London), valued at £177 billion in 2006. GDP per capita in 2007 was estimated at £22,624, compared with a UK average of £19,956, making South East England the second richest region per capita, behind London.

Many high technology companies are located near the M3 in Surrey and the M4 in Berkshire.

Pressure on water environment from industry and business is intense, both in terms of the release of pollutants and the abstraction of limited resources. The challenge for the region is to ensure that it maintains its competitive advantage without compromising the enhancement of its natural environment.

Table C8: **Actions for Industry, manufacturing and other business**

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0380	Abstraction and other artificial flow pressures	Reduction of demand through labelling of water efficient appliances (Market Transformation)	Thames RBD	2010	Defra
TH0381	Abstraction and other artificial flow pressures	Reduction of demand through offering of tax incentives (enhanced Capital Allowances) for the purchase and use of efficient plant and fittings by commercial organisations	Thames RBD	2010	Defra

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0441	Abstraction and other artificial flow pressures	Water efficiency requirements in Environmental Permitting Regulation (EPR) permits	Thames RBD	2012	Environment Agency
TH0452	Ammonia; Faecal indicator organisms; Hazardous substances and non-hazardous pollutants; Nitrate; Phosphate; Priority Substances & Specific Pollutants	Yalding agrochemicals - groundwater beneath site impacting SWB. Clean up via Planning. Ongoing assessment.	Kent Weald Western - Medway	2012	Local Authorities; Environment Agency; Developers
TH0403	Ammonia; Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Square Deal Tip, Ditton	Kent Greensand Middle	2015	Environment Agency
TH0359	Direct biological pressures	Promote greater public awareness through the production of identification guides for key species, including aquatic invasive non-native species. Target the guides at river users, garden centres and other commercial outlets.	Thames RBD	2012	Natural England; Non Native Invasive Species Forum; Environmental NGOs; Environment Agency
TH0118	Fluoranthene; Benzo(a)pyrene; Indeno (123-cd) pyrene; Benzo (ghi) perylene	EU Restriction on use of PAH content in oil used in the manufacture of tyres	Thames RBD	Implemented	EU

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0022	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Comply with Environment Agency Notice (WRA S86 and S161, Groundwater Regulations, contaminated land legislation). Make use of site specific notices to remove pollution risk to groundwater	Thames RBD	Implemented	Environment Agency; Land managers and owners
TH0027	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Comply with Local Authority Contaminated Land Remediation Notices - Make use of site specific notices to remove pollution risk to groundwater	Thames RBD	Implemented	Local Authorities; Land managers and owners; Industry leads
TH0085	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Development planning structure plans - influence location of development to protect groundwater	Thames RBD	Implemented	Environment Agency; Water companies
TH0175	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Groundwater protection advice to Veterinary Medicines Directorate products approvals process	Thames RBD	Implemented	Land managers and owners
TH0029	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Comply with Pt 2a Contaminated Land Remediation Notice served to clean up bromate (and bromide) groundwater pollution plume.	Mid-Chilterns Chalk; Upper Lee Chalk	2010	Crest Homes; Redland

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0032	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Conduct pollution prevention campaign and advise industries using solvents within Source Protection Zone of groundwater abstraction. Carry out investigation into solvent contamination and liaise with local authority on use of Contaminated Land Regulations	Maidenhead Chalk	2011	Environment Agency; Local Authorities
TH0086	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Development planning: land contamination - site specific advice and required action for remediation of contaminated land through planning liaison	Thames RBD	Implemented	Environment Agency; Local Authorities
TH0107	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Environmental Permitting – effluent discharges to ground	Thames RBD	Implemented	Environment Agency
TH0108	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Environmental Permitting - Process Industries Regulation	Thames RBD	Implemented	Environment Agency
TH0109	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Environmental Permitting - waste disposal	Thames RBD	Implemented	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0155	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow Petrol Retailing Code of Practice (Groundwater Regulations) - comply with published advice for operators	Thames RBD	Implemented	Industry leads
TH0157	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow Solvents Code of Practice (Groundwater Regulations) - comply with published advice for operators	Thames RBD	Implemented	Industry leads
TH0192	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow the SUDS (sustainable drainage systems) Interim Code of Practice - comply with published advice for operators	Thames RBD	Implemented	Industry leads
TH0181	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Implement DCLG Planning Policy Guidance Statement 23 (PPS23) on controlling pollution of groundwater that may arise from development of land	Thames RBD	Implemented	Local Authorities
TH0183	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Implement Groundwater Protection: Policy & Practice - External education on groundwater pollution prevention	Thames RBD	Implemented	Industry leads
TH0190	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Implementation of 'oil-filled cables' operating agreement with electricity transmission companies	Thames RBD	Implemented	Environment Agency; Industry leads

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0310	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Liaise with local authority on use of Pt2a (contaminated land legislation). Pollution Prevention campaign and advise metal finishers and industries using solvents.	Upper Lee Chalk	2011	Environment Agency
TH0313	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Local Authority Contaminated Land Remediation Notice powers . Make use of site specific notices to remove pollution risk to groundwater	Thames RBD	Implemented	Local Authorities
TH0315	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Local Campaign: Fawkham Solvent Impact	West Kent Darent and Cray Chalk	2015	Environment Agency
TH0316	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Local Campaign: Footscray Solvent Impact	West Kent Darent and Cray Chalk	2015	Environment Agency
TH0317	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Local Campaign: Pembury Pesticides	Kent Weald Western - Medway	2015	Environment Agency
TH0318	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Local Campaign: Reduction in widespread impact by solvents in groundwater.	West Kent Darent and Cray Chalk	2015	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0320	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Local Campaign: Tonbridge Solvents	Kent Weald Western - Medway	2015	Environment Agency
TH0321	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Local Campaign: Windmill Hill Solvent Impact	North Kent Medway Chalk	2015	Environment Agency
TH0347	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Pollution prevention campaign on urban and agricultural use of pesticides. Although atrazine has been withdrawn from use, its presence in groundwater demonstrates a pathway and that other pesticides may also cause pollution	Maidenhead Chalk	2011	Environment Agency
TH0371	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Proposed oil pipelines Operating Agreement(s)	Thames RBD	2012	Environment Agency; Industry leads



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0389	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Remediation of chlorinated solvents and hydrocarbons: trichloroethene, trichloroethane, tetrachloroethene, benzene, toluene, ethylbenzene and xylene by pump-and-treat in progress under Part 2A (contaminated land legislation) Remediation Statement	Aldermaston Bagshot Beds	Implemented	Ministry of Defence
TH0416	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Targeted Pollution Prevention campaign and advice to industry driven by groundwater pollution.	Mid-Chilterns Chalk	2012	Environment Agency
TH0422	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Total Oil Operating agreement	Thames RBD	Implemented	Environment Agency; Industry leads
TH0438	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Voluntary groundwater remediation of trichloroethene	Aldermaston Bagshot Beds	Implemented	Ministry of Defence
TH0439	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Voluntary groundwater remediation scheme - ongoing hydraulic containment of chlorinated solvents at Harwell.	Vale of White Horse Chalk	Implemented	Research Sites Restoration Limited

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0377	Mercury and its compounds	Recently introduced restrictions across the UK will see decreasing trend in emissions and probable compliance by 2015 with no further action	Thames RBD	Implemented	Environment Agency
TH0084	Nitrate	Development planning - planning liaison. Site specific groundwater pollution prevention advice and recommendations	Thames RBD	Implemented	Local Authorities
TH0386	Nitrate	Register low risk waste activities which are exempt from the requirement for an environmental permit	Thames RBD	Implemented	Environment Agency
TH0335	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	NetRegs (Environmental Guidance to Business) - External education on groundwater pollution legislation	Thames RBD	Implemented	Environment Agency
TH0385	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Re-engineer existing discharges to avoid direct discharges of pollutants to groundwater	Thames RBD	Implemented	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0388	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Registrations (in conjunction with Standard Rules) - Implement new regulatory approach (via Environmental Permitting Regulations) arising from implementation of new Groundwater Directive (2006/116/EC)	Thames RBD	2012	Water companies; Land managers and owners; Environment Agency; Industry leads
TH0346	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Pollution Prevention advice and local campaigns to provide targeted advice and enforcement in high risk areas on all rural diffuse pollution issues: farm & land management, domestic oil storage, septic tanks.	Thames RBD	Implemented	Local industry associations; Environment Agency; Local Authorities; Natural England
TH0115	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Establish and maintain local advice led partnerships to improve farm and land management practices, to reduce diffuse pollution from agriculture.	Eden Brook; Eden Brook East of Lingfield; Mid Medway from Eden Confluence to Yalding; Tudeley Brook; Ulcombe Stream; White Drain	2011	Natural England; National Farmers' Union; Local Authorities; Land managers and owners; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0232	Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Sediments (as a direct pollutant)	Influence the future targeting of England Catchment Sensitive Farming Initiative activities and agri-environment schemes to ensure adoption of best farming practices.	Bourne; Tributary of Beult at Sutton Valance; Tudeley Brook; Upper Beult	Implemented	Environment Agency; Natural England
TH0096	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Encourage uptake of Voluntary Initiative best practice advice on pesticide use by land managers within the agricultural and amenity sectors (e.g. golf courses, parks, highways, railways).	Thames RBD	Implemented	Environment Agency
TH0170	Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve Pesticide use through the Amenity Forum	Thames RBD	Implemented	Amenity Forum
TH0362	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Promote partnership work to tackle diffuse rural pollution and including roads, highways, public rights of way and farm tracks. Promote initiatives such as Landcare Schemes.	Thames RBD	2012	Environment Agency; Farmers; Highways Agency; Local Authorities; Natural England
TH0018	Saline intrusion	CAMS – Implement abstraction licensing controls to minimise and manage risks from saline intrusion	Thames RBD	Implemented	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0393	Sediments (as a direct pollutant); Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients	Review environmental permits and modify permit conditions, where necessary, to protect the water environment	Thames RBD	2012	Environment Agency; Industry leads
TH0121	Trichloroethylene	EU-wide ban on use	Thames RBD	Implemented	EU
<b>Investigations</b>					
TH0399	Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Salinity	Set up an academic knowledge exchange network to identify collaborative areas of research and investigation.	Thames RBD	2010	University of Westminster; Environment Agency
TH0070	Ammonia	Detailed Part IIA site investigation proposed at Sterling Industrial Site (former Newbury Gasworks). Based on the findings, the site may be put forward for determination.	Berkshire Downs Chalk	2010	Environment Agency
TH0401	Ammonia	Specific local investigation into sources of ammonia	Kemble Forest Marble; South Essex Thurrock Chalk	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
DrWPA0085	Bromate	Further monitoring to confirm risk of failure of WFD Article 7	Lee Navigation (Hertford and Ware)	2010	Environment Agency; Water companies
TH0253	Direct biological pressures; Physical modification	Investigate the opportunity to develop a commercial fisheries and sea angling code of conduct.	Thames Coastal North; Medway Catchment; Thames Estuary	2012	Sea Fisheries Committee (Local Authorities; Marine Stewardship Council; Shellfish Association of Great Britain; Inshore Fisheries and Conservation Authorities; Angling Trusts)
TH0271	Dredging and trawling (commercial fishing and shellfish)	Investigation into the impact of commercial shellfish and fin fisheries to improve the risk assessment of the impact of these activities on ecology and to identify appropriate measures. Will use case studies, but outcomes will have a national application.	Thames RBD	2010	Environment Agency
TH0014	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Assess data available prior to carrying out targeted Pollution Prevention campaign and advising industry	Burford Jurassic; Chiltern Chalk Scarp; Greenwich Tertiaries	2010	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0160	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow up 1990s report using recent data and knowledge of groundwater-surface water inter-relationship, including use of groundwater modelling .	Mid-Chilterns Chalk	2010	Environment Agency
TH0169	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Further river water bromate monitoring in relation to river abstraction to confirm whether there is a risk of failure of the Drinking Water Protected Area requirements of WFD.	Lee Navigation (Hertford and Ware)	2010	Water companies
TH0243	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Investigate and assess occurrence and distribution of chlorinated solvents	Upper Lee Chalk	2010	Environment Agency
TH0258	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Investigation and additional measures required since measures already in place are insufficient to clean up solvent plume within a generation	Vale of White Horse Chalk	2010	Research Sites Restoration Limited
TH0322	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Local investigation and campaign to reduce the widespread impact by solvents in this groundwater.	North Kent Medway Chalk	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0344	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Pollution and prevention campaigns and advice, particularly targeting industrial premises in the catchment where copper may be used. Check for use of other metals and hazardous substances. Also investigate possible inflow from river to groundwater at abstraction.	South-West Chilterns Chalk	2012	Environment Agency
TH0334	Phosphate	National R&D on fate and transport of phosphorus in groundwater to determine impact on surface water, investigation and assessment. Apply findings locally and assess.	Alton Upper Greensand; Bicester-Otmoor Cornbrash	2012	Environment Agency
TH0015	Physical modification	Assessment of abstraction points, hydropower proposals, pumping stations for impacts on eel populations, and ensure appropriate screening in place.	Thames RBD	2012	Water companies; Environment Agency



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0252	Physical modification	Investigate the need to screen intakes and discharges to prevent loss or damage to fish populations. Ensure screening on priority sites.	Thames RBD	2012	Business and Industry; Fisheries and Angling Interests; Land managers and owners; Environment Agency; Water companies; trout farms; Angling Trusts
TH0390	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Research into locations of non-agricultural pesticide problem areas and their solutions, such as pesticide used on highways.	Thames RBD	2012	Environment Agency
TH0186	Salinity; Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Implement programmes of research and local investigations to improve evidence base to enable effective targeting of actions	Thames RBD	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0019	Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Carry out investigative monitoring and field work into the origins, causes and solutions to sedimentation (Non-tidal waters).	Thames RBD	2012	Environment Agency; Water companies; Natural England; Local Authorities
<b>Natura 2000 protected areas and SSSIs</b>					
TH0053	Abstraction and other artificial flow pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas by revoking or amending abstraction licences (See Annex D)	Thames RBD	2012	Environment Agency
TH0054	Nutrients; Sediments (as a direct pollutant)	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas by revoking or amending Discharge/PPC Consents (See Annex D)	Thames RBD	2012	Environment Agency

## C.9 Local and regional government

Local government is responsible for working with the community to implement government policy and maintain public services and facilities, from parks and education to social services and transport. In addition to the delivery of public services by individual councils and other statutory agencies, there is an increasing emphasis on the importance of organisations working in partnership with each other i.e. through Local Strategic Partnerships bringing together key service providers from the private, business, community and voluntary sectors into a single partnership.

In the Thames river basin district there are 13 unitary authorities (Bracknell Forest, Central Bedfordshire, Luton, Medway, Reading, Slough, Southend-on-Sea, Swindon, Thurrock, West Berkshire, Wiltshire, Windsor and Maidenhead, and Wokingham) which deliver the full range of services, including education, social services, council tax and housing benefits, public libraries, museums and art galleries, traffic and transportation, refuse collection, recycling and disposal, planning, environmental health, swimming pools and leisure facilities, parks, open spaces and countryside including footpaths, cemeteries and crematoria, markets and fairs, registration of births, deaths, marriages and electorates, collecting council tax and business rates..

There are 14 County Councils (Buckinghamshire, Cambridgeshire, East Sussex, Essex, Gloucestershire, Hampshire, Hertfordshire, Kent, Northamptonshire, Oxfordshire, Surrey, Warwickshire, West Sussex and Worcestershire) and 65 District Councils in the Thames RBD (Ashford, Aylesbury Vale, Basildon, Basingstoke and Deane, Brentwood, Broxbourne, Canterbury, Castle Point, Cheltenham, Cherwell, Chichester, Chiltern, Cotswold, Crawley, Dacorum, Dartford, Daventry, East Hampshire, East Hertfordshire, Elmbridge, Epping Forest, Epsom and Ewell, Gravesham, Guildford, Harlow, Hart, Hertsmere, Horsham, Maidstone, Mid Sussex, Mole Valley, North Hertfordshire, Oxford, Reigate and Banstead, Rochford, Rother, Runnymede, Rushmoor, Sevenoaks, South Bucks, South Cambridgeshire, South Northamptonshire, South Oxfordshire, Spelthorne, St. Albans, Stevenage, Stratford-on-Avon, Surrey Heath, Swale, Tandridge, Tewkesbury, Three Rivers, Tonbridge and Malling, Tunbridge Wells, Uttlesford, Vale of White Horse, Watford, Waverley, Wealden, Welwyn Hatfield, West Oxfordshire, Winchester, Woking, Wychavon and Wycombe).

In addition to the above, London has 33 London boroughs (Barking and Dagenham, Barnet, Bexley, Brent, Bromley, Camden, City and County of the City of London, City of Westminster, Croydon, Ealing, Enfield, Greenwich, Hackney, Hammersmith and Fulham, Haringey, Harrow, Havering, Hillingdon, Hounslow, Islington, Kensington and Chelsea, Kingston upon Thames, Lambeth, Lewisham, Merton, Newham, Redbridge, Richmond upon Thames, Southwark, Sutton, Tower Hamlets, Waltham Forest and Wandsworth).

Town and parish councils exist at the most local level across the whole of the region.

Table C9: **Action for local and regional government**

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0017	Abstraction and other artificial flow pressure, Acidification, Direct biological pressures, Microbiology, Nutrients, Organic pollutants, Physical modification, Priority Hazardous Substances Priority Substances and Specific Pollutants, Salinity, Sediment	Biodiversity and New Development - In reviewing existing, or developing new DPDs, and when making planning decisions, the planning authority (regional and local) should use evidence relating to 'priority water bodies' <sup>1</sup> , alongside other relevant evidence, to maximise opportunities for enhancing biodiversity - where this can contribute to an improved water environment. This should contribute regional biodiversity targets and should take into account / implement any existing regional or local habitat creation strategies, such as the London Rivers Restoration Action Plan, and the SE Biodiversity Strategy.	Thames RBD	2012	Local Authorities; Environment Agency; Regional Planning Authority

<sup>1</sup> For the purposes of these actions 'priority water bodies' should be taken to mean those that have been assigned 'bad' / 'poor' status in the RBMP, where there is a high confidence in this classification.

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0125	Abstraction and other artificial flow pressure, Acidification, Direct biological pressures, Microbiology, Nutrients, Organic pollutants, Physical modification, Priority Hazardous Substances Priority Substances and Specific Pollutants, Salinity, Sediment	Flood Risk Management and New Development - In reviewing existing, or developing new DPDs, and when making planning decisions, the planning authority (regional and local) should use evidence relating to 'priority water bodies' <sup>2</sup> , alongside other relevant evidence, (i.e. included in the RFRA, SFRA, CFMP, SMP and SWMP) to require the use of SUDS techniques & flood storage measures that maximise potential for improvements to water quality & the water environment in all appropriate development.	Thames RBD	2012	Local Authorities; Environment Agency; Regional Planning Authority

<sup>2</sup> For the purposes of these actions 'priority water bodies' should be taken to mean those that have been assigned 'bad' / 'poor' status in the RBMP, where there is a high confidence in this classification.

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0172	Abstraction and other artificial flow pressure, Acidification, Direct biological pressures, Microbiology, Nutrients, Organic pollutants, Physical modification, Priority Hazardous Substances Priority Substances and Specific Pollutants, Salinity, Sediment	Green Infrastructure and New Development - In reviewing existing, or developing new DPDs, and when making planning decisions, the planning authority (regional and local) should use evidence relating to 'priority water bodies' <sup>3</sup> , alongside other relevant evidence, to maximise the potential for delivery of green infrastructure that incorporates benefits for the water environment - e.g. incorporation of SUDS, flood storage measures and biodiversity enhancements that can have positive impacts on water quality. In the South East, local authorities should refer to 'The South East Green Infrastructure Framework: From Policy into Practice'.	Thames RBD	2012	Local Authorities; Environment Agency; Regional Planning Authority

<sup>3</sup> For the purposes of these actions 'priority water bodies' should be taken to mean those that have been assigned 'bad' / 'poor' status in the RBMP, where there is a high confidence in this classification.

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0391	Abstraction and other artificial flow pressure, Acidification, Direct biological pressures, Microbiology, Nutrients, Organic pollutants, Physical modification, Priority Hazardous Substances Priority Substances and Specific Pollutants, Salinity, Sediment	Retro-fitting and New Development - In reviewing existing, or developing new DPDs, and when making planning decisions, the planning authority (regional and local) should use evidence relating to 'priority water bodies' <sup>4</sup> , alongside other relevant evidence, to ensure that during the redevelopment, refurbishment or conversion of existing building stock, opportunities are maximised for retro-fitting - where this will have benefits for the water environment. For example, this could include; retrofitting to achieve higher water efficiency standards (based on the Code for Sustainable Homes standards), incorporating SUDS techniques that address water quality, and delivering biodiversity enhancements that contribute positively to the water environment.	Thames RBD	2012	Local Authorities; Environment Agency

<sup>4</sup> For the purposes of these actions 'priority water bodies' should be taken to mean those that have been assigned 'bad' / 'poor' status in the RBMP, where there is a high confidence in this classification.

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0366	Abstraction and other artificial flow pressures; Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Direct biological pressures; Nutrients	Promote sustainable water management best practice through pre-application discussions with developers (as set out in the Environment Agency's publication 'A guide for developers') and establish good practice for site clearance prior to development.	Thames RBD	Implemented	Business and Industry; Local Authorities; Environment Agency
TH0410	Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Salinity; Abstraction and other artificial flow pressures	Sustainable Community Strategy (SCS) and Local Area Agreement (LAA) - Local Strategic Partnerships should use evidence relating to 'priority water bodies' <sup>5</sup> in the RBMP, alongside other relevant evidence, to include the water environment as a priority for action in the SCS. Where appropriate, this evidence should be used to justify the inclusion of a relevant National Indicator, or local targets related to the water environment in the Local Area Agreement.	Thames RBD	2012	Regional Planning Authority; Local Authorities; Environment Agency

<sup>5</sup> For the purposes of these actions 'priority water bodies' should be taken to mean those that have been assigned 'bad' / 'poor' status in the RBMP, where there is a high confidence in this classification.



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0411	Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Salinity; Abstraction and other artificial flow pressures	Tackling water efficiency in existing development Local Authorities should work with water companies to investigate the potential for increasing water efficiency in Council owned and managed estate (land and buildings). E.g. through metering and /or retro-fitting of water saving devices.	Thames RBD	2012	Regional Planning Authority; Local Authorities; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0440	Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Salinity; Abstraction and other artificial flow pressures	Water Efficiency and New Development - In reviewing existing, or developing new DPDs, and when making planning decisions, the planning authority (regional and local) should use evidence relating to 'priority water bodies' <sup>6</sup> , alongside other relevant evidence, to seek the use of water efficiency standards in new development that exceed extant Buildings regulations, or, in the case of London Catchment; that go beyond the maximum target of 105 litres per person per day. Required standards should be based on the Code for Sustainable Homes standards for residential development, and the BREEAM standards for non-residential development.	Thames RBD	2012	Local Authorities; Environment Agency; Regional Planning Authorities

<sup>6</sup> For the purposes of these actions 'priority water bodies' should be taken to mean those that have been assigned 'bad' / 'poor' status in the RBMP, where there is a high confidence in this classification.

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0442	Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Salinity;	Water Quality, Infrastructure & Integrated Water Management and New Development - In reviewing existing, or developing new DPDs, and when making planning decisions, the planning authority (regional and local) should use evidence relating to 'priority water bodies' <sup>7</sup> , alongside other relevant evidence, to influence the location and scale of future development, and to require Water Cycle Studies (WCS) where appropriate. The need for WCS should be established through consultation with the Environment Agency and other relevant stakeholders (e.g. water companies). Completed WCS's should be used to inform future development to ensure it does not compromise, and helps to meet, the 'no deterioration' and 'good ecological status / potential' objectives of the WFD.	Thames RBD	2012	Regional Planning Authority; Local Authorities; Environment Agency

<sup>7</sup> For the purposes of these actions 'priority water bodies' should be taken to mean those that have been assigned 'bad' / 'poor' status in the RBMP, where there is a high confidence in this classification.

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0227	Acidification; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification; Salinity; Nutrients; Direct biological pressures; Abstraction and other artificial flow pressures; Microbiology	Influence stakeholders on the preparation of planning proposals for eco-towns at Whitehill Bordon and North West Bicester, as well as proposals for any new eco-town sites, to ensure that the most sustainable options are pursued for; flood risk, drainage, water quality and water resources in line with the eco-towns PPS, and any other best practice guidance	Cherwell (Gallos Brook, Gubbinshole Ditch); Slea (Kingsley to Sleaford)	2012	Local Authorities; Environment Agency
TH0124	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Fire service Memorandum of Understanding (MoU) on implementing pollution control measures in emergencies	Thames RBD	Implemented	Local Authorities; Environment Agency
TH0179	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Identify suitable development for high risk areas in this groundwater sensitive area with thin soils over Chalk and rapid fissure flow in Local Development plans.	Upper Lee Chalk	2012	Local Authorities
TH0181	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Implement DCLG Planning Policy Guidance Statement 23 (PPS23) on controlling pollution of groundwater that may arise from development of land	Thames RBD	Implemented	Local Authorities

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0367	Microbiology; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Promote the inclusion of actions to assist in protecting and enhancing water quality (on a catchment basis) in Surface Water Management Plans	Loddon Catchment; London Catchment; Mole Catchment; Wey Catchment	2012	Environment Agency; Local Authorities; Water companies
TH0180	Nitrate	Implement DCLG Planning Policy Guidance Statement 23 (PPS23) on controlling pollution of groundwater that may arise from development of land	Thames RBD	Implemented	Local Authorities
TH0115	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Establish and maintain local advice led partnerships to improve farm and land management practices, to reduce diffuse pollution from agriculture.	Eden Brook; Eden Brook East of Lingfield; Mid Medway from Eden Confluence to Yalding; Tudeley Brook; Ulcombe Stream; White Drain	2011	Natural England; National Farmers' Union; Local Authorities; Land managers and owners; Environment Agency
TH0358	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Promote good practice to avoid pollution from construction sites.	Loose Stream	2010	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0232	Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Sediments (as a direct pollutant)	Influence the future targeting of England Catchment Sensitive Farming Initiative activities and agri-environment schemes to ensure adoption of best farming practices.	Bourne; Tributary of Beult at Sutton Valance; Tudeley Brook; Upper Beult	Implemented	Environment Agency; Natural England
TH0363	Nutrients; Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Promote partnership work to tackle diffuse rural pollution and including roads, highways, public rights of way and farm tracks. Promote initiatives such as Landcare Schemes.	Thames RBD	2012	Environment Agency; Farmers; Highways Agency; Local Authorities; Natural England
TH0364	Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Direct biological pressures; Abstraction and other artificial flow pressures; Nutrients; Sediments (as a direct pollutant)	Promote sustainable design and construction techniques for water efficiency, water quality and drainage / flooding to the planning and development sector through the use of best practice guidance and promotion of the Code for Sustainable Homes and BREAM standards.	Thames RBD	2012	Environment Agency; Industry leads; Local Authorities

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0234	Organic pollutants; Salinity; Abstraction and other artificial flow pressures; Physical modification; Nutrients; Microbiology; Direct biological pressures; Acidification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Influence the planning and development sector to ensure that the objectives of the WFD and RBMP are considered in relevant strategic plans and planning applications. And, where appropriate, that this is reflected in any related environmental assessments (e.g. Sustainability Appraisals, SEA, EIA, IIA etc)	Thames RBD	2012	Environment Agency
TH0443	Physical modification	WFD mitigation measures manual for flood and coastal erosion risk management and land drainage activities. This manual will set out best practice options for measures to mitigate against the impacts of such activities upon ecology. This will be used to ensure that new and existing schemes and management activities will take into consideration WFD requirements and will result in minimal ecological damage.	Thames RBD	2010	Environment Agency
TH0170	Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve Pesticide use through the Amenity Forum	Thames RBD	Implemented	Amenity Forum

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0415	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients; Microbiology; Sediments (as a direct pollutant)	Targeted management of surface water systems to reduce contaminants in discharges, including consideration of gully cleaning, trapping fats, oils and grease.	Thames RBD	Implemented	Environment Agency; Local Authorities; Water companies
TH0361	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Nutrients; Organic pollutants	Promote land management best practice at commercial, agricultural and amenity sites, including golf courses, playing fields, parks and railway lines	Thames RBD	2012	Environment Agency; Wildlife Trusts; Water companies; Network Rail; Land managers and owners; Local Authorities; Natural England
TH0100	Sediments (as a direct pollutant); Physical modification; Organic pollutants; Direct biological pressures; Nutrients	Engage with local authority and local stakeholders to devise methods to tackle diffuse rural and urban pollution and river restoration through Kennet Chalkstream Restoration Project	Kennet and Pang Catchment	2012	Environment Agency; Environmental NGOs; Local Authorities



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
Investigations					
TH0309	Physical modification	Investigations into the ecological outcomes of measures to mitigate against effects of FCERM activities, improving the understanding of the cost/benefit and technical feasibility of such measures and developing understanding of the underlying processes, ecological responses and applicability. Will use case studies, but outcomes will have a national application.	Thames RBD	2010	Environment Agency
TH0390	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Research into locations of non-agricultural pesticide problem areas and their solutions, such as pesticide used on highways.	Thames RBD	2012	Environment Agency
TH0186	Salinity; Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Implement programmes of research and local investigations to improve evidence base to enable effective targeting of actions	Thames RBD	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0019	Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Carry out investigative monitoring and field work into the origins, causes and solutions to sedimentation (Non-tidal waters).	Thames RBD	2012	Environment Agency; Water companies; Natural England; Local Authorities
<b>Natura 2000 protected areas and SSSIs</b>					
TH0002	Nutrients	Contribute to favourable condition on Cotswold Water Park SSSI by planning permission - enforcement/revocation	Cotswolds Catchment	Implemented	Cotswold District Council
TH0063	Physical modification; Direct biological pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Specific Management Works to address morphology and invasive species issues (See Annex D)	Thames RBD	2011	Central Government; Local Authorities; Natural England

## C.10 Mining and quarrying

There are no active mines in the Thames River Basin and whilst former mines may provide enhanced pathways for migration of pollutants they do not normally cause pollution. There are plenty of quarries and these are mainly in the more vulnerable Principal Aquifers, namely Chalk, Jurassic Limestone, Lower Greensand and gravels of the Lower Thames Gravels. Most of the current quarrying in the River Basin is for sands and gravels for both industrial and constructional minerals. Concentrations of quarries occur in the flood-plains of the major valleys such as the Thames, Kennet, Lee and Medway where in some cases they may provide limited flood storage capacity.

Oil and gas is extracted from natural reservoirs deep below ground from several sites to the south of London, located in an east-west line to the south of the Surrey and Kent Hills.

Current quarrying activity and oil extraction is well regulated. Likewise, current guidance on infilling of the former quarries with waste, and the associated regulation of these current activities, leads to very few impacts on the water environment. Some of the materials used to infill quarries historically is leading to pollution problems in the groundwater and the surface waters. Dealing with the environmental legacy of historic activities may be expensive and presents a technical challenge.

The most important environmental issues are to do with de-watering: preventing migration of existing contaminated groundwater from neighbouring sites; impact on wetlands and water resources; and sediment load in discharges to rivers. After-use is also an important consideration with restrictions on use for landfill and concerns about increased groundwater vulnerability from restoration at a lower level or as water-filled features.

Table C10: Mining and quarrying sector

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0123	Abstraction	Extension of abstraction control to include previously exempt uses as new legislation introduced	Thames RBD	2012	Environment Agency
TH0022	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Comply with Environment Agency Notice (WRA S86 and S161, Groundwater Regulations, contaminated land legislation). Make use of site specific notices to remove pollution risk to groundwater	Thames RBD	Implemented	Environment Agency; Land managers and owners
TH0027	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Comply with Local Authority Contaminated Land Remediation Notices - Make use of site specific notices to remove pollution risk to groundwater	Thames RBD	Implemented	Local Authorities; Land managers and owners; Industry leads
TH0025	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Comply with Environment Agency Notice (WRA S86 and S161, Groundwater Regulations, contaminated land legislation). Make use of site specific notices to remove pollution risk to groundwater	Thames RBD	Implemented	Industry leads

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0388	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Registrations (in conjunction with Standard Rules) - Implement new regulatory approach (via Environmental Permitting Regulations) arising from implementation of new Groundwater Directive (2006/116/EC)	Thames RBD	2012	Water companies; Land managers and owners; Environment Agency; Industry leads
<b>Investigations</b>					
TH0186	Salinity; Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Implement programmes of research and local investigations to improve evidence base to enable effective targeting of actions	Thames RBD	2012	Environment Agency
TH0019	Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Carry out investigative monitoring and field work into the origins, causes and solutions to sedimentation (Non-tidal waters).	Thames RBD	2012	Environment Agency; Water companies; Natural England; Local Authorities

## C.11 Navigation

The Ports and marinas of the Thames Estuary provide important regional infrastructure supporting local economies and businesses. Ports handle approximately 95 per cent of UK trade in tonnage terms. Domestic coastal freight services contribute to reducing road congestion and can provide a more environmentally friendly mode of transport than road or rail. The River Thames Basin District has a number of important international ports including Tilbury and Sheerness, and a number of port development proposals.

Shipping relies on safe access to water of an adequate depth for access to markets. Some ports have statutory duties to maintain waters to specified depths and undertake dredging activities to maintain and deepen channels. Metal concentrations in the South East estuarine sediments and levels of chemicals used as anti-foulants are high in a number of locations. This contamination can be released into the water as a result of dredging or disturbance. This causes operational problems for port and harbour authorities that may need to dredge for navigation purposes and for some shellfisheries.

The River Thames basin is also popular with tourists and there is a significant number of inland navigations, marinas and small ports including the River Thames, the British Waterways network, Chatham and boating on the north Kent coast. A British Marine Federation report on marinas and moorings for both inland and coastal sectors illustrated that the demand for moorings exceeds the supply in coastal waters. The Environment Agency is the navigation authority on the Thames and Medway.

Table C11: Actions for the Navigation sector

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0123	Abstraction	Extension of abstraction control to include previously exempt uses (abstractions by Ports and Harbour authorities from tidal waters under certain conditions likely to remain exempt)	Thames RBD	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0089	Dredging (sediment management)	Dredging and disposal framework (Ports sector), which will provide guidance to all those undertaking or permitting navigation dredging and dredged material disposal activities to assist in achieving the statutory objectives of the WFD and related EQS Directive (2008/105/EEC).	Allhallows Marshes; Cliffe Fort Lagoon; Higham Marshes; Medway; Mucking Flats and Marshes; Murston Lakes; Swale; Thames Coastal North; Thames Lower; Thames Middle; Thames Upper; West Thurrock Lagoon	Implemented	Environment Agency
TH0091	Microbiology; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Education campaign for boat users regarding disposal of toilet waste, oil, solvent, paint and cleaning products in waters at risk from diffuse pollution.	Medway	2012	British Marine Federation; Environment Agency; Environmental NGOs; Local Authorities; Royal Yachting Association; Ports and Harbours Authorities

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0016	Navigation (boat traffic)	Awareness raising / information boards (invasive species)- A programme of awareness raising will be implemented by April 2011	Brent (below Silk stream down to the Thames); Fiddlers Brook; Lee (from Tottenham Locks to the Tideway); Lee (from Woolens Brook down to Tottenham Locks); Regents Canal, lower section	2011	British Waterways
TH0046	Physical modification	Contribute to achievement of favourable condition on River Kennet SSSI by regulation of boat movements	Kennet and Pang Catchment	2012	British Waterways
TH0009	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Apply national guidance framework on disposal of dredgings to refine local measures as appropriate (where not disproportionately costly or technically infeasible)	Allhallows Marshes; Cliffe Fort Lagoon; Higham Marshes; Medway; Mucking Flats and Marshes; Murston Lakes; Swale; Thames Coastal North; Thames Lower; Thames Middle; Thames Upper; West Thurrock Lagoon	2012	Ports and Harbours Authorities; Environment Agency; Marine and Fisheries Agency; Defra



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0010	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Apply national guidance framework on dredging to refine local measures as appropriate (where not disproportionately costly or technically infeasible)	Allhallows Marshes; Cliffe Fort Lagoon; Higham Marshes; Medway; Mucking Flats and Marshes; Murston Lakes; Swale; Thames Coastal North; Thames Lower; Thames Middle; Thames Upper; West Thurrock Lagoon	2012	Ports and Harbours Authorities; Environment Agency; Marine and Fisheries Agency; Defra
TH0081	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Develop national guidance framework on disposal of dredgings to inform Programme of Measures to meet WFD objectives	Allhallows Marshes; Cliffe Fort Lagoon; Higham Marshes; Medway; Mucking Flats and Marshes; Murston Lakes; Swale; Thames Coastal North; Thames Lower; Thames Middle; Thames Upper; West Thurrock Lagoon	2010	Defra

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0082	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Develop national guidance framework on dredging to inform Programme of Measures to meet WFD objectives	Allhallows Marshes; Cliffe Fort Lagoon; Higham Marshes; Medway; Mucking Flats and Marshes; Murston Lakes; Swale; Thames Coastal North; Thames Lower; Thames Middle; Thames Upper; West Thurrock Lagoon	2010	Defra
TH0394	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Review existing controls for disposal of dredgings inside and outside harbour limits as appropriate	Allhallows Marshes; Cliffe Fort Lagoon; Higham Marshes; Medway; Mucking Flats and Marshes; Murston Lakes; Swale; Thames Coastal North; Thames Lower; Thames Middle; Thames Upper; West Thurrock Lagoon	2012	Marine and Fisheries Agency; Defra

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0395	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Review existing controls for dredging inside and outside harbour limits as appropriate	Allhallows Marshes; Cliffe Fort Lagoon; Higham Marshes; Medway; Mucking Flats and Marshes; Murston Lakes; Swale; Thames Coastal North; Thames Lower; Thames Middle; Thames Upper; West Thurrock Lagoon	2012	Marine and Fisheries Agency; Defra
TH0006	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Adoption of UK Boat Safety Scheme on all enclosed navigable waters, for recreational craft	Medway	2012	British Marine Federation; Royal Yachting Association
TH0122	Tributyltin (TBT) compounds	EU-wide non-application of TBT to boat hulls from July 2003. From January 2008 TBT should not be used on ship hulls or there should be a coating to prevent leaching of underlying TBT anti-foulants	Thames RBD	Implemented	EU
TH0177	Tributyltin (TBT) compounds	Help prevent illegal use of old TBT containing products	Thames RBD	Implemented	Royal Yachting Association; Environment Agency; British Waterways; British Marine Federation

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0120	Tributyltin (TBT) compounds	EU-wide ban on marketing of TBT as a biocide in the EU	Thames RBD	Implemented	EU
<b>Investigations</b>					
TH0374	Abstraction and other artificial flow pressures; Direct biological pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Provide local guidance and information to ensure marine licensing and consents take into account diffuse pollution pressures and physical measures and therefore contribute to the delivery of objectives.	Medway; SWALE	2011	Marine and Fisheries Agency; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0019	Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Carry out investigative monitoring and field work into the origins, causes and solutions to sedimentation (Non-tidal waters).	Thames RBD	2012	Environment Agency; Water companies; Natural England; Local Authorities
TH0255	Tributyltin (TBT) compounds	Investigate the reason for failure: to assess the contribution from dredging or disposal activities on EQS compliance as appropriate	See below	2012	Environment Agency
<p>TH0255 – Where it will happen</p> <p>Cerney Wick Brook (source to Thames); Cherwell (Cropredy to Nell Bridge); Cherwell (Ray to Thames) and Woodeaton Brook; Crane (including part of the Yeading Brook); Eden at Bough Beech; Evenlode (Compton Bk to Bledington Bk) &amp; 4 Shires; Farthinghoe Stream (Source to Cherwell) and tributaries; Foudry Brook (Source to WestEnd Brook); Foudry Brook (West End Brook to M4); Key (Source to Thames); Kingsey Cuttle Brook and tributaries at Thame; Lee (from Tottenham Locks to the Tideway); Lee (from Woolens Brook down to Tottenham Locks); Lower Cray; Mardyke; MEDWAY; Medway at Maidstone; Mid Medway from Eden Confluence to Yalding; Mid Medway from Hartfield to Eden Confluence; Middle Kennet (Marlborough to Newbury); Rib (upper stretches, above confluence with the Quin); Roding (Cripsey Brook to Loxford Water); Snodland Reservoir; Stanstead Brook; Stort Navigation (near Sawbridgeworth Lock); SWALE; Thame (Scotsgrove Brook to Thames); Thames (Cookham to Egham); Thames (Egham to Teddington); Thames (Evenlode to Thame); Thames (Leach to Evenlode); THAMES LOWER; THAMES MIDDLE; THAMES UPPER; Thames Wallingford to Caversham; Windrush and tributaries (Little Rissington to Thames); Medway Catchment</p>					

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
Natura 2000 protected areas and SSSIs					
TH0005	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification	Adoption of the Maintenance Dredging Protocol, to ensure no deterioration and contribute to achieving good status/good ecological potential within Natura 2000 sites, and off-site where necessary to maintain the integrity of the European site network	Thames RBD	2012	Defra; Environment Agency; Natural England; Ports and Harbours Authorities
TH0044	Sediments (as a direct pollutant)	Contribute to achievement of favourable condition on River Kennet SSSI by implementing appropriate dredging programme	Kennet and Pang Catchment	2012	British Waterways

## C.12 Urban and transport

Around 12 million people live in the Thames River Basin District. London is clearly the main urban centre, but other significant areas include Luton, Watford, Slough, Guildford, Reading, Oxford and Swindon. With this large population and because London tends to act as a hub for many national transport links, there is a significant road, rail and air infrastructure within the district.

Current and historical land-use around the major towns and cities in the district gives rise to pollution pressures. Runoff and drainage from urban areas and transport infrastructure can contain a range of contaminants including sewage, metals, sediment and other substances that wash directly into rivers or enter via the sewerage network. Extreme runoff events are likely to become more frequent as climate change continues. The legacy of land contamination in some former industrial areas has led to pollution of groundwater resources and some of rivers. Predicted housing growth in and around several towns and cities in the district will also increase pressure on the water environment unless the potential impacts are well managed.

Encouraging the sustainable use and management of water resources and a move to more sustainable drainage systems will help reduce the impacts associated with abstraction and urban runoff, with benefits for all water users. Sustainable and integrated drainage systems also offer potential benefits for managing the risk of flooding in urban areas.

Table C12: **Actions for the urban and transport sector**

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0022	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Comply with Environment Agency Notice (WRA S86 and S161, Groundwater Regulations, contaminated land legislation). Make use of site specific notices to remove pollution risk to groundwater	Thames RBD	Implemented	Environment Agency; Land managers and owners

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0012	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Appropriate policies in Local Development Plans to ensure protection of groundwater.	Mid-Chilterns Chalk	2010	Local Authorities
TH0028	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Comply with new EC Sustainable Use of Pesticides Directive to control use of Plant Protection Products	Thames RBD	2012	Land managers and owners
TH0153	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow Pesticides Code of Practice - comply with published advice for operators on control of plant protection products	Thames RBD	Implemented	Industry leads
TH0158	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow the SUDS (sustainable drainage systems) Interim Code of Practice - comply with published advice for operators	Thames RBD	Implemented	Industry leads
TH0176	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Groundwater protection advice to Veterinary Medicines Directorate products approvals process	Thames RBD	Implemented	Industry leads
TH0189	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Implementation of Network Rail Pesticide protocol	Thames RBD	Implemented	Environment Agency; Industry leads



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0348	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Pollution prevention campaign on urban and agricultural use of pesticides. Although atrazine has been withdrawn from use, its presence in groundwater demonstrates a pathway and that other pesticides may also cause pollution	Reigate Lower Greensand	2011	Environment Agency
TH0030	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Comply with WRA consent conditions	Thames RBD	Implemented	Environment Agency
TH0104	Microbiology; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Environment Agency and Highways Agency Memorandum of Understanding (MoU) and associated initiatives	Thames RBD	Implemented	Highways Agency
TH0388	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Registrations (in conjunction with Standard Rules) - Implement new regulatory approach (via Environmental Permitting Regulations) arising from implementation of new Groundwater Directive (2006/116/EC)	Thames RBD	2012	Water companies; Land managers and owners; Environment Agency; Industry leads

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0332	Nutrients; Microbiology; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	National Fire Service Protocol to minimise the risk of pollution during fire emergencies	Thames RBD	Implemented	National Fire Service
TH0358	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Promote good practice to avoid pollution from construction sites.	Loose Stream	2010	Environment Agency
TH0364	Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Direct biological pressures; Abstraction and other artificial flow pressures; Nutrients; Sediments (as a direct pollutant)	Promote sustainable design and construction techniques for water efficiency, water quality and drainage / flooding to the planning and development sector through the use of best practice guidance and promotion of the Code for Sustainable Homes and BREAM standards.	Thames RBD	2012	Environment Agency; Industry leads; Local Authorities

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0443	Physical modification	WFD mitigation measures manual for flood and coastal erosion risk management and land drainage activities. This manual will set out best practice options for measures to mitigate against the impacts of such activities upon ecology. This will be used to ensure that new and existing schemes and management activities will take into consideration WFD requirements and will results in minimal ecological damage.	Thames RBD	2010	Environment Agency
TH0170	Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve Pesticide use through the Amenity Forum	Thames RBD	Implemented	Amenity Forum
TH0365	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Abstraction and other artificial flow pressures; Direct biological pressures; Organic pollutants; Sediments (as a direct pollutant); Nutrients	Promote sustainable water management best practice through pre-application discussions with developers (as set out in the Environment Agency's publication 'A guide for developers') and establish good practice for site clearance prior to development.	Thames RBD	Implemented	Business and Industry; Environment Agency; Local Authorities

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0415	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients; Microbiology; Sediments (as a direct pollutant)	Targeted management of surface water systems to reduce contaminants in discharges, including consideration of gully cleaning, trapping fats, oils and grease.	Thames RBD	Implemented	Environment Agency; Local Authorities; Water companies
TH0031	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Conduct audit of Motorways and highways pollution control valves and communicate results to potential users such as Fire Service	Thames RBD	2012	Local Authorities; Highways Agency
TH0094	Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants	Encourage sustainable and efficient use of salt/grit used on Motorways, and highways	Thames RBD	2012	Highways Agency; Local Authorities
<b>Investigations</b>					
TH0401	Ammonia	Specific local investigation into sources of ammonia	Kemble Forest Marble; South Essex Thurrock Chalk	2012	Environment Agency
TH0168	Diuron	Further monitoring to confirm risk of failure of WFD Article 7	Thames (Egham to Teddington)	2010	Water companies; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
DrWPA0025	Diuron	This substance has been banned/shortly to be withdrawn from use in the UK. No further measures should be required although surveillance monitoring will be done to confirm this.	Medway at Maidstone	2010	Central Government; Environment Agency
TH0421	Diuron	This substance has been banned/shortly to be withdrawn from use in the UK. No further measures should be required although surveillance monitoring will be done to confirm this.	Medway at Maidstone	2010	Central Government; Environment Agency
TH0160	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow up 1990s report using recent data and knowledge of groundwater-surface water inter-relationship, including use of groundwater modelling .	Mid-Chilterns Chalk	2010	Environment Agency
TH0178	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Highways Agency Programme to investigate soakaways	Thames RBD	Implemented	Highways Agency
TH0369	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Promote the targeted mapping of land drainage discharges (fields, highways, rural roads) to better assess their impact on water quality and adopt appropriate control measures.	Thames RBD	2012	Environment Agency; Environmental NGOs; Land managers and owners; Local Authorities; Highways Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0334	Phosphate	National R&D on fate and transport of phosphate in groundwater to determine impact on surface water, investigation and assessment. Apply findings locally and assess.	Alton Upper Greensand; Bicester-Otmoor Cornbrash	2012	Environment Agency
TH0309	Physical modification	Investigations into the ecological outcomes of measures to mitigate against effects of FCERM activities, improving the understanding of the cost/benefit and technical feasibility of such measures and developing understanding of the underlying processes, ecological responses and applicability. Will use case studies, but outcomes will have a national application.	Thames RBD	2010	Environment Agency
TH0390	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Research into locations of non-agricultural pesticide problem areas and their solutions, such as pesticide used on highways.	Thames RBD	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0186	Salinity; Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Implement programmes of research and local investigations to improve evidence base to enable effective targeting of actions	Thames RBD	2012	Environment Agency
TH0019	Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Carry out investigative monitoring and field work into the origins, causes and solutions to sedimentation (Non-tidal waters).	Thames RBD	2012	Environment Agency; Water companies; Natural England; Local Authorities

## C.13 Water industry

There are two main water and sewerage service companies operating in the Thames RBD – Thames Water and Southern Water. A few peripheral parts of the district are served by Anglian Water, Severn Trent Water and Wessex Water. In addition, four water-only companies also operate in the District: Sutton and East Surrey Water, Veolia Water Three Valleys, South East Water and Essex and Suffolk Water. The size of water companies operating in the Thames RBD varies between Thames Water who serve 13.6 million customers for wastewater through to Sutton and East Surrey Water who supply water to 648,000 customers. The challenges faced by companies also vary and these are reflected in their charges they make to customers. Southern Water is cheapest for water supply with an average 2008/09 bill of £126 per household and Wessex Water most expensive at £196. By contrast, Southern Water customers pay the most for sewage treatment, £233 per household, which is about 34% above the industry average.

Protecting waters means that sewage effluents must be treated to a very high standard and abstractions limited to ensure acceptable minimum flows remain in rivers and estuaries, including those that are groundwater fed. Although the water industry is regulated consistently across the country as a whole, the challenges companies face vary significantly across the District in a number of ways. For example, one important difference is the source of the drinking water supplied by the industry. 59% across the district is abstracted from rivers, almost exclusively from the Thames itself, while 41% is taken directly from groundwater, mainly the chalk aquifer around and below London. The River Thames, with its tributaries, is the only major river in the District, and its flow consists of a base groundwater contribution supplemented by surface drainage. The groundwater contribution should mean that its flow is more reliable and less variable than a river supplied by surface drainage only. However, abstractions from the river modify its flow greatly, and some reaches of it were reported to be stagnant in the drought of 1976. In managing the use of resources across the District, the Environment Agency must ensure that river flow and groundwater regimes can also support the many high value river and wetland ecosystems such as the River Lambourn, the Kennet and Lambourn Floodplain, Lee Valley and the Thames and Medway Estuaries and their marshes.

About 63% of the demand for water in the District is from Greater London. Much of the wastewater here is discharged to the tidal Thames, reducing the opportunity to recycle it. However water abstracted in the Upper Thames is generally returned to the river, to be abstracted again further downstream. High population density across much of the District, combined with low rainfall, means that less water is available per person than in many hotter countries. Nearly all of the District is in an area agreed by Defra of Serious Water Stress and all the water companies have begun working together to optimise the planning process to find the best way to share precious water resources across the region. Population growth and the effects of climate change have led to more pressure on rivers and sewage effluent treatment has needed to improve to meet environmental standards. This has required a great deal of investment by water companies, which is reviewed every 5 years during Ofwat's periodic review process.



Table C13: **Actions for the water industry**

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0123	Abstraction	Extension of abstraction control to include previously exempt uses as new legislation introduced	Thames RBD	2012	Environment Agency
TH0067	Abstraction and other artificial flow pressures	Coordinated education and awareness on water efficiency and re-use to promote value of water	Thames RBD	Implemented	Water companies
TH0093	Abstraction and other artificial flow pressures	Encourage more water companies to achieve universal water metering more rapidly and to implement variable tariffs.	Thames RBD	2012	Environment Agency
TH0188	Abstraction and other artificial flow pressures	Implementation of mitigation scheme to reduce risk to HD site from Berkshire Groundwater Scheme: Kennet & Lambourn Floodplain cSAC	Berkshire Downs Chalk; Kennet and Pang Catchment	2015	Environment Agency; Thames Water
TH0379	Abstraction and other artificial flow pressures	Reduction of demand through installation of household meters on change of occupier	Thames RBD	Implemented	Water companies
TH0382	Abstraction and other artificial flow pressures	Reduction of demand through promotion of free household meters	Thames RBD	Implemented	Water companies
TH0383	Abstraction and other artificial flow pressures	Reduction of leakage through active leakage control and customer supply pipe repair policies	Thames RBD	Implemented	Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0384	Abstraction and other artificial flow pressures	Reduction of leakage through increased rate of replacement of old or damaged pipes	Thames RBD	Implemented	Water companies
TH0425	Abstraction and other artificial flow pressures	Undertake targeted education campaigns to change the behaviour of the water consumer.	Thames RBD	2012	Abstractors; Developers; Environment Agency; Local Authorities; Water companies
TH0451	Abstraction and other artificial flow pressures	Work with the water companies in the South East to encourage them to share existing and future resources including consideration of transfers and interconnectivity of supply systems.	Thames RBD	Implemented	Environment Agency
DrWPA0118	Carbetamide	Address issue as priority action within this VI Pilot Catchment. Consider site as candidate Water Protection Zone	Sor Brook (Broughton to Adderbury)	2010	Pesticides Voluntary Initiative
DrWPA0124	Carbetamide	Address issue as priority action within these VI Pilot Catchments	Salmons Brook; Lee Navigation (Hertford and Ware); Lee (from Woolens Brook down to Tottenham Locks); Thames (Egham to Teddington)	2010	Environment Agency; Water companies
THD001	Chlortoluron	Re-direct existing CSF resource to address issue	Bewl Water	2010	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0022	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Comply with Environment Agency Notice (WRA S86 and S161, Groundwater Regulations, contaminated land legislation). Make use of site specific notices to remove pollution risk to groundwater	Thames RBD	Implemented	Environment Agency; Land managers and owners
TH0027	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Comply with Local Authority Contaminated Land Remediation Notices - Make use of site specific notices to remove pollution risk to groundwater	Thames RBD	Implemented	Local Authorities; Land managers and owners; Industry leads
TH0021	Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances & Specific Pollutants	Comply with discharge consent conditions	Thames RBD	Implemented	Water companies
DrWPA0094	MCPA	Address issue as priority action within this VI Pilot Catchment	Thames (Egham to Teddington)	2010	Pesticides Voluntary Initiative
DrWPA0018	Metaldehyde	Proactive implementation of Metaldehyde Stewardship Group 'Get Pelletwise' measures. Water industry scheme to address diffuse pollution in the catchment	Bough Beech Reservoir	2010	Metaldehyde Stewardship Group

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
DrWPA0084	Metaldehyde	Develop detailed 5-year Catchment Action Plan for Safeguard Zone. Proactive implementation of Metaldehyde Stewardship Group 'Get Pelletwise' measures	Lee Navigation (Hertford and Ware); Lee Navigation Subsidiary A; Thames (Cookham to Egham); Lee (from Tottenham Locks to the Tideway); Lee (from Woolens Brook down to Tottenham Locks); Salmons Brook; Kennet and Foudry Brook and Clayhill Brook in Reading; Thames (Egham to Teddington)	2010	Metaldehyde Stewardship Group
DrWPA0092	Metaldehyde	Develop detailed 5-year Catchment Action Plan for Safeguard Zone. Water industry catchment scheme to address diffuse pollution in the catchment. Consider site as candidate Water Protection Zone. Proactive implementation of Metaldehyde Stewardship Group 'Get Pelletwise' measures	Cherwell (Cropredy to Nell Bridge); Sor Brook (Broughton to Adderbury)	2010	Metaldehyde Stewardship Group

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0414	Microbiology; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Targeted education and awareness of the impact that small discharges to ground and surface water have on water quality of the receiving waters, with a view to advising residents of the need to connect to the mains sewer system	Thames RBD	2010	Environment Agency
TH0102	Nitrate	Ensure sewage sludge is applied to land in accordance with the Sludge Regulations	Thames RBD	Implemented	Water companies; Environment Agency
TH0191	Nitrate	Implementation of site specific notices to remove nitrate pollution risk to groundwater. (WRA S86 and S161, Groundwater Regulations, contaminated land legislation)	Thames RBD	Implemented	Local Authorities
TH0375	Nitrate	Provision of first time rural sewerage schemes	Thames RBD	Implemented	Water companies
TH0272	Nitrate; Hazardous substances and non-hazardous pollutants; Phosphate; Priority Substances & Specific Pollutants	Investigation of Groundwater Dependent Terrestrial Ecosystems (GWDTEs) to assess if they have been significantly damaged as a result of groundwater pollution	Thames RBD	Implemented	Environment Agency
TH0182	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Implement Groundwater Protection: Policy & Practice - External education on groundwater pollution prevention	Thames RBD	Implemented	Environment Agency; Land managers and owners

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0385	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Re-engineer existing discharges to avoid direct discharges of pollutants to groundwater	Thames RBD	Implemented	Environment Agency; Water companies
TH0388	Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Registrations (in conjunction with Standard Rules) - Implement new regulatory approach (via Environmental Permitting Regulations) arising from implementation of new Groundwater Directive (2006/116/EC)	Thames RBD	2012	Water companies; Land managers and owners; Environment Agency; Industry leads
TH0202	Nutrients	Improvements to 1 water company asset in the Thame and South Chilterns catchment to reduce nutrient inputs. (PR09)	Thame	2012	Water companies
TH0208	Nutrients	Improvements to 2 water company assets in the Upper Lee catchment to reduce nutrient inputs. (PR09)	Upper Lee Catchment	2012	Water companies
TH0195	Organic pollutants	Improvement in Brentwood sewage treatment works effluent quality through the reduction of ammonia concentrations (AMP4 scheme)	Roding, Beam & Ingrebourne Catchment	2010	Water companies
TH0196	Organic pollutants	Improvement in effluent quality at 1 water company asset in the Colne catchment to achieve Freshwater Fish Directive objectives. (PR09)	Colne Catchment	2015	Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0199	Organic pollutants	Improvements to 1 water company asset in the Loddon catchment to prevent deterioration in river quality from organic pollutants. (PR09)	Loddon Catchment	2015	Water companies
TH0200	Organic pollutants	Improvements to 1 water company asset in the Mole catchment to prevent deterioration in river quality from organic pollutants. (PR09)	Mole Catchment	2015	Water companies
TH0201	Organic pollutants	Improvements to 1 water company asset in the Roding, Beam and Ingrebourne catchment to achieve WFD ammonia & oxygen objectives. (PR09)	Roding, Beam & Ingrebourne Catchment	2012	Water companies
TH0203	Organic pollutants	Improvements to 1 water company asset in the Upper Lee catchment to prevent deterioration in river quality from organic pollutants. (PR09)	Upper Lee Catchment	2015	Water companies
TH0204	Organic pollutants	Improvements to 1 water company asset in the Wey catchment to prevent deterioration in river quality from organic pollutants. (PR09)	Wey Catchment	2015	Water companies
TH0213	Organic pollutants	Improvements to the London sewerage network to reduce the impact of storm sewage on water quality in the Thames Tideway - Lee Tunnel.	London Catchment	2014	Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0214	Organic pollutants	Improvements to the London sewerage network to reduce the impact of storm sewage on water quality in the Thames Tideway - Thames Tunnel.	London Catchment		Water companies
TH0215	Organic pollutants	Improvements to water company assets at 1 location in the Cherwell catchment to achieve WFD ammonia & dissolved oxygen objectives. (PR09)	Cherwell Catchment	2012	Water companies
TH0217	Organic pollutants	Improvements to water company assets at 6 locations in the Kennet and Pang catchment to prevent deterioration in river quality from organic pollutants. (PR09)	Kennet and Pang Catchment	2015	Water companies
TH0218	Organic pollutants	Improvements to water company assets at 5 locations in the Thame and South Chilterns catchment to prevent deterioration in river quality from organic pollutants. (PR09)	Thame	2015	Water companies
TH0219	Organic pollutants	Improvements to water company assets at 5 locations to enhance water quality in the Thames Estuary through the reduction of organic pollutants. (PR09)	Thames (tidal) Catchment	2015	Water companies



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0220	Organic pollutants	Improvements to water company assets at 6 locations in the Cotswolds catchment to prevent deterioration in river quality from organic pollutants. (PR09)	Cotswolds Catchment	2015	Water companies
TH0221	Organic pollutants	Improvements to water company assets at 7 locations in the Cherwell catchment to prevent deterioration in river quality from organic pollutants. (PR09)	Cherwell Catchment	2015	Water companies
TH0426	Organic pollutants	Upgrade of 1 sewage pumping station in South Essex to reduce impact from organic pollutants	South Essex Catchment	2012	Anglian Water Services
TH0427	Organic pollutants	Upgrade of storm tanks at sewage treatment works (AMP4 scheme) - Epping (Fiddlers Hamlet) STW	Roding, Beam & Ingrebourne Catchment	2010	Water companies
TH0428	Organic pollutants	Upgrade of unsatisfactory intermittent discharge from sewer network (Amp4 scheme) - Eastern Avenue, Wanstead	Roding, Beam & Ingrebourne Catchment	2010	Water companies
TH0429	Organic pollutants	Upgrade of unsatisfactory intermittent discharge from sewer network (Amp4 scheme) - Elmcroft Avenue, Wanstead	Roding, Beam & Ingrebourne Catchment	2010	Water companies
TH0430	Organic pollutants	Upgrade of unsatisfactory intermittent discharge from sewer network (AMP4 scheme) - Ferguson Avenue, Gidea Park	Roding, Beam & Ingrebourne Catchment	2010	Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0431	Organic pollutants	Upgrade of unsatisfactory intermittent discharge from sewer network (AMP4 scheme) - Longbridge Road CSO	Roding, Beam & Ingrebourne Catchment	2010	Water companies
TH0432	Organic pollutants	Upgrade of unsatisfactory intermittent discharge from sewer network (AMP4 scheme) - Prospect Rd CSO, Woodford	Roding, Beam & Ingrebourne Catchment	2010	Water companies
TH0433	Organic pollutants	Upgrade of unsatisfactory intermittent discharge from sewer network (AMP4 scheme) - Renwick Road, Barking	Roding, Beam & Ingrebourne Catchment	2010	Water companies
TH0434	Organic pollutants	Upgrade of unsatisfactory intermittent discharge from sewer network (AMP4 scheme) - Romford Road, Ilford	Roding, Beam & Ingrebourne Catchment	2010	Water companies
TH0435	Organic pollutants	Upgrade of unsatisfactory intermittent discharge from sewer network (AMP4 scheme) - South Park, Ilford	Roding, Beam & Ingrebourne Catchment	2010	Water companies
TH0170	Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve Pesticide use through the Amenity Forum	Thames RBD	Implemented	Amenity Forum

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0205	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Organic pollutants	Improvements to 1 water company sewage treatment works and 1 unsatisfactory intermittent discharge in the Lower Lee (London) catchment to deliver water quality benefits to the Lower Lee.	London Catchment	2017	Water companies
TH0436	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Organic pollutants	Upgrade of unsatisfactory intermittent discharges from the combined sewer network to improve water quality in the Lower Lee. It will include some investigation to understand the extent of the problem. Sites on the following rivers are included: Hennikers Ditch. Waterworks River, River Lee, Stonebridge, Moselle, Dagenham, Pymmes, and Salmon Brooks.	London (Lower Lee)	2015	Lower Lee Water Quality Board; Thames Water
TH0415	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients; Microbiology; Sediments (as a direct pollutant)	Targeted management of surface water systems to reduce contaminants in discharges, including consideration of gully cleaning, trapping fats, oils and grease.	Thames RBD	Implemented	Environment Agency; Local Authorities; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0361	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Nutrients; Organic pollutants	Promote land management best practice at commercial, agricultural and amenity sites, including golf courses, playing fields, parks and railway lines	Thames RBD	2012	Environment Agency; Wildlife Trusts; Water companies; Network Rail; Land managers and owners; Local Authorities; Natural England
TH0206	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Improvements to 1 water company sewage treatment works to protect groundwater quality. (PR09)	Kemble Forest Marble; Cotswolds Catchment	2015	Water companies
TH0207	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Improvements to 1 water company sewage treatment works to protect groundwater quality. (PR09)	Basingstoke Chalk; Loddon Catchment	2013	Water companies
TH0209	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Improvements to 2 water company sewage treatment works to protect groundwater quality. (PR09)	Mid-Chilterns Chalk; Colne Catchment	2015	Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0210	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Improvements to 2 water company sewage treatment works to protect groundwater quality. (PR09)	Upper Lee Chalk; Upper Lee Catchment	2015	Water companies
TH0211	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Improvements to 3 water company sewage treatment works to protect groundwater quality. (PR09)	Berkshire Downs Chalk; Kennet and Pang Catchment	2015	Water companies
TH0212	Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Improvements to 3 water company sewage treatment works to protect groundwater quality. (PR09)	Berkshire Downs Chalk; Maidenhead Chalk; South-West Chilterns Chalk; Thame	2014	Water companies
TH0018	Saline intrusion	CAMS – Implement abstraction licensing controls to minimise and manage risks from saline intrusion	Thames RBD	Implemented	Environment Agency; Water companies
DrWPA0103	Simazine	Address issue as priority action within this VI Pilot Catchment	Thames (Egham to Teddington)	2010	Pesticides Voluntary Initiative

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
Investigations					
TH0011	Abstraction and other artificial flow pressures	Appraise new public water supply resource options including investigating role of different generic option types (e.g. desalination, effluent reuse, transfers and reservoirs) in context of likely regional supply-demand need.	Thames RBD	Implemented	Environment Agency; Water companies
TH0267	Abstraction and other artificial flow pressures	Investigation at local nature conservation site perceived to be adversely affected by abstraction : Farnham Bourne	Godalming Lower Greensand; North Wey (Alton to Tilford)	2012	Environment Agency; South East Water
TH0268	Abstraction and other artificial flow pressures	Investigation at local nature conservation site perceived to be adversely affected by abstraction : Maidenhead Ditch	Cut (Binfield to River Thames confluence) and Maidenhead Ditch; Maidenhead Chalk	2012	South East Water; Environment Agency
TH0269	Abstraction and other artificial flow pressures	Investigation at local nature conservation site perceived to be adversely affected by abstraction : Upper Wandle	Epsom North Downs Chalk; Wandle (Croydon to Wandsworth) and the River Graveney	2012	Thames Water; Environment Agency
TH0283	Abstraction and other artificial flow pressures	Investigation to assess whether abstraction is having an adverse impact on the ecology, recreation and navigation: Lower Thames	Thames (Egham to Teddington)	2012	Thames Water; Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0284	Abstraction and other artificial flow pressures	Investigation to determine cost effective action to manage abstraction to support good ecological status: Leybourne Stream	Kent Greensand Western; Leybourne Stream	2012	Environment Agency; South East Water
TH0286	Abstraction and other artificial flow pressures	Investigation to determine the impact of abstraction in limiting achievement of good ecological potential: Wandle	Epsom North Downs Chalk; Wandle (Carshalton Branch at Carshalton)	2012	Environment Agency; Sutton & East Surrey Water
TH0287	Abstraction and other artificial flow pressures	Investigation to determine the impact of abstraction in limiting achievement of good ecological status: Ver	Mid-Chilterns Chalk; Ver	2012	Environment Agency; Three Valleys Water
TH0288	Abstraction and other artificial flow pressures	Investigation to determine the impact of abstraction in limiting achievement of good ecological status: Wey Catchment; Royal Brook	Godalming Lower Greensand; Royal Brook	2012	Thames Water; Environment Agency
TH0350	Abstraction and other artificial flow pressures	Programme of investigation of ecological impacts of managed flows in HMWBs with Water supply use	Thames RBD	2012	Environment Agency; Water companies
TH0401	Ammonia	Specific local investigation into sources of ammonia	Kemble Forest Marble; South Essex Thurrock Chalk	2012	Environment Agency

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
THD002	Carbendazim; Chlortoluron; Dalapon; Linuron; Propyzamide; Trichloroacetic Acid	Further monitoring/investigations to confirm risk of failure of WFD Article 7	Medway at Maidstone	2010	Environment Agency
DrWPA0022	Carbendazim; Dalapon; Linuron; Trichloroacetic Acid	Further monitoring to confirm risk of failure of WFD Article 7	Medway at Maidstone	2010	Environment Agency; Water companies
DrWPA0106	Carbetamide	Further monitoring to confirm risk of failure of WFD Article 7	Thames (Egham to Teddington); Cherwell (Cropredy to Nell Bridge); Lee Navigation Subsidiary A	2010	Environment Agency; Water companies
DrWPA0099	Chlortoluron	Further monitoring to confirm risk of failure of WFD Article 7	Medway at Maidstone; Thames (Egham to Teddington); Lee Navigation Subsidiary A; Lee (from Woolens Brook down to Tottenham Locks); Lee Navigation (Hertford and Ware)	2010	Environment Agency; Water companies
DrWPA0115	Chlortoluron; Nitrate	Further monitoring to confirm risk of failure of WFD Article 7. Consider site as candidate Water Protection Zone	Sor Brook (Broughton to Adderbury)	2010	Environment Agency; Water companies



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0273	Cryptosporidium; Metaldehyde; Lead; Various; Turbidity; Nitrate	Investigation of catchment sources	Thames RBD	2012	Thames Water; Water companies
TH0277	Faecal indicator organisms	Investigation of Continuous Sewage Discharges	North Kent Catchment	2012	Southern Water; Water companies
TH0280	Faecal indicator organisms	Investigation of Intermittent Sewage Discharges	North Kent Catchment	2013	Southern Water; Water companies
DrWPA0096	Fluroxypyr; Bentazone; 2,4-D; Isoproturon; Metazachlor; Terbutryn	Further monitoring to confirm risk of failure of WFD Article 7	Thames (Egham to Teddington)	2010	Environment Agency; Water companies
TH0160	Hazardous substances and non-hazardous pollutants; Priority Substances & Specific Pollutants	Follow up 1990s report using recent data and knowledge of groundwater-surface water inter-relationship, including use of groundwater modelling .	Mid-Chilterns Chalk	2010	Environment Agency
THD006	Isoproturon; Diuron; Simazine	These substances have been banned/shortly to be withdrawn from use in the UK. No further measures should be required although surveillance monitoring will be done to confirm this.	Medway at Maidstone	2010	Central Government; Environment Agency
DrWPA0017	Mecoprop	Further monitoring to confirm risk of failure of WFD Article 7	Bough Beech Reservoir; Medway at Maidstone; Thames (Egham to Teddington)	2010	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
DrWPA0107	Mecoprop	Further monitoring to confirm risk of failure of WFD Article 7. Consider site as candidate Water Protection Zone	Cherwell (Cropredy to Nell Bridge); Sor Brook (Broughton to Adderbury)	2010	Environment Agency; Water companies
TH1002	Metaldehyde	Further monitoring/investigations to confirm risk of failure of WFD Article 7	Grom; Medway at Maidstone; Medway at Weir Wood; Mid Medway from Eden Confluence to Yalding; Mid Medway from Hartfield to Eden Confluence; Somerhill Stream; Teise at Bewl; Bewl Water; Thames (Cookham to Egham); Bough Beech Reservoir	2010	Environment Agency; Water companies
TH0223	Microbiology	Improvements to water company assets at 9 locations in the North Kent Catchment, to deliver benefits against the pressures identified or investigate the need for further investment.	Medway Catchment	2014	Southern Water
TH0164	Nitrate; Faecal indicator organisms	Further investigation - Mains sewer integrity survey	Kent Greensand Middle	2015	Environment Agency; Southern Water

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0222	Nutrients	Improvements to water company assets at 8 locations in the Medway Catchment, to deliver benefits against the pressures identified or investigate the need for further investment.	Medway Catchment	2010	Southern Water
TH0247	Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigate improvements to sewage treatment works that could be integrated into the 2009 periodic review (PR09), or put into PR14.	Thames RBD	2012	Environment Agency; Water companies
TH0275	Organic pollutants	Investigation of continuous and intermittent sewage discharges	Grom	2012	Southern Water; Water companies
TH0216	Organic pollutants; Nutrients	Improvements to water company assets at 18 locations in the Medway Catchment, to deliver benefits against the pressures identified or investigate the need for further investment.	Medway Catchment	2014	Southern Water
TH0334	Phosphate	National R&D on fate and transport of phosphorus in groundwater to determine impact on surface water, investigation and assessment. Apply findings locally and assess.	Alton Upper Greensand; Bicester-Otmoor Cornbrash	2012	Environment Agency
TH0376	Phosphate	R&D on fate and transport of phosphate in groundwater to determine impact on surface water	Thames RBD	2012	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0015	Physical modification	Assessment of abstraction points, hydropower proposals, pumping stations for impacts on eel populations, and ensure appropriate screening in place.	Thames RBD	2012	Water companies; Environment Agency
TH0252	Physical modification	Investigate the need to screen intakes and discharges to prevent loss or damage to fish populations. Ensure screening on priority sites.	Thames RBD	2012	Business and Industry; Fisheries and Angling Interests; Land managers and owners; Environment Agency; Water companies; trout farms; Angling Trusts
TH0285	Pressures on groundwater dependent ecosystems	Investigation to determine cost effective action to manage abstraction to support good groundwater quantitative status	Basingstoke Chalk	2011	Environment Agency
TH0292	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 1 water company asset in the Cherwell catchment. It forms part of a national investigation by the water companies. (PR09)	Cherwell Catchment	2011	Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0293	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 1 water company asset in the Colne catchment. It forms part of a national investigation by the water companies. (PR09)	Colne Catchment	2011	Water companies
TH0294	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 2 water company asset in the Upper Lee catchment. It forms part of a national investigation by the water companies. (PR09)	Upper Lee Catchment	2011	Water companies
TH0295	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 2 water company assets in the Cotswolds catchment. It forms part of a national investigation by the water companies. (PR09)	Cotswolds Catchment	2011	Water companies
TH0296	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 2 water company assets in the Loddon catchment. It forms part of a national investigation by the water companies. (PR09)	Loddon Catchment	2011	Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0297	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 2 water company assets in the Mole catchment. It forms part of a national investigation by the water companies. (PR09)	Mole Catchment	2011	Water companies
TH0298	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 2 water company assets in the Wey catchment. It forms part of a national investigation by the water companies. (PR09)	Wey Catchment	2011	Water companies
TH0299	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 3 water company asset in the Roding, Beam and (No Suggestions) catchment. It forms part of a national investigation by the water companies. (PR09)	Roding, Beam & Ingrebourne Catchment	2011	Water companies
TH0300	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 3 water company assets in the London catchment. It forms part of a national investigation by the water companies. (PR09)	London Catchment	2011	Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0301	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 4 water company asset in the Maidenhead to Sunbury catchment. It forms part of a national investigation by the water companies. (PR09)	Thames (Maidenhead to Sunbury)	2011	Water companies
TH0302	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 5 water company assets in the Kennet and Pang catchment. It forms part of a national investigation by the water companies. (PR09)	Kennet and Pang Catchment	2011	Water companies
TH0303	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 5 water company assets in the Vale of White Horse catchment. It forms part of a national investigation by the water companies. (PR09)	Vale of White Horse Catchment	2011	Water companies
TH0304	Priority Hazardous Substances, Priority Substances and Specific Pollutants	Investigation to quantify the risk from chemicals at 9 water company asset in the Thame and South Chilterns catchment. It forms part of a national investigation by the water companies. (PR09)	Thame and South Chilterns Catchment	2011	Water companies
DrWPA0019	Propyzamide	Further monitoring to confirm risk of failure of WFD Article 7	Bough Beech Reservoir; Medway at Maidstone; Lee Navigation Subsidiary A	2010	Environment Agency; Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
DrWPA0113	Propyzamide; Chlortoluron; Nitrate	Further monitoring to confirm risk of failure of WFD Article 7. Consider site as candidate Water Protection Zone	Cherwell (Cropredy to Nell Bridge)	2010	Environment Agency; Water companies
TH0259	Saline intrusion	Investigation and Assessment	Greenwich Tertiaries	2010	Environment Agency
TH0291	Saline intrusion; Abstraction; Pressures on groundwater (GW) balance	Investigation to improve confidence in groundwater quantitative status result	Basingstoke Chalk; Bromley Tertiaries; Burford Jurassic; Chiltern Chalk Scarp; Effingham Tertiaries; Greenwich Tertiaries; North Kent Medway Chalk; North Kent Tertiaries; North Mymms Tertiaries; Radlett Tertiaries; South Essex Thurrock Chalk; Thatcham Tertiaries; Twyford Tertiaries; Upper Lee Chalk; West Kent Tertiaries	2010	Environment Agency



ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0306	Saline intrusion; Pressures on groundwater dependent ecosystems; Abstraction; Pressures on groundwater (GW) balance	Investigation to verify risk of deterioration in groundwater quantitative status	Burford Jurassic; Chiltern Chalk Scarp; Lower Thames Gravels; North Kent Swale Chalk; Old Basing Tertiaries; Upper Lee Chalk	2011	Environment Agency
TH0186	Salinity; Abstraction and other artificial flow pressures; Acidification; Direct biological pressures; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Implement programmes of research and local investigations to improve evidence base to enable effective targeting of actions	Thames RBD	2012	Environment Agency
TH0019	Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Carry out investigative monitoring and field work into the origins, causes and solutions to sedimentation (Non-tidal waters).	Thames RBD	2012	Environment Agency; Water companies; Natural England; Local Authorities

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
Natura 2000 protected areas and SSSIs					
TH0329	Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: Kennet & Lambourn Floodplain cSAC	Berkshire Downs Chalk; Middle Kennet (Marlborough to Newbury)	2015	Environment Agency; Thames Water
TH0053	Abstraction and other artificial flow pressures; Nutrients	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas by revoking or amending abstraction licences (See Annex D)	Thames RBD	2012	Environment Agency
TH0058	Abstraction and other artificial flow pressures; Nutrients	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Implementing AMP Schemes (See Annex D)	Thames RBD	2012	Water companies
TH0042	Nutrients	Contribute to achievement of favourable condition on River Kennet SSSI and River Beult SSSI by implementing AMP schemes	Medway; Kennet and Pang Catchment	2010	Southern Water; Thames Water
TH0198	Nutrients	Improvements to 1 water company asset in the Kennet and Pang catchment to reduce nutrient inputs to the River Kennet SSSI. (PR09)	Kennet and Pang Catchment	2015	Water companies

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0064	Nutrients; Direct biological pressures; Physical modification; Abstraction and other artificial flow pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through SSSI Management Agreement (See Annex D)	Thames RBD	2012	Natural England
TH0054	Nutrients; Sediments (as a direct pollutant)	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas by revoking or amending Discharge/PPC Consents (See Annex D)	Thames RBD	2012	Environment Agency
<b>Investigations - Natura 2000 protected areas and SSSIs</b>					
TH0270	Abstraction and other artificial flow pressures	Investigation at Site of Special Scientific Interest perceived to be adversely affected by abstraction : Mid Colne Lakes (including West Hyde stream)	Colne and GUC (from confluence with Chess to Ash); Mid Colne Valley; Mid-Chilterns Chalk	2012	Three Valleys Water; Environment Agency
TH0289	Abstraction and other artificial flow pressures	Investigation to determine the impact of abstraction on a SSSI perceived to be adversely affected by abstraction: Reigate Heath / Wallace Brook	Reigate Lower Greensand	2012	Environment Agency; Sutton & East Surrey Water
TH0260	Abstraction and other artificial flow pressures	Investigation at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : Letcombe Brook	Letcombe Brook; Vale of White Horse Chalk	2012	Environment Agency; Thames Water

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0261	Abstraction and other artificial flow pressures	Investigation at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : Mid Colne - Gade confluence to Denham Green	Colne and GUC (from confluence with Chess to Ash); Mid-Chilterns Chalk	2012	Three Valleys Water; Environment Agency
TH0262	Abstraction and other artificial flow pressures	Investigation at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : Rib - Buntingford to Latchford	Rib (from confluence with Quin to Lee Navigation)	2012	Environment Agency; Three Valleys Water
TH0263	Abstraction and other artificial flow pressures	Investigation at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : River Wye	Wye (High Wycombe fire station to Thames)	2012	Environment Agency; Thames Water
TH0264	Abstraction and other artificial flow pressures	Investigation at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : Upper Colne - Broad Colney to Watford gauging station	Colne (upper stretch, Hatfield to confluence with Ver)	2012	Environment Agency; Three Valleys Water
TH0265	Abstraction and other artificial flow pressures	Investigation at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : Upper Colne - Colney Heath to Broad Colney	Colne (upper east arm including Mimshall Brook)	2012	Environment Agency; Three Valleys Water
TH0266	Abstraction and other artificial flow pressures	Investigation at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : Upper Colne - Watford gauging station to Gade confluence	Colne (from Confluence with Ver to Gade)	2012	Environment Agency; Three Valleys Water

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0337	Abstraction and other artificial flow pressures	Options appraisal for action at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : Letcombe Brook	Letcombe Brook; Vale of White Horse Chalk	2012	Environment Agency; Thames Water
TH0338	Abstraction and other artificial flow pressures	Options appraisal for action at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : River Cray	Upper Cray	2012	Environment Agency; Thames Water
TH0339	Abstraction and other artificial flow pressures	Options appraisal for action at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : River Lee at New Gauge	Lee Navigation (Hertford and Ware); Upper Lee Chalk	2012	Thames Water; Environment Agency
TH0340	Abstraction and other artificial flow pressures	Options appraisal for action at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : River Misbourne	Mid-Chilterns Chalk; Misbourne	2012	Environment Agency; Three Valleys Water
TH0341	Abstraction and other artificial flow pressures	Options appraisal for action at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : Ver - Bow Bridge to Verulam Park	Mid-Chilterns Chalk; Ver	2012	Environment Agency; Three Valleys Water
TH0342	Abstraction and other artificial flow pressures	Options appraisal for action at BAP (Biodiversity Action Plan) site perceived to be adversely affected by abstraction : Ver - source to Redbourne gauging station	Mid-Chilterns Chalk; Ver	2012	Environment Agency; Three Valleys Water

ID	Pressures	Description of the action			Lead organisation and partners
		What will happen	Where it will happen	Date	
TH0250	Nutrients	Investigate the impact of 1 water company asset in the Thame and South Chilterns catchment on a local SSSI. (PR09)	Thame	2011	Water companies
TH0282	Nutrients	Investigation of the impact on the Kennet SSSI of water company assets discharging via the Kennet and Avon Canal. (PR09)	Kennet and Pang Catchment	2012	Water companies