



Water for life and livelihoods

River Basin Management Plan
Anglian River Basin District

Annex C: Actions to deliver
objectives

Contents

C.1 Introduction	3
C. 2 Actions we can all take	8
C.3 All sectors	10
C.4 Agriculture and rural land management	13
C.5 Angling and conservation	34
C.6 Central government	50
C.7 Environment Agency	57
C.8 Industry, manufacturing and other business	70
C.9 Local and regional government	79
C.10 Mining and quarrying	83
C.11 Navigation	86
C.12 Urban and transport	95
C.13 Water industry	110

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 Anglian 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

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

Pressures	Description of the action			Lead organisation and partners
	What will happen	Where it will happen	Date	
<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>
Investigations				
<i>Sets out investigations measures that will be put in place</i>				
Natura 2000 protected areas and SSSIs				
<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,	Adopt-a-river 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	Eliminate invasive non-native species from gardens. They can have a negative effect on native species and the water environment. Please dispose of them responsibly.
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 low 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 recycling 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**

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
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).	Anglian RBD	2010	Environment Agency
Microbiology; Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants ; Radioactivity	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. Appropriate measures may include pollution prevention, England Catchment Sensitive Farming Initiative or Water Protection Zones.	Cam And Ely Ouse Chalk; North Norfolk Chalk	2010	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Microbiology; Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients	Influence Town and Country Planning Act authorisation process to help minimise risk of diffuse pollution from new developments (e.g. implement Sustainable Urban Drainage Systems and use of Water Resource Act Planning Guidance)	Anglian RBD	Implemented	Local Authorities
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	Anglian RBD	Implemented	Environment Agency
Acidification, Direct biological pressures, Microbiology, Nutrients, Organic Pollutants, Physical Modification, Priority Hazardous Substances, Priority Substances and Specific Pollutants, Sediments.	Where appropriate, subject to the Environment Agency making an appropriate case to the Secretary of State and/or Welsh Minister and carrying out a 12 week public consultation, 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 further designation of Water Protection Zones by 2012	Anglian RBD	2012	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Investigations				
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants ; Radioactivity; Microbiology	Designation of Safeguard Zones - investigation of source-pathway-target linkages to support development of a pollution action plan to identify specific measures	Cam And Ely Ouse Chalk; North Norfolk Chalk	2010	Environment Agency
Physical modification	Monitoring and investigation into mitigation measures techniques to establish the effectiveness of these measures and improve understanding of hydro-morphological interactions. Outcomes will have a national application.	Anglian RBD	2011	Environment Agency
Abstraction and other artificial flow pressures	Improve flow estimates for surface water bodies	Anglian RBD	2012	Environment Agency
Abstraction and other artificial flow pressures	Investigations at sites identified under the Restoring Sustainable Abstraction Programme (where funded)	Anglian RBD	2012	Environment Agency
Abstraction and other artificial flow pressures	Review and improve Environmental Flow Indicators	Anglian RBD	2012	Environment Agency
Natura 2000 and Site of Special Scientific Interest actions				
None				
Natura 2000 Investigations				
None				

C.4 Agriculture and rural land management

Introduction to the Sector:

The Anglian RBD is a predominantly rural catchment, which encompasses such varied landscapes, as the Fens and the Broads, and with more than three quarters of its land mass (approximately 1.5 million hectares) used for agriculture and horticulture it supports some of the best and largest tracts of agricultural land in the UK. It contains the third largest county on England, Lincolnshire, and is an area both rich in landscape and biodiversity as well as being high grade agricultural land which produces much of the food we eat today.

From the fertile fens - which cover 3,885 square kilometres of Lincolnshire, Cambridge and Norfolk - to the extensively grazed grasslands in the Waveney Valley, Anglian RBD has one of the most productive agricultural landscapes in the world. Best known for its cereal crops, more than a quarter of England's wheat and barley are produced here. But the Anglian River Basin District is also a major horticultural region, cultivating everything from peas and beans to potatoes and carrots, apples, strawberries, salad crops, flowers and shrubs. Farmers in Anglian region also harvest over half of the nation's sugar beet – mainly in Cambridgeshire, Lincolnshire, Norfolk and Suffolk. Britain's intensive pig and poultry farms are mostly located here – not surprising as so much of the grain on which they feed is grown here. The RBD has the second largest pig herd in England. The sheep flocks, beef and dairy herds may be small compared with other regions but they are important to the farming balance of the region and grazing livestock make a major contribution to the prized landscape. These are predominantly located in the west and east of the region – Lincolnshire/ Nottinghamshire border down into Northamptonshire and over in Norfolk and Suffolk.

Anglian region has a rich diversity of soils, with clayey or heavier soils dominating, and has over 50% of the country's grade 1 and 2 soils, hence the ability to sustain acres of high quality crops. Medium textured soils also feature throughout the region but particularly in the counties of Norfolk and Suffolk, with more sandy type soils located closer to the coastline. In Lincolnshire there are also shallow calcareous soils present. Due to the agricultural nature of the region it is important these soils are managed well to ensure they retain their quality and biodiversity, farm management and cultivation techniques must maintain good soil structure and reduce compaction to ensure good water infiltration and reduced pressures of flooding.

One of the most striking parts of the river basin district are the Lincolnshire and Cambridgeshire Fens. This artificial, man-made landscape has been forged from coastal and estuarine wetlands over many centuries. These marshes, which are at or below sea level, have been artificially drained and continue to be protected from floods by drainage banks and pumps. With the support of this drainage system, the Fens have become a major arable agricultural region in Britain for grains and vegetables.

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

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Nitrate	'Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment. Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Salary Brook, Ouse	2010	Natural England
Nitrate	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment	Pitsford Water	2010	Natural England
Nitrate	Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Nene	2010	Environment Agency
Nitrate	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment. Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Welland	2010	Natural England
Bentazone	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment. Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Willow Brook	2010	Natural England
Clopyralid	Re-direct existing Catchment Sensitive Farming (CSF) resource to address issue.	River Waveney; River Chelmer; River Blackwater; Stour (DS) Lamarsh	2010	Environment Agency
Physical modification	Contribute to achievement of favourable condition on River Nar Site of Special Scientific Interest by implementing water level management plans	North West Norfolk Catchment	2010	Natural England
Nitrate	Nitrates Action Programme in Nitrate Vulnerable Zones will help address high nitrate concentrations in drinking water abstractions	Nene	2010	Environment Agency
Hazardous substances	Agri-environment schemes/ Environmental Stewardship -	Anglian RBD	Implemented	Land

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	payments for best practice to limit nitrate input and control agric-chemicals (England only)			managers and owners
Ammonia; Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants; Phosphate	Catchment Sensitive Farming / Local urban partnerships / Local campaigns – educational	Cam And Ely Ouse Chalk	2010	Environment Agency
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	Anglian RBD	Implemented	Land managers and owners
Hazardous substances and non-hazardous pollutants; Priority Substances and 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	Anglian RBD	Implemented	Land managers and owners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Comply with new EC Sustainable Use of Pesticides Directive to control use of Plant Protection Products	Anglian RBD	2012	Land managers and owners
Nitrate	Development planning - planning liaison. Site specific groundwater pollution prevention advice and recommendations	Anglian RBD	Implemented	Local Authorities
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and	Development planning structure plans - influence location of development to protect groundwater	Anglian RBD	Implemented	Water companies; Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Specific Pollutants				
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Comply with Environment Agency Notice (WRA S86 and S161, Groundwater Regulations). Make use of site specific notices to remove pollution risk to groundwater	Anglian RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Enforcement of Groundwater Regulations to control agricultural chemicals through Cross Compliance	Anglian RBD	Implemented	Environment Agency
Nitrate	Enforcement of Sludge Regulations through Cross compliance	Anglian RBD	Implemented	Land managers and owners; Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Environmental Permitting – disposal of sheep dip and pesticides	Anglian RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Environmental Permitting – effluent discharges to ground	Anglian RBD	Implemented	Environment Agency
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	Anglian RBD	Implemented	Defra; Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	from farmland. (see map D6 in annex D)			
Sediments (as a direct pollutant); Microbiology; Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Establish and maintain a nationally funded advice-led partnership under the Catchment Sensitive Farming Programme to reduce diffuse water pollution from agriculture in at risk catchments.	Anglian RBD	2010	Environment Agency; Natural England
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	EU review of approvals for Plant Protection Products	Anglian RBD	Implemented	EU
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)	Broadland Rivers Catchment; Cam and Ely Ouse (including South Level) Catchment	2012	Environment Agency
Nitrate	Follow advice on controlling nitrate releases to land and water	Anglian RBD	Implemented	Land managers and owners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow Pesticides Code of Practice - comply with published advice for operators on control of plant protection products	Anglian RBD	Implemented	Land managers and owners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow Sheep Dip Statutory Code of Practice - comply with published advice for operators	Anglian RBD	Implemented	Land managers and owners

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Nitrate	Follow The Code of Good Agricultural Practice - comply with published advice for operators on nitrate control	Anglian RBD	Implemented	Land managers and owners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow The Code of Good Agricultural Practice - comply with published advice for operators on control of agri-chemicals	Anglian RBD	Implemented	Land managers and owners
Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve pesticide use through the Voluntary Initiative	Anglian RBD	Implemented	Voluntary Initiative Partnership
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Groundwater protection advice to Chemicals Regulation Directorate (formerly the Pesticides Safety Directorate) approvals process	Anglian RBD	Implemented	Central Government; Environment Agency
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants	Groundwater protection advice to Veterinary Medicines Directorate products approvals process	Anglian RBD	Implemented	Central Government
Nitrate	Implement DCLG (Department for Communities and Local Government) Planning Policy Guidance Statement 23 (PPS23) on controlling pollution of groundwater that may arise from development of land	Anglian RBD	Implemented	Local Authorities
Priority Substances and Specific Pollutants ; Nitrate; Hazardous	Implement Groundwater Protection: Policy & Practice - External education on GW pollution prevention	Anglian RBD	Implemented	Environment Agency; Land managers and

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
substances and non-hazardous pollutants				owners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow Pesticides Code of Practice - comply with published advice for operators on control of plant protection products	Anglian RBD	Implemented	Land managers and owners
Nitrate	Make use of site specific notices to remove nitrate pollution risk to groundwater. (WRA S86 and S161, Groundwater Regulations, contaminated land legislation)	Anglian RBD	Implemented	Local Authorities
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Local agricultural partnerships e.g. Linking Environment and Farming, non government organisations such as Rivers Trusts, Landcare, Farming & Wildlife Advisory Group – advice on use of agri-chemicals	Anglian RBD	Implemented	Land managers and owners
Nitrate	Local agricultural partnerships e.g. Linking Environment and Farming, non government organisations such as Rivers Trusts, Landcare, Farming & Wildlife Advisory Group - Advice to farmers on nitrate control	Anglian RBD	Implemented	Land managers and owners
Ammonia; Faecal indicator organisms; Hazardous substances and non-hazardous pollutants; Nitrate; Phosphate; Priority Substances and Specific Pollutants	Local urban partnerships / Local campaigns - educational	Welland Limestone Unit; Essex Gravels; Waveney And East Suffolk Chalk & Crag; North Norfolk Chalk; North West Norfolk Chalk; Broadland Rivers Chalk & Crag; Upper Bedford Ouse Chalk; Cam And Ely Ouse Chalk; Upper Bedford Ouse Principal Oolite 2; North	2010	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
		Essex Chalk; Felixstowe Peninsula Crag & Chalk; Welland Mid Jurassic Unit; Upper Bedford Ouse Oolite Principal 1; Upper Bedford Ouse Woburn Sands		
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Microbiology; Nutrients; Organic pollutants; Sediments (as a direct pollutant)	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	Anglian RBD	Implemented	Natural England. Defra
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	NetRegs (Environmental Guidance to Business) - External education on GW pollution legislation	Anglian RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	New EC Sustainable Use of Pesticides Directive to control use of Plant Protection Products	Anglian RBD	2012	Central Government
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Permitting – disposal of sheep dip and pesticides	Anglian RBD	Implemented	Environment Agency
Hazardous substances	Proactive targeted farmer education on control of agri-	Anglian RBD	Implemented	Environment

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	chemicals and nitrate			Agency
Microbiology; Nutrients; Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Progress delivery of Cross-compliance inspection and enforcement	Anglian RBD	2010	Rural Payments Agency; Environment Agency; Defra
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients; Sediments (as a direct pollutant); Microbiology	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.	Anglian RBD	Implemented	Natural England; Defra
Nutrients	Promote good land management practice where there are a high number of equine related waste and pollution incidents.	Combined Essex Catchment	Implemented	Environment Agency
Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Nutrients	Promote the targeted mapping of land drainage discharges (fields, highways and rural roads) to better assess their impact on water quality and good ecological status.	Combined Essex Catchment	2012	Local Authorities; Land managers and owners; Environmental NGOs; Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Provide development planning standing advice	Anglian RBD	Implemented	Environment Agency
Isoproturon	Recently introduced UK-wide restrictions will see decreasing trend in emissions and probable compliance by 2015 with no further action	Combined Essex, East Suffolk	Implemented	Chemicals Regulation Directorate
Bentazone; Clopyralid	Re-direct existing England Catchment Sensitive Farming Initiative resource to address issue.	Combined Essex, East Suffolk	2010	Environment Agency; Natural England
Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Re-engineer existing discharges to avoid direct discharges of pollutants to groundwater	Anglian RBD	Implemented	Water companies; Environment Agency
Nitrate	Registrations (in conjunction with Standard Rules) - Implement new regulatory approach (via Environmental Permitting Regulations) arising from implementation of new Groundwater Directive (2006/116/EC)	Anglian RBD	2012	Environment Agency
Priority Substances and Specific Pollutants ; Nitrate; Hazardous substances and non-hazardous 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)	Anglian RBD	2012	Environment Agency; Land managers and owners; Water companies; Industry leads
Physical modification	River restoration to mitigate the impacts of hydromorphological modifications where applicable.	Broadland Rivers Catchment	2010	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Hazardous Substances, Priority Substances and Specific Pollutants	Specific, targeted guidance in high risk catchments to improve pesticide use through the Voluntary Initiative	Anglian RBD	Implemented	Voluntary Initiative Partnership
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Support to Chemicals Regulation Directorate (formerly the Pesticides Safety Directorate) research into amenity use of pesticides	Anglian RBD	Implemented	Central Government
Cypermethrin	UK-wide suspension (temporary) on use as sheep-dip	Anglian RBD	Implemented	Veterinary Medicines Directorate
Nitrate	Use of statutory notice powers (WRA S86 and S161, Groundwater Regulations, Silage Slurry and Agricultural Fuel Oils Regulations)	Anglian RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Voluntary Initiative educational and advice programme to reduce agricultural chemical use	Anglian RBD	Implemented	Land managers and owners
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)	Anglian RBD	2012	Environment Agency
Abstraction and other artificial flow pressures	Registration for previously exempt activity: abstraction of water within water meadow systems	Anglian RBD	2012	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Maintenance manuals have been developed by the Middle level Commissioners. These are linked to local Biodiversity Action Plans.	Old Bedford including the Middle Level Catchment	Implemented	Middle Level Commissioners

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Physical modification	LOCALLY DERIVED MEASURE: A 94ha site at Frampton has been changed from intensive arable production to freshwater wetland grazing marsh. The land replaces habitat being affected by coastal change elsewhere in the RBD.	Witham Catchment	Implemented	Royal Society for Protection of Birds; Environment Agency
Organic pollutants	LOCALLY DERIVED MEASURE: Awareness raising of issues with failing shellfish waters on the River Alde and provision of follow up on farm visits to farmers and land managers. Action through: Media and communications, Capital grant scheme, one to one on-farm advice.	Anglian RBD	Implemented	Natural England; England Catchment Sensitive Farming Initiative; Environment Agency; Defra
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Breckland Growers Scheme for winter storage sourced from the River Little Ouse, replaced groundwater abstraction in the vicinity of the Breckland Meres.	Cam and Ely Ouse (including South Level) Catchment	2012	Environment Agency; Farmers groups
Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Broads Sediment Management Strategy. This proposes data gathering, source control measures, programme of dredging, beneficial reuse opportunities etc. Actions include: England Catchment Sensitive Farming Initiative to produce best land management practices; Removal of land drainage and increase in buffer strips etc	Broadland Rivers Catchment	2012	Land managers and owners; Broads Authority
Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Encourage best practice for Slug pellet (metaldehyde) application, through the use of postcards distributed to users and events such as Cereals 2009.	Anglian RBD	Implemented	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
<p>Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Organic pollutants</p>	<p>LOCALLY DERIVED MEASURE: Encourage farmers and land managers to adopt best soil management practices to reduce soil erosion and runoff, best nutrient and manure management practices with the provision of free manure analysis, adopt best pesticide management practices, Action through: Capital grant scheme, One to one on-farm advice, One to many on-farm advice, Sampling and analysis.</p>	<p>Anglian RBD</p>	<p>2011</p>	<p>England Catchment Sensitive Farming Initiative; Defra; Natural England; Environment Agency</p>
<p>Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Abstraction and other artificial flow pressures</p>	<p>LOCALLY DERIVED MEASURE: Essex Local Area Agreement - Living landscapes. Landscape scale projects for conservation enhancement. Including: The Blackwater estuary project which will promote the sustainable use of this inspiring rugged estuary that provides a haven to wildlife and supports the local economy and enjoyment for the public; Abberton Reservoir - The reservoir is of international importance for waterfowl, particularly over winter and during the late summer moulting period; this is reflected in it being a Special Protection Area, RAMSAR site and Site of Special Scientific Interest. The Abberton Reservoir Enhancement Scheme will secure additional water resources and improve the reservoir's value for biodiversity. The Scheme involves increasing the storage capacity by 58%. This together with various habitat creation and management measures in the Scheme has been designed to increase the value of the reservoir for birds and other wildlife, e.g. most of the 8.5 miles of existing concrete edge will be removed and replaced with gently shelving edges, which is attractive to many species of wildfowl; Roman River remains one of the best preserved river valleys and stunning landscape</p>	<p>Combined Essex Catchment</p>	<p>2011</p>	<p>Essex Wildlife Trust; Essex County Council</p>

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	in Essex that supports a rich variety of rare and unique wildlife. The Living Landscape project will protect and enhance this area to the south of Colchester.			
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Establishment of agricultural water abstractor groups in the Lark Valley, Chatteris, BAWAG (Broadlands Agricultural Water Abstractor Group) and ESWAG (East Suffolk Water Abstractor Group)	Old Bedford including the Middle Level Catchment; Broadland Rivers Catchment; East Suffolk Catchment; Cam and Ely Ouse (including South Level) Catchment	2012	National Farmers' Union; Country Landowners Association; Local farmer action groups; Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Gaywood Flood Alleviation Scheme - Reconnection of the Gaywood River to its former flood plain. Within the project there is the opportunity to create new wildlife habitats in the Gaywood Valley that will enhance the amenity of the area.	North West Norfolk Catchment	2012	Kings Lynn Internal Drainage Board
Organic pollutants; Nutrients; Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Halvergate Marshes Water Strategy. Developed to meet the needs of both grazing and conservation for water quality, quantity and level.	Broadland Rivers Catchment	2012	Broads Authority; Broads Internal Drainage Board; Natural England
Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Hickling Broad -Drain diversion at Willow Farm from the Commissioners Drain to Eastfield Pumping Station. This removes ochre from the Site of Special Scientific Interest.	Broadland Rivers Catchment	2012	Broads Internal Drainage Board; Norfolk Wildlife Trust

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Hazardous Substances, Priority Substances and Specific Pollutants	<p>LOCALLY DERIVED MEASURE: In response to increasing pesticide concentrations in the Rivers Stour, Chelmer and Blackwater Essex & Suffolk Water has appointed two catchment Officers to work with farmers, growers, landowners and agronomists and other pesticide users in the catchments with the aim of reducing pesticides entering watercourses. They will work closely with the Voluntary Initiative and England Catchment Sensitive Farming Initiative.</p>	Combined Essex Catchment	Implemented	Essex & Suffolk Water; Natural England Catchment Sensitive Farming Initiative;; Environment Agency; Pesticides Voluntary Initiative
Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	<p>LOCALLY DERIVED MEASURE: Blackwater, Chelmer partnership project. Essex & Suffolk Water, the Environment Agency and the England Catchment Sensitive Farming Initiative will deliver advice and guidance to farmers to reduce the impact of diffuse pollution from agriculture.</p>	Combined Essex Catchment	Implemented	Essex & Suffolk Water; Natural England Catchment Sensitive Farming Initiative; Environment Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Sediments (as a direct pollutant)	<p>LOCALLY DERIVED MEASURE: Lincolnshire Coastal Grazing Marsh to retain and increase traditional cattle grazing. Aims to provide incentives for farmers to continue or return livestock farming with network of ditches used again as wet fences. Project officer is being employed (2007 -10) to advise farmers. A grant has been received from HLF to develop a £1.7million</p>	Witham Catchment	2012	East Lindsey District Council; Farming and Wildlife Advisory

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	Landscape Partnership scheme.			Group; Lincolnshire County Council; Lincolnshire Wildlife Trust; Lindsey Marsh Drainage Board
Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Mud On Road Campaign - reports sent to Environment Agency, investigated and passed onto agronomist / catchment sensitive farming officer / highways.	Broadland Rivers Catchment	2012	Broads Authority; Environment Agency; Essex & Suffolk Water
Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Ochre and Salinity Management Plan to reduce loads to the Broads. £400,000 funding from the Environment Agency.	Broadland Rivers Catchment	Implemented	Broads Authority; Environment Agency; Water Management Alliance
Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Provide guidance and training to farmers, land managers and agronomists on best pesticide management practices and provision of information on local pesticide issues. Action through: One to many off-farm advice, Media and Communications.	Cam and Ely Ouse (including South Level) Catchment; Broadland Rivers Catchment	2011	Environment Agency; England Catchment Sensitive Farming Initiative;; Natural

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
				England; Defra; Pesticides Voluntary Initiative
Nutrients	LOCALLY DERIVED MEASURE: River Ouse Strategic Partnership. This will provide the opportunity to: deliver farm advice through on-farm visits and workshops; channel experiences from the England Catchment Sensitive Farming Initiative to more farmers; create a farm-scale appraisal of catchment risk and to target solutions; put farmers on a higher priority basis for their application for ELS/HLS; build 'accession partners'.	Upper and Bedford Ouse Catchment	Implemented	Environment Agency; Natural England
Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Specialist workshops to address pressures in areas identified via Environment Agency's Agricultural Evidence Base	Anglian RBD	2012	Environment Agency
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Specific measures to encourage farmers to build storage reservoirs to support summer irrigation and promote water efficiency on farms.	Anglian RBD	2012	National Farmers' Union; Environment Agency; Natural England
Physical modification	LOCALLY DERIVED MEASURE: Standard Maintenance Operations manual provides guidance on the appropriate	East Suffolk Catchment; North West Norfolk	2012	Water Management

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	standards to be achieved when undertaking maintenance works	Catchment; Broadland Rivers Catchment		Alliance
Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Voluntary Initiative for pesticides, including MOTs on sprayers, crop protection management plans, training for sprayer operators.	Anglian RBD	2012	Highways Agency; Local Authorities; National Farmers' Union; Pesticide sprayer operators; Pesticide Manufacturers; Farmers
Investigations				
Nutrients; Microbiology; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Demonstration Catchment Project to test and demonstrate the effect of agricultural diffuse pollution control measures in a representative range of catchment types (River Wensum and its tributaries)	Broadland rivers catchment	Implemented	Environment Agency; Defra
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants; Nitrate; Phosphate	Investigation of Groundwater Dependent Terrestrial Ecosystems to assess if they have been significantly damaged as a result of groundwater pollution	Anglian RBD	Implemented	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Natura 2000 and Site of Special Scientific Interest actions				
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)	Anglian RBD	2012	Natural England; Environment Agency
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)	Anglian RBD	2012	Natural England
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)	Anglian RBD	2012	Environment Agency
Sediments (as a direct pollutant); Nutrients;	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)	Anglian RBD	2012	Environment Agency
Physical modification; Abstraction and other artificial flow pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through a special project to address hydrology pressures (See Annex D)	Anglian RBD	2012	Natural England
Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Compulsory Management Scheme to address sea fisheries pressures (See Annex D)	Anglian RBD	2011	Natural England
Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through	Anglian RBD	2012	Local Authorities;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	Flood Management Programme (See Annex D)			Environment Agency
Nutrients; Physical modification; Abstraction and other artificial flow pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Specific Management Works to address water quality and morphology pressures (See Annex D)	Anglian RBD	2012	Environmental NGOs; Land managers and owners; Natural England; Water companies
Physical modification; Abstraction and other artificial flow pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Water Level Management Plans (See Annex D)	Anglian RBD	2012	Environment Agency; Land managers and owners;
Physical modification	Contribute to achievement of favourable condition on River Nar Site of Special Scientific Interest by implementing water level management plans	North West Norfolk Catchment	2010	Natural England
Physical modification	Contribute to achievement of favourable condition on the River Nar Site of Special Scientific Interest by implementing river restoration project	North West Norfolk Catchment	2010	Internal Drainage Boards
Nutrients	Contribute to achievement of favourable condition on Westwick Lakes Site of Special Scientific Interest and Tattershall Old Gravel Pits Site of Special Scientific Interest by compulsory management scheme/notice	Broadland Rivers Catchment; Witham Catchment	2010	Natural England
Natura 2000 Investigations				
Nutrients; Sediments (as a direct pollutant)	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through investigation and negotiation to address water quality	Anglian RBD	2012	Natural England; Environment

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	pressures (See Annex D)			Agency
Nutrients	LOCALLY DERIVED MEASURE: Ant valley Project. One year trial led by Broads Authority looking at the catchment to Barton Broad	Broadland Rivers Catchment	Implemented	Broads Authority; Environment Agency; Natural England
Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Additional investigative monitoring to address Metaldehyde (slug pellets) use on commercial crops.	Anglian RBD	Implemented	Environment Agency

C.5 Angling and conservation

Within the Anglian RBD there are 24 water dependent Special Areas of Conservation and 24 water dependent Special Protection Areas. There are numerous Site of Special Scientific Interests, Biodiversity Action Plan sites, national and local nature reserves, the Broads national park, making the RBD internationally important for its wetland habitat sites.

In addition, there are 21 areas designated to protect economically important shellfish waters, whilst for freshwater fish 17 lakes and 444 rivers are designated for their economic importance. The RBD has some of the finest coarse fishing in the country, as well as some of the most famous river-trout fisheries. Roach, bream and pike are the dominant species in most of our flowing waters, although chub, dace and barble become important in the upper reaches of the major rivers. Many of the chalk-fed rivers support natural brown trout populations.

The Anglian River Basin District is the richest region in the UK for wetland wildlife. The Broads, in particular, is Britain's largest nationally protected wetland and provides a habitat for a myriad of rare plants and animals. Freshwater habitats within the river basin district are very important for wintering wildfowl and our reservoirs and watercourses support some important fisheries. Many invertebrate populations and populations of rare birds depend upon these freshwater wetlands. Approximately 80% of England's resource of lowland fen occurs here, including the largest expanse of lime-rich fens. Other internationally important fens occur in the heads of valleys, fed by groundwater springs. A rich mix of other habitats are found in the region, including swamp, reedbeds and carr woodland.

Much of the extensive and varied coast of the region is internationally designated. This includes 33% of the UK's extensive areas of saltmarsh, which reflects the presence of large estuaries and wide intertidal areas along the coast.

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

Table C5: **Actions for the angling and conservation sector**

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Direct biological pressures	Secure resources for management of invasive non-native species and to support the implementation of a non-native species management plan.	Combined Essex Catchment	2012	Defra; Environment Agency; Natural

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
				England; Central Government
Physical modification	Work with anglers, fishing clubs, boat users and riparian owners to identify areas of bankside erosion and the associated impacts.	Combined Essex Catchment	2012	Environment Agency; Natural England; Fisheries and Angling Interests; Land managers and owners
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)	Anglian RBD	2012	Environment Agency
Abstraction and other artificial flow pressures	Registration for previously exempt activity: abstraction of water within water meadow systems	Anglian RBD	2012	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Anglian River Sea Trout Project. Identification and prioritisation of barriers to breeding brown trout populations in several Anglian Rivers including North Norfolk chalk rivers: the Glaven, Stiffkey, Burn and Nar.	North Norfolk Catchment	Implemented	Centre for Environment, Fisheries & Aquaculture Science; Environment Agency; Association of Rivers Trusts; Natural England; Wild Trout Trust; Wildlife Trusts
Physical modification	LOCALLY DERIVED MEASURE: Creation of backwaters, bankside scrapes, reed beds and marginal vegetation.	Upper and Bedford Ouse Catchment	Implemented	Ouzel Valley Park partnership

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Physical modification	LOCALLY DERIVED MEASURE: Development of Great Ouse Wetland - to restore natural features at Ouse Fen, Fen Drayton and Lakenheath.	Old Bedford including the Middle Level Catchment	2012	Royal Society for Protection of Birds
Physical modification; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Development of tidal river strategy to address evacuation of water from the Ouse Washes in spring.	Old Bedford including the Middle Level Catchment	Implemented	Environment Agency
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Econet - Norfolk Wildlife Trust and the Norfolk Biodiversity Partnership have prepared an ecological network map for Norfolk identifying core areas for biodiversity where protection, enhancement and expansion of the existing resource will be a priority.	North West Norfolk Catchment; Broadland Rivers Catchment; North Norfolk Catchment	2012	Norfolk Biodiversity Partnership; Norfolk Wildlife Trust
Physical modification	LOCALLY DERIVED MEASURE: Establishment of the Broads Authority expert panel to draw upon research and examples of managed re alignment, saline intrusion etc	Broadland Rivers Catchment	2012	Local Authorities; Natural England; Broads Authority
Direct biological pressures	LOCALLY DERIVED MEASURE: Floating pennywort removal projects	Combined Essex Catchment	Implemented	local conservation groups; Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Gaywood Valley Restoration Project (Living Landscape Scheme). A vision to restore Leziate, Sugar and Derby Fens Site of Special Scientific Interest. To link sections and secure new wetland habitats. Production of a Vision Statement. As well as working on bankside habitats,	North West Norfolk Catchment	2012	King Lynn and West Norfolk District Councils; Kings Lynn Internal

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	including reedbed, fen, wet grassland and wet woodland, the valley edge habitats of heathland, grassland and woodland will also be restored, enhanced and created.			Drainage Board; Natural England
Direct biological pressures	LOCALLY DERIVED MEASURE: Giant Hogweed control measures on the River Nar Site of Special Scientific Interest. Aim is to prevent expansion from lower reaches to the Upper Nar. £6,000 budget obtained from Defra.	North West Norfolk Catchment	Implemented	Natural England; Norfolk River Internal Drainage Board; Environment Agency
Abstraction and other artificial flow pressures; Acidification; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Great Fen Project - to restore over 3,700ha of wildlife habitat in Cambridgeshire, connecting Woodwalton Fen and Holme Fen National Nature Reserves.	Old Bedford including the Middle Level Catchment	2012	Wildlife Trusts; Middle Level Commissioners; Natural England
Physical modification	LOCALLY DERIVED MEASURE: Gt Ouse Wetland Vision - river restoration on a catchment scale. Some projects are small scale (rod licence funded) £10 - 30K, but others are landscape scale: Bedford River Valley Park, Milton Keynes Floodplain Forest.	Upper and Bedford Ouse Catchment; Old Bedford including the Middle Level Catchment	2012	Environment Agency; Natural England; Wildlife Trusts
Direct biological pressures	LOCALLY DERIVED MEASURE: Habitat enhancement work at Great Ponton and Syston. Installation of faggots to reinforce banks and help deflect the flow of water and scour silt from the river bed to benefit white-clawed crayfish as well as brown trout and water vole.	Witham Catchment	Implemented	Natural England; Grantham Angling Club; Environment Agency
Abstraction and other	LOCALLY DERIVED MEASURE: Initiate formation of Rivers	Welland Catchment	Implemented	Environment

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
artificial flow pressures; Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	Trust for the River Welland.			Agency; Natural England; Community Groups
Physical modification; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Jurassic Rivers Project, aimed at improving limestone rivers, including: Belton House and Upper Witham Crayfish Improvements; Grantham fly fishery improvements; Willow Brook fly fishery improvements	Witham Catchment	Implemented	Fisheries and Angling Interests; National Trust; Environment Agency
Nutrients; Physical modification; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Lake Restoration Strategy - Adaptive management strategy to review restoration success and prioritise water bodies of greatest value and those at lowest risk from climate change. Production of Management Plans and actions.	Broadland Rivers Catchment	2012	Broads Authority
Sediments (as a direct pollutant); Direct biological pressures; Nutrients; Organic pollutants; Physical modification	LOCALLY DERIVED MEASURE: Lincolnshire Chalk Stream Project works: 1. With the farming community, Natural England and agricultural consultants to improve land management, thereby limiting pollutants contaminating watercourses. 2. With the farming community to enhance and restore chalk stream habitat where it has been degraded by both past and present management techniques. 3. To improve understanding of Lincolnshire's chalk streams by identifying and commissioning surveys and studies. This	Witham Catchment	2011	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	<p>includes catchment characterisations that highlight areas of point and diffuse pollution that can be followed up with specific advice.</p> <p>4. To raise awareness of Lincolnshire's chalk streams and their threats by undertaking talks, guided walks, workshops and one to one site visits. The project also uses local media to get the message across.</p> <p>1. With the farming community, Natural England and agricultural consultants to improve land management, thereby limiting pollutants contaminating watercourses. 2. With the farming community</p>			
Physical modification; Sediments (as a direct pollutant)	<p>LOCALLY DERIVED MEASURE: Lincolnshire Coastal Grazing Marsh to retain and increase traditional cattle grazing. Aims to provide incentives for farmers to continue or return to livestock farming with networks of ditches used again as wet fences. Project Officer is being employed (2007-10) to advise farmers. A grant has been received from HLF to develop a £1.7m Landscape Partnership scheme 2015 Lincolnshire coast. Restoration of traditional livestock management in areas that are now predominantly arable Grants and funding</p>	Witham Catchment	Implemented	Lindsey Marsh Drainage Board; East Lindsey District Council; Natural England; Lincolnshire Coastal Grazing Marsh Project; Lincolnshire Wildlife Trust; Lincolnshire County Council; Farming and Wildlife Advisory Group; English Heritage; Environment

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
				Agency
Nutrients; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	<p>LOCALLY DERIVED MEASURE: Nene Valley Vision – a valley with naturally functioning interlinked wetlands, rich in wildlife for the enjoyment of everybody. In the next 20 years The Wildlife Trust's strategy for the Nene Valley is, initially, to buffer and extend our existing reserves and, eventually, to link them together through habitat restoration and creation. In this process, facilities for visitors will be improved and environmental education and outdoor learning will support the growth of healthy, environmentally aware communities. In addition to acquiring land, we will work with farmers and landowners to support more wildlife friendly land use and with local authorities, development agencies and developers to achieve a valley with naturally functioning interlinked wetlands, rich in wildlife for the enjoyment of everyone.</p>	Nene Catchment	Implemented	Wildlife Trust Beds Cambs Northant's and Peterborough
Direct biological pressures	<p>LOCALLY DERIVED MEASURE: Norfolk Non Native Forum. Appointment of a dedicated co coordinator to raise awareness and a network of surveillance and eradication programme. Work with aquatic centres to raise awareness and encourage not to sell invasive plants. Planning guidance and conditions to eradicate through the consent process. Training for partner organisations / issue guidance notes. Encouraging non - returns of angling catch invasive species. Angling guidance regarding live baiting, crayfish plague. Dredging SoP/guidance to clean down equipment etc. Stocking policies to remove risk.</p>	Broadland Rivers Catchment; North Norfolk Catchment; North West Norfolk Catchment	2012	Norfolk Biodiversity Partnership
Sediments (as a direct pollutant)	<p>LOCALLY DERIVED MEASURE: North Walsham and Dilham Canal Trust. The trust was formed in January 2008 with the aim of working with the canal owners and adjacent landowners to</p>	Broadland Rivers Catchment	2012	North Walsham and Dilham Canal Trust;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	protect, conserve and improve the route of the canal for the benefit of the community and the environment. Improve habitat and recreation of wetlands at Honing.			LEADER+ Programme
Physical modification	LOCALLY DERIVED MEASURE: NT owns several km of River. Over-zealous river management in past has left river with little instream habitat diversity. Over-widening and deepening of river has caused siltation of gravel bed. Soil erosion from arable fields ending up in river. Native brown trout and river lamprey populations should be higher. It is intended to diversify instream habitat for fish and invertebrates through introduction of coarse woody debris. Catchment management programme to reduce soil inputs. At Woodgate Carrs, TG16030, the National Trust has in winter 2008-9, with Environment Agency permission, introduced pieces of large woody debris to 2km of the River Bure, which as already had a beneficial effect on instream habitats.	Broadland Rivers Catchment	Implemented	National Trust; Environment Agency
Physical modification	'LOCALLY DERIVED MEASURE: Partnership working in the Broads to deliver Wetland Opportunities, with wetland sites being enhanced that include South Fen in the Ant, Hickling in the Thurne and Upton in the Bure. The Broads Biodiversity Action Plan is mapping is mapping habitat opportunities as part of its Whole Valley Approach.	Broadland Rivers Catchment	Implemented	Broads Authority
Direct biological pressures	LOCALLY DERIVED MEASURE: Pennywort control on River Waveney and Rockland Board.	Broadland Rivers Catchment	Implemented	Broads Authority
Physical modification	LOCALLY DERIVED MEASURE: Purchase of land by the National Trust near Flatford and the Dedham Vale. This will allow integrated flood plain management, reconnection of the river to the floodplain and habitat enhancement.	Combined Essex Catchment	Implemented	National Trust
Physical modification	LOCALLY DERIVED MEASURE: Removal of litter and solid	Upper and Bedford Ouse	Implemented	Ouzel Valley

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	contamination, industrial waste, plastics etc. through clearance education and enforcement.	Catchment		Park partnership
Physical modification	LOCALLY DERIVED MEASURE: River Mel Restoration Group. Voluntary local action (such as litter picks etc) to improve this chalk stream. Includes Melbourne Riverside Park, where a series of habitat and access improvement works were undertaken in 2007. The works provided informal footpaths and a boardwalk, meadows, new tree and scrub planting, riverside access and new orchards. The site is now managed to provide a quiet amenity area for the local community and a diverse range of wildlife habitats.	Cam and Ely Ouse (including South Level) Catchment	Implemented	South Cambridgeshire District Council Environment Agency; River Mel Restoration Group
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: River Nar restoration - production of management and sediment strategies.	North West Norfolk Catchment	2012	Environment Agency; Natural England
Physical modification	LOCALLY DERIVED MEASURE: River restoration at Andersons Stream in St Ives, funded through Capital Programme for Flood Alleviation Scheme - Environment mitigation to restore / enhance physical modification (rivers)	Old Bedford including the Middle Level Catchment	Implemented	Environment Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant);	LOCALLY DERIVED MEASURE: River Wensum Restoration Strategy Project - large scale habitat improvements to restore favourable conditions for a range of fish species. Proposed actions include reducing impoundments on the river, restoring the gravel beds, narrowing the channel, increasing the amount	Broadland Rivers Catchment	2012	Natural England; Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Organic pollutants; Nutrients; Abstraction and other artificial flow pressures	of woody material and modifying the weed cutting regime at critical phases of fish life cycles.			
Physical modification; Sediments (as a direct pollutant); Nutrients	LOCALLY DERIVED MEASURE: Sediment Management Strategy - catchment approach to sediment management to reduce inputs and balance with dredging to achieve waterways specification for users. Production of Management Plans and actions.	Broadland Rivers Catchment	2012	Broads Authority
Physical modification	LOCALLY DERIVED MEASURE: South Lincolnshire Fenland Restoration Project centred on Baston and Thurlby fens (Site of Special Scientific Interest and nature reserve). Expansion of last remnants of fenland in Lincolnshire to landscape scale through land management, including restoration of gravel workings and measures to secure long-term security of water supply.	Welland Catchment	2012	Environment Agency; Lincolnshire Wildlife Trust; Natural England
Direct biological pressures; Physical modification	LOCALLY DERIVED MEASURE: Stanwick Lake HLS to restore wet grassland and reed bed areas in Stanwick Country Park	Nene Catchment	2010	Natural England
Physical modification	LOCALLY DERIVED MEASURE: Stour and Orwell Estuary Management Group - undertaking a review of the management scheme and management plan	Combined Essex Catchment	2012	Stour and Orwell Estuary Management Group
Physical modification	LOCALLY DERIVED MEASURE: Task and Finish group for managed re alignment to create additional freshwater habitat (e.g. managed realignment of North and South Hickling Broad within the land already part of the Norfolk WT reserve).	Broadland Rivers Catchment	2012	Norfolk Wildlife Trust; Environment Agency; Natural England
Physical modification	LOCALLY DERIVED MEASURE: The Blyth-Alde Project Living	East Suffolk Catchment	Implemented	Forestry

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	<p>Landscape - Blyth-Alde is a landscape scale partnership project involving Suffolk Wildlife Trust, Natural England, RSPB, National Trust and Forestry Commission. The project partners between them own or manage in excess of 3,400 ha. The Blyth-Alde landscape partnership vision will encourage a re-emergence of the natural landscape between the two estuaries creating a large sustainable area of unique beauty whose evolution whilst founded on the past will be of benefit to both people and wildlife in the future. The objectives are: - To provide a large area where landscape and wildlife can be sustainably managed and be adaptable to changes in the environment and land use - To work in partnership with local communities and agencies - To improve access and develop links to the local economy - To establish a beacon site to inspire others.</p>			<p>Commission; National Trust; Natural England; Royal Society for Protection of Birds; Suffolk Wildlife Trust</p>
Physical modification	<p>LOCALLY DERIVED MEASURE: The National Trust has carried out a Coastal Risk Assessment on its properties to evaluate land and buildings in relation to future flood and erosion risks on the coast. A Coastal Adaptation Strategy has been completed for Brancaster and Orford Ness..</p>	<p>North Norfolk Catchment, East Suffolk Catchment</p>	<p>Implemented</p>	<p>National Trust</p>
Physical modification	<p>LOCALLY DERIVED MEASURE: The National Trust has carried out a Coastal Risk Assessment on its properties to evaluate land and buildings in relation to future flood and erosion risks on the coast. A Coastal Adaptation Strategy is being prepared for Northy Island, Copt Hall Marshes and Ray Island</p>	<p>Combined Essex Catchment</p>	<p>Implemented</p>	<p>National Trust</p>
Physical modification	<p>LOCALLY DERIVED MEASURE: The Ouse Valley Living Landscape project aims to create a network of species-rich flood meadows, floodplain grazing marsh and wet woodland</p>	<p>Old Bedford including the Middle Level Catchment</p>	<p>2012</p>	<p>Wildlife Trusts; Environment Agency;</p>

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	along the Ouse Valley from St Neots to the Ouse Washes. The main approaches are through the expansion and management of existing nature reserves, through targeted advice to owners of County Wildlife Sites, through seed harvesting of species rich meadows too aid the restoration of improved meadows and through the creation of wet grassland for breeding and wintering water birds.			Huntingdon District Council; Forestry Commission; Farming and Wildlife Advisory Group
Physical modification	LOCALLY DERIVED MEASURE: The River Glaven Conservation Group has restored sections of the Glaven with riffles, reconnecting the flood plain etc. Also, Environment Agency funding the installation of silt traps in headwaters of the Glaven in 2008. This is to collect and remobilise residual silt from diffuse pollution, catchment sensitive farming to reduce inputs into the river.	North Norfolk Catchment	2012	River Glaven Conservation Group
Physical modification	LOCALLY DERIVED MEASURE: The Suffolk Broads Living Landscape Project is a 30 year landscape scale conservation project. It covers 1,750 ha of the Lower Waveney Valley between Barsham and Somerleyton and includes the full suite of Broadland habitats. Our vision is to create a rich, robust Living Landscape by applying a landscape scale approach to the management of this part of the Waveney Valley through seeking opportunities to re-connect, expand and buffer the areas of highest quality habitat and restoring habitats degraded by either intensive management or neglect. The project also involves recreating wetland habitats lost to arable farming, promoting more sustainable low input farming practices and creating a landscape of high value that is easily accessible and valued by local people and visitors alike.	Broadland Rivers Catchment	Implemented	Wildlife Trusts
Physical modification;	LOCALLY DERIVED MEASURE: Welland Rivers Trust	Welland Catchment	Implemented	Fisheries and

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Sediments (as a direct pollutant)	Scheme. River enhancements through HLS and working with the Mayfly Fishers, Grantham Fly Fishers, and Gwash Fly Fishers			Angling Interests; Welland Rivers Trust
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: WETLAND CREATION SCHEME - Fen Protection Project - pressure to protect peat. Need to continue with Great Fen project (joins up Holme and Woodwalton Fen), Major potential to protect and enhance biodiversity and environmental quality through Wicken fen, Ouse Washes, Needingworth, Lakenheath and Boston sites.	Anglian RBD	2012	National Trust; Natural England; Royal Society for Protection of Birds; Wildlife Trusts
Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Abstraction and other artificial flow pressures; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: WETLAND CREATION SCHEME - This project sets out a 50-year vision for England's freshwater wetlands. It will show where new wetlands could be created and current wetlands restored.	Anglian RBD	2012	Environment Agency; Natural England; Wildlife Trusts
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants;	LOCALLY DERIVED MEASURE: Wicken Fen Vision. The Wicken Fen Vision is an ambitious plan to create a new nature reserve covering around 56 square kilometres between Cambridge and Wicken Fen. This will be the largest project of its kind in lowland England. Today The National Trust owns 930 hectares in the area. The National Trust sees the Wicken Fen as an exciting opportunity to create a mosaic of different	Cam and Ely Ouse (including South Level) Catchment	Implemented	National Trust

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Sediments (as a direct pollutant)	habitats for wildlife and different sorts of open space for people to enjoy. There will be wetland habitat, especially in the lower-lying areas around the existing Wicken Fen. This will include areas of open water and marshy areas with tall vegetation such as reeds and bulrush. The existing Wicken Fen was the first Nature Reserve to be owned by the National Trust and is today one of the few remaining areas of fenland wilderness in East Anglia with over 7800 recorded species.			
Abstraction and other artificial flow pressures; Physical modification	LOCALLY DERIVED MEASURE: East Midlands Strategic River Corridors Project Vision - Holistic approach to management and enhancement of strategic river corridors to benefit people, wildlife and management of flood risk.	Witham Catchment; Nene Catchment; Welland Catchment	2012	East Midlands Regional Assembly
Investigations				
Physical modification	LOCALLY DERIVED MEASURE: Commissioning of research to investigate barriers to eel movements in The Broads to assess the efficacy of elver stocking in certain locations and recommendations on eel passes.	Broadland Rivers Catchment	Implemented	Environment Agency; Broads Authority
Physical modification	LOCALLY DERIVED MEASURE: Conservation and monitoring work carried out the Willow Brook Flyfishers. Work includes: Water quality monitoring. Riverfly Partnership Angler Monitoring Initiative. Collecting adult caddis flies weekly throughout the year under the Adult Caddid Occurrence Scheme. Improving bank side and in stream vegetation by cutting back, planting and installing in-stream structures as appropriate. Cleaning and loosening of spawning gravels is carried out by members of Willow Brook Flyfishers each Autumn. Installation of 10 pairs of upstream facing brushwood groins to expose gravel beds and introduce variation of flow and depth	Nene Catchment	Implemented	Riverfly Partnership; Willow Brook Flyfishers

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	<p>where past engineering has left areas very uniform. An enlightened approach to fishery management with more emphasis on habitat improvement. Stocking of adult trout has been reduced and only brown trout are stocked. A gravel hatchery box was installed so that eyed ova could be hatched and the fry released.</p>			
<p>Sediments (as a direct pollutant); Direct biological pressures; Nutrients; Organic pollutants; Physical modification</p>	<p>LOCALLY DERIVED MEASURE: Lincolnshire Chalk Stream Project works:</p> <ol style="list-style-type: none"> 1. With the farming community, Natural England and agricultural consultants to improve land management, thereby limiting pollutants contaminating watercourses. 2. With the farming community to enhance and restore chalk stream habitat where it has been degraded by both past and present management techniques. 3. To improve understanding of Lincolnshire's chalk streams by identifying and commissioning surveys and studies. This includes catchment characterisations that highlight areas of point and diffuse pollution that can be followed up with specific advice. 4. To raise awareness of Lincolnshire's chalk streams and their threats by undertaking talks, guided walks, workshops and one to one site visits. The project also uses local media to get the message across. <p>1. With the farming community, Natural England and agricultural consultants to improve land management, thereby limiting pollutants contaminating watercourses. 2. With the farming community</p>	<p>Witham Catchment</p>	<p>2011</p>	<p>Environment Agency</p>
<p>Natura 2000 and Site of Special Scientific Interest actions</p>				

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
None				
Natura 2000 Investigations				
None				

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 our rural policy.

Defra has several delivery partners that have important actions in our Draft River Basin Management Plan, including the following:

- Marine and Fisheries Agency
- Rural Payments Agency
- Environment Agency (see separate section)
- Forestry Commission
- National Park Authorities
- British Waterways

Other Government Departments like the following are also included under the sector heading of Central Government

- 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)

Table C6: **Actions for central government**

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Alien species	Contribute to the development of any EU level initiatives to improve legislation and controls relating to invasive non-native species.	Anglian RBD	2012	Central Government
Alien species	Develop a national early warning system with contingencies for rapid response control measures to eradicate new invasions	Anglian RBD	2012	Central Government

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Alien species	Develop and implement codes of practice to reduce the spread of invasive non-native species	Anglian RBD	2012	Central Government; Environment Agency
Alien species	Draw together a database of projects to facilitate better information sharing and increase opportunities for partnership working	Anglian RBD	2012	Central Government
Alien species	Draw up Individual Species Action Plans for species identified as presenting particular risk levels, to minimise the risks associated with them	Anglian RBD	2012	Environment Agency; Central Government
Alien species	Establish a central repository for holding data on invasive non-native species distribution.	Anglian RBD	2012	Central Government
Alien species	Establish National Invasive Non-Native Species Forums to plan, prioritise and coordinate action	Anglian RBD	Implemented	Central Government
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.	Anglian RBD	2010	Central Government
Alien species	Integrate invasive non-native species control measures across all policy areas	Anglian RBD	2012	Environment Agency; Central Government
Alien species	Make appropriate use of existing legislative powers e.g. 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; Natural Environment and Rural Communities Act; Habitats Directive; International Maritime	Anglian RBD	2012	Environment Agency; Central Government

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	Organisation convention on ballast water)			
Alien species	Provide advice and training on identification, control and disposal of invasive non-native species to all relevant groups and encourage monitoring schemes.	Anglian RBD	2012	Central Government; Environment Agency
Direct biological pressures	Secure resources for management of invasive non-native species and to support the implementation of a non-native species management plan.	Combined Essex Catchment	2012	Natural England; Environment Agency; Central Government; Defra
Alien species	Set up and maintain a website that acts as a "one stop shop" for information and advice on invasive non-native species.	Anglian RBD	Implemented	Central Government
Alien species	Support established local fora by providing advice and guidance and support control actions by selected local fora	Anglian RBD	2012	Central Government; Environment Agency
Alien species	Work to raise awareness of the of the risks transferring non-native species to the wild amongst the public and target groups	Anglian RBD	2010	Central Government
Physical modification	Work with anglers, fishing clubs, boat users and riparian owners to identify areas of bankside erosion and the associated impacts.	Combined Essex Catchment	2012	Natural England; Environment Agency; Fisheries and Angling Interests; Land managers

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
				and owners
Physical modification	LOCALLY DERIVED MEASURE: All consent processes (whether under FEPA, CPA, EIA, planning or Habitats Directive etc, or a port's own works and dredging consents) need to be "WFD-proof" i.e. ensure that all WFD issues are taken properly into account.	Anglian RBD	2012	Ports and Harbours Authorities; Defra; Local Authorities
Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Awareness raising of issues with failing shellfish waters on the River Alde and provision of follow up on farm visits to farmers and land managers. Action through: Media and communications, Capital grant scheme, one to one on-farm advice.	Cam and Ely Ouse (including South Level) Catchment; Broadland Rivers Catchment; Anglian RBD	2011	Defra; Environment Agency; Natural England
Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Awareness raising of issues with failing shellfish waters on the River Alde and provision of follow up on farm visits to farmers and land managers. Action through: Media and communications, Capital grant scheme, one to one on-farm advice.	Cam and Ely Ouse (including South Level) Catchment; Broadland Rivers Catchment; Anglian RBD	Implemented	Defra; Environment Agency; Natural England
Sediments (as a direct pollutant)	'LOCALLY DERIVED MEASURE: Development of Best Practise Guidelines on the Depositing of Dredgings. These have been drawn up by a group including representatives from British Waterways, Environment Agency, Middle Level Commissioners and DEFRA to reach an acceptable position as to how dredgings arising from watercourses can be properly disposed of.	Anglian RBD	2012	Middle Level Commissioners; Defra; Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Eel Management Plan for the Anglian RBD. Produced to improve migration. Identification of barriers: Implement eel passage solutions at Hemingford Sluice, Houghton Mill on the River Ivel and at Brownhill all in the Great Ouse system.	Upper and Bedford Ouse Catchment	2012	Environment Agency; Defra
Physical modification	LOCALLY DERIVED MEASURE: Eel Management Plan for the	Broadland Rivers Catchment	2012	Defra;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	Anglian RBD. Produced to improve migration. Identification of barriers: Installation of a permanent eel pass and trap at Taverham on the River Wensum for recording silver eel migration.			Environment Agency
Sediments (as a direct pollutant); Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Encourage farmers and land managers to adopt best soil management practices to reduce soil erosion and runoff, best nutrient and manure management practices with the provision of free manure analysis, adopt best pesticide management practices, Action through: Capital grant scheme, One to one on-farm advice, One to many on-farm advice, Sampling and analysis.	Anglian RBD	2011	Defra; Environment Agency; England Catchment Sensitive Farming Initiative; Natural England
Nitrate	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment	Pitsford Water	2010	Natural England
Clopyralid	Re-direct existing Catchment Sensitive Farming (CSF) resource to address issue.	River Chelmer	2010	Natural England
Clopyralid	Re-direct existing Catchment Sensitive Farming (CSF) resource to address issue.	River Blackwater	2010	Natural England
Clopyralid	Re-direct existing Catchment Sensitive Farming (CSF) resource to address issue.	Stour DS Lamarsh	2010	Natural England
Nitrate	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment. Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Welland	2010	Natural England
Physical modification	Work with anglers, fishing clubs, boat users and riparian owners to identify areas of bankside erosion and the associated impacts.	Combined Essex Catchment	2012	Environment Agency; Natural England;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
				Fisheries and Angling Interests; Land managers and owners
Alien species	Work to raise awareness of the of the risks transferring non-native species to the wild amongst the public and target groups	Anglian RBD	2010	Central Government
Alien species	Set up and maintain a website that acts as a "one stop shop" for information and advice on invasive non-native species.	Anglian RBD	Implemented	Central Government
Alien species	Support established local fora by providing advice and guidance and support control actions by selected local fora	Anglian RBD	2012	Central Government; Environment Agency
Investigations				
Alien species	Seek sustainable and cost-effective methods for managing established invasions, such as biological control	Anglian RBD	2012	Central Government; Environment Agency
Alien species	Undertake risk assessments to identify priority invasive species for mitigation and control action at a national level	Anglian RBD	2012	Central Government
Physical modification	LOCALLY DERIVED MEASURE: Eel Management Plan for the Anglian RBD. Produced to improve migration. Monitoring of sites.	Anglian RBD	2012	Defra; Environment Agency
Natura 2000 and Site of Special Scientific Interest actions				
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	Anglian RBD	2012	Environment Agency; Natural

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	protected areas (See Annex D)			England
Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Flood Management Programme (See Annex D)	Anglian RBD	2012	Environment Agency; Local Authorities
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)	Anglian RBD	2012	Environment Agency; Natural England
Alien species	Eradication and control at selected Sites of Special Scientific Interest and Natura 2000 sites	Anglian RBD	2012	Natural England
Sediments (as a direct pollutant); Nutrients	Contribute to achievement of favourable condition on Old Buckenham Fen, Upware North Pit , River Nar, Sea Bank Clay Pits, Glemsford Pits, Kilby - Foxton Canal, Tattershall Old Gravel Pits and Swanholme Lakes Sites of Special Scientific Interest by developing a pollution action plan.	Combined Essex Catchment; North West Norfolk Catchment; Witham Catchment; Cam and Ely Ouse (including South Level) Catchment	2012	Natural England
Direct biological pressures	Contribute to achievement of favourable condition on the River Ise and Meadows Site of Special Scientific Interest by implementing invasive species control programme .	Anglian RBD	Implemented	Natural England
Natura 2000 Investigations				
None				

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 Environment 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 Environment Agency's structure in the South West River Basin District is based on one Regional office in Exeter which operates through two Areas. 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 Environment Agency, including policy development, strategic and operational objective setting and performance management.

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

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Alien species	Develop and implement codes of practice to reduce the spread of invasive non-native species	Anglian RBD	2012	Central Government; Environment Agency
Temperature	Develop guidance on the regulation of thermal discharges to surface waters where there are multiple discharges, to protect ecological status.	Combined Essex Catchment	2012	Environment Agency
Alien species	Draw up Individual Species Action Plans for species identified	Anglian RBD	2012	Central

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	as presenting particular risk levels, to minimise the risks associated with them			Government; Environment Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants	Enforce REACH Annex 17 restrictions	Anglian RBD	Implemented	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate channel maintenance strategies and techniques e.g. minimise disturbance to channel bed and margins	Relief Channel	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate techniques (invasive species)	Bottisham Lode-quy Water	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate techniques to align and attenuate flow to limit detrimental effects of these features (drainage)	Relief Channel; Counter Drain	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate water level management strategies, including timing and volume of water moved	Relief Channel; Counter Drain; Bottisham Lode-quy Water; Mortons Leam; Ise	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Flow manipulation (e.g. construct structures to normalise flow; realign frontage)	Relief Channel; Mortons Leam	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Improve floodplain connectivity	Ise	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Managed realignment of flood defence	Norfolk North	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Operational and structural changes to locks, sluices, weirs, beach control, etc	Counter Drain; Relief Channel; Mortons Leam	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve	Witham; Norfolk North; Relief	2011	Environment

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	(e.g. fencing) and where possible enhance ecological value of marginal aquatic habitat, banks and riparian zone	Channel		Agency
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	Whaddon Brook	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve and where possible enhance ecological value of marginal aquatic habitat, banks and riparian zone	Essex; Bottisham Lode-quy Water; Norfolk North; Witham	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve and where possible enhance ecological value of marginal aquatic habitat, banks and riparian zone	Whaddon Brook	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve and, where possible, restore historic aquatic habitats	Witham; Norfolk North; Relief Channel; Ise	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve and, where possible, restore historic aquatic habitats	Whaddon Brook	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Re-opening existing culverts	Mortons Leam; Ise; Relief Channel	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Retain marginal aquatic and riparian habitats (channel alteration)	Witham; Norfolk North; Wash Outer ; Counter Drain	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Retain marginal aquatic and riparian habitats (channel alteration)	Whaddon Brook	2027	Environment Agency
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	Relief Channel; Norfolk East	2011	Environment Agency
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	Whaddon Brook	2027	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	natural recovery minimising maintenance, d) riffle construction, e) reduce all bar necessary management in flood risk areas			
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.	Mortons Leam; Relief Channel; Witham	2011	Environment Agency
Alien species	Integrate invasive non-native species control measures across all policy areas	Anglian RBD	2012	Environment Agency; Central Government
Alien species	Make appropriate use of existing legislative powers e.g. 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; Natural Environment and Rural Communities Act; Habitats Directive; International Maritime Organisation convention on ballast water)	Anglian RBD	2012	Environment Agency; Central Government
Alien species	Provide advice and training on identification, control and disposal of invasive non-native species to all relevant groups and encourage monitoring schemes.	Anglian RBD	2012	Central Government; Environment Agency
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	Anglian RBD	2012	Environment Agency
Alien species	Reduction of extent of invasive non-native species by operations	Anglian RBD	2012	Environment Agency
Alien species	Support established local fora by providing advice and guidance and support control actions by selected local fora	Anglian RBD	2012	Central Government;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
				Environment Agency
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.	Anglian RBD	2010	Environment Agency
Alien species	Work to raise awareness of the of the risks transferring non-native species to the wild amongst the public and target groups	Anglian RBD	2010	Central Government
Direct biological pressures	LOCALLY DERIVED MEASURE: Floating Pennywort Control on the River Nene. Rolling programme targeting floating pennywort on the Upper Nene. Designated areas affected include the Upper Nene potential Special Protection Area. The species threatens navigation, flood defence and potable abstraction and the downstream Nene Washes Special Protection Area/Special Area of Conservation	Nene Catchment	Implemented	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Anglian River Sea Trout Project. Identification and prioritisation of barriers to breeding brown trout populations in several Anglian Rivers including North Norfolk chalk rivers: the Glaven, Stiffkey, Burn and Nar.	North Norfolk Catchment	Implemented	Environment Agency; Wildlife Trusts; Natural England; Centre for Environment, Fisheries & Aquaculture Science;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
				Association of Rivers Trusts; Wild Trout Trust
Nutrients; Physical modification	LOCALLY DERIVED MEASURE: Anglian Rivers Sea Trout Project will improve access and habitat for migratory fish in the Nar, Stiffkey, Glaven and Burn catchments.	North Norfolk Catchment	2012	Environment Agency; Wild Trout Trust
Physical modification; Nutrients	LOCALLY DERIVED MEASURE: Anglian Rivers Sea Trout Project will improve access and habitat for migratory fish in the Welland catchment.	Welland Catchment	2012	Environment Agency; Wild Trout Trust
Physical modification	LOCALLY DERIVED MEASURE: Broadland Flood Alleviation Projects seek to replace existing hard defences with realigned banks and softer reed beds or soft erosion protection materials. (see www.bfap.org). Action through: Financial investment through a £100 million project over 20 years.	Broadland Rivers Catchment	2012	Environment Agency; Broads Authority.
Physical modification	LOCALLY DERIVED MEASURE: Bures Mill Project. Will deliver fish pass and habitat improvement in river channel	Stour US Lamarsh; Stour DS Lamarsh	Implemented	Environment Agency
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Cessation conditions on surface water abstraction licenses (summer) to protect low flows and levels in fenland drains. Action through: Habitats Directive and abstraction licensing	Anglian RBD	2010	Environment Agency
Direct biological pressures	LOCALLY DERIVED MEASURE: Distribution of "White clawed Crayfish - Protect Me!" pamphlet. Identification of American Red Signal Crayfish and Narrow Clawed/Turkish Crayfish.	Cam and Ely Ouse (including South Level) Catchment	2012	Environment Agency; The Brecks Partnership
Physical modification	LOCALLY DERIVED MEASURE: Eel brushes for improved elver/eel passage on obstructions.	Combined Essex Catchment	Implemented	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Eel Management Plan for the Anglian RBD. Produced to improve migration. Identification of	Broadland Rivers Catchment	2012	Environment Agency;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	barriers: Installation of a permanent eel pass and trap at Taverham on the River Wensum for recording silver eel migration.			Defra
Direct biological pressures; Physical modification	LOCALLY DERIVED MEASURE: Eel Management Plan. Enhancing eel stocks in Northern Area Rivers.	Anglian RBD	Implemented	Environment Agency
Organic pollutants; Microbiology; Sediments (as a direct pollutant); Nutrients	LOCALLY DERIVED MEASURE: Environment Agency working closely with the Broads Authority on reporting, attending and resolving pollution incidents. A legal protocol has been agreed between the two organisations. All incidents reported to Environment Agency hotline will be assessed and have annual review of incidents.	Broadland Rivers Catchment	2012	Broads Authority; Environment Agency
Direct biological pressures	LOCALLY DERIVED MEASURE: Fisheries and Nene Valley SPA. To prevent the spread of harmful fish species and ensure sustainable management of fish stocks in Nene Valley	Nene Catchment	Implemented	Environment Agency
Direct biological pressures	LOCALLY DERIVED MEASURE: Floating pennywort removal projects	Cam and Ely Ouse (including South Level) Catchment; Nene Catchment	Implemented	Environment Agency; local conservation groups
Direct biological pressures	LOCALLY DERIVED MEASURE: Giant Hogweed control measures on the Upper Ouse at Brackley.	Upper and Bedford Ouse Catchment	Implemented	Environment Agency
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct	LOCALLY DERIVED MEASURE: Initiate formation of Rivers Trust for the River Welland.	Welland Catchment	Implemented	Community Groups; Environment Agency; Natural England

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
pollutant)				
Physical modification	LOCALLY DERIVED MEASURE: Installation of Brush for elver pass to provide habitat improvement in river channel and eel migration. Schemes located at :Kings Mill, Stonham Back Cut, Cuton Back Cut, Barnes Mill, Broomfield Mill, Langleys Weir, Howe ST. Mill, Wickham Place, Blue Mills, Greys Mill, Easterford Mill, Blackwater Mill, Bradwell, Stisted Mill, Convent Lane Wiers, Cooks Mill, Ford ST. Mill, Chappel Mill, Chalkney Mill, Earls Colne Mill, Townsford Mill, Hulls Mill, Alderford Mill	Combined Essex Catchment	Implemented	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Installation of riffles and flow deflectors to provide habitat improvement in river channel	Northwest Norfolk	Implemented	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Installation of riffles and flow deflectors to provide habitat improvement in river channel	North Norfolk	Implemented	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Installation of riffles and flow deflectors to provide habitat improvement in river channel	Welland	Implemented	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Judas Gap Project. Will deliver fish pass and habitat improvement in river channel	Stour (Essex)	Implemented	Environment Agency
Physical modification; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Jurassic Rivers Project, aimed at improving limestone rivers, including: Belton House and Upper Witham Crayfish Improvements; Grantham fly fishery improvements; Willow Brook fly fishery improvements	Witham Catchment	Implemented	Environment Agency; Fisheries and Angling Interests; National Trust
Microbiology; Nutrients; Organic pollutants	LOCALLY DERIVED MEASURE: Misconnection guidance and awareness programmes for foul and surface water systems. Education /Awareness for existing and new builds, increased inspection and monitoring.	Anglian RBD	2012	Developers; DIY shops; Environment Agency;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	EEDA, Environment Agency undertake detection of mis-connection as part of current business.			Regional Development Agency
Physical modification	LOCALLY DERIVED MEASURE: Nene Park Fisheries Project. Working with Nene Park Trust to improve angling, fisheries and biodiversity	Nene Catchment	Implemented	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Partnership working in the Broads to deliver Wetland Opportunities, with wetland sites being enhanced that include South Fen in the Ant, Hickling in the Thurne and Upton in the Bure. The Broads Biodiversity Action Plan is mapping habitat opportunities as part of its Whole Valley Approach.	Upper and Bedford Ouse Catchment	2012	Defra; Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Priority Barriers Project to identify barriers in need of removal or fish passes to benefit coarse fish and eels	Anglian RBD	Implemented	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Provision of eel pass on the River Stour to allow natural recolonisation, rather than restocking.	Combined Essex Catchment	2010	Environment Agency; Water for Wildlife; Wildlife Trusts
Physical modification	LOCALLY DERIVED MEASURE: River Great Ouse Waterways Plan 2006-2011	Upper and Bedford Ouse Catchment; Cam and Ely Ouse (including South Level) Catchment; Old Bedford including the Middle Level Catchment	Implemented	Great Ouse Boating Association; Environment Agency
Abstraction and other artificial flow pressures;	LOCALLY DERIVED MEASURE: River Nar restoration - production of management and sediment strategies.	North West Norfolk Catchment	2012	Environment Agency;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)				Natural England
Physical modification	LOCALLY DERIVED MEASURE: River Nene Waterways Plan 2006-2011	Nene Catchment	Implemented	Environment Agency; Great Ouse Boating Association
Physical modification	LOCALLY DERIVED MEASURE: Tidal Flap project. Will deliver fish pass and habitat improvement in river channel	Binham Tributary	Implemented	Environment Agency
Nutrients; Organic pollutants	LOCALLY DERIVED MEASURE: Leaflets sent to each package treatment plants owner on the Broads raising awareness of problem of phosphates being discharged from small private and promoting reduced detergent use.	Broadland Rivers Catchment	2012	Broads Authority; Environment Agency; Water quality partnership
Physical modification	LOCALLY DERIVED MEASURE: Welland Sea Trout Project. To re-establish a viable sea trout population in the Welland by enabling natural re-colonisation	Welland Catchment	2012	Environment Agency
Direct biological pressures	LOCALLY DERIVED MEASURE: Distribution of Chinese Mitten Crab identification leaflet. Gives species characteristics and current distribution in the Great Ouse catchment.	Cam and Ely Ouse (including South Level) Catchment; North West Norfolk Catchment; Upper and Bedford Ouse Catchment	2012	Environment Agency
Bentazone	Re-direct existing Catchment Sensitive Farming (CSF)	River Waveney	2010	Environment

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	resource to address issue.			Agency
Nitrate	Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Nene	2010	Environment Agency
Investigations				
Physical modification	Investigations into the ecological outcomes of measures to mitigate against effects of FCERM (flood and coastal erosion risk management) 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.	Anglian RBD	2010	Environment Agency
Alien species	Seek sustainable and cost-effective methods for managing established invasions, such as biological control	Anglian RBD	2012	Central Government; Environment Agency
Acidification; Microbiology; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Undertake investigations to better understand problems in waterbodies where extended deadlines have been put in place and identify actions to resolve them where possible.	Anglian RBD	Implemented	Environment Agency
Sediment	Investigation into the cause of sediment impact.	Harrowden Brook; Cranbrook Drain	2012	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Physical modification	LOCALLY DERIVED MEASURE: Commissioning of research to investigate barriers to eel movements in The Broads to assess the efficacy of elver stocking in certain locations and recommendations on eel passes.	Broadland Rivers Catchment	Implemented	Broads Authority; Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Eel Management Plan for the Anglian RBD. Produced to improve migration. Monitoring of sites.	Anglian RBD	2012	Environment Agency; Defra
Sediments (as a direct pollutant)	Investigate impact of sediments on ecological status	Combined Essex Catchment	2012	Water companies; Natural England; Environment Agency; Local Authorities
Natura 2000 and Site of Special Scientific Interest actions				
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)	Anglian RBD	2012	Environment Agency; Natural England
Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Flood Management Programme (See Annex D)	Anglian RBD	2012	Local Authorities; Environment Agency
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)	Anglian RBD	2012	Natural England; Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Physical modification; Abstraction and other artificial flow pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Water Level Management Plans (See Annex D)	Anglian RBD	2012	Environment Agency; Land managers and owners
Sediments (as a direct pollutant); Nutrients	Contribute to achievement of favourable condition on Old Buckenham Fen, Upware North Pit, River Nar, Sea Bank Clay Pits, Glemsford Pits, Kilby - Foxton Canal, Tattershall Old Gravel Pits Sites of Special Scientific Interest and Swanholme Lakes Site of Special Scientific Interest by developing a pollution action plan (Welland)	Witham Catchment; Combined Essex Catchment; Cam and Ely Ouse (including South Level) Catchment; North West Norfolk Catchment	2012	Natural England
Abstraction and other artificial flow pressures	Contribute to achievement of favourable condition on River Nar Site of Special Scientific Interest by revoking or amending abstraction licences	North West Norfolk Catchment	2012	Environment Agency
Physical modification	Contribute to achievement of favourable condition on the River Nar Site of Special Scientific Interest by implementing river restoration project	North West Norfolk Catchment	2012	Environment Agency
Nutrients	Contribute to achievement of favourable condition on the River Nar Site of Special Scientific Interest by revoking or amending discharge consents	North West Norfolk Catchment	2010	Environment Agency
Natura 2000 Investigations				
Physical modification; nutrients	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Investigation into water quality and morphology pressures (See Annex D)	Anglian RBD	2012	Environment Agency
Acidification, Microbiology, Nutrients, Organic Pollutants, Physical Modification,	Undertake investigations to better understand problems in waterbodies where extended deadlines have been put in place and identify actions to resolve them where possible.	Anglian RBD	Implemented	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Hazardous Substances, Priority Substances and Specific Pollutants, Sediments.				

C.8 Industry, manufacturing and other business

Business services, retailing and health services are three of the most significant employment sectors for the Anglian RBD. Sectors that provide significantly above average levels of employment in the RBD include: wholesale and distribution; transport; food and drink; and agriculture.

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

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Saline intrusion	CAMS – Implement abstraction licensing controls to minimise and manage risks from saline intrusion	Anglian RBD	Implemented	Water companies; Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and 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	Anglian RBD	Implemented	Land managers and owners
Nitrate	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	Anglian RBD	Implemented	Land managers and owners
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous 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	Anglian RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous	Comply with environmental permit conditions	Anglian RBD	Implemented	Industry leads

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
pollutants; Priority Substances and Specific Pollutants				
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Comply with local authority contaminated land remediation notices - Make use of site specific notices to remove pollution risk to groundwater	Anglian RBD	Implemented	Land managers and owners; Local Authorities
Nitrate	Development planning - planning liaison. Site specific groundwater pollution prevention advice and recommendations	Anglian RBD	Implemented	Local Authorities
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Development planning structure plans - influence location of development to protect groundwater	Anglian RBD	Implemented	Water companies; Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Development planning: land contamination - site specific advice and required action for remediation of contaminated land through planning liaison	Anglian RBD	Implemented	Local Authorities; Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Environment Agency Notice powers (WRA S86 and S161, Groundwater Regulations) Make use of site specific notices to remove pollution risk to groundwater	Anglian RBD	Implemented	Environment Agency
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous	Environmental Permitting – effluent discharges to ground	Anglian RBD	Implemented	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
pollutants				
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Environmental Permitting - Process Industries Regulation	Anglian RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Environmental Permitting - waste disposal	Anglian RBD	Implemented	Environment Agency
Indeno (123-cd) pyrene; Fluoranthene; Benzo(a)pyrene; Benzo (ghi) perylene	EU Restriction on use of PAH content in oil used in the manufacture of tyres	Anglian RBD	Implemented	EU
Trichloroethylene	EU-wide ban on use	Anglian RBD	Implemented	EU
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants	Follow Petrol Retailing Code of Practice (Groundwater Regulations) - comply with published advice for operators	Anglian RBD	Implemented	Industry leads
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow Solvents Code of Practice (Groundwater Regulations) - comply with published advice for operators	Anglian RBD	Implemented	Industry leads
Priority Hazardous Substances, Priority Substances and Specific	General guidance to improve pesticide use through the Amenity Forum	Anglian RBD	Implemented	Amenity Forum

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Pollutants				
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Groundwater protection advice to Veterinary Medicines Directorate products approvals process	Anglian RBD	Implemented	Land managers and owners
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants; Nitrate	Implement DCLG (Department for Communities and Local Government) Planning Policy Guidance Statement 23 (PPS23) on controlling pollution of groundwater	Anglian RBD	Implemented	Local Authorities
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Implement Groundwater Protection: Policy & Practice - External education on GW pollution prevention	Anglian RBD	Implemented	Industry leads
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Implementation of 'oil-filled cables' operating agreement with electricity transmission companies	Anglian RBD	Implemented	Environment Agency; Industry leads
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow the SUDS (sustainable drainage systems) Interim Code of Practice - comply with published advice for operators	Anglian RBD	Implemented	Industry leads
Hazardous substances and non-hazardous pollutants; Priority	local authority contaminated land legislation Notice powers - Make use of site specific notices to remove pollution risk to groundwater	Anglian RBD	Implemented	Local Authorities

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Substances and Specific Pollutants				
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Local campaigns - industry	Cam And Ely Ouse Chalk	2010	Environment Agency
Priority Substances and Specific Pollutants ; Nitrate; Hazardous substances and non-hazardous pollutants	NetRegs (Environmental Guidance to Business) - External education on GW pollution legislation	Anglian RBD	Implemented	Environment Agency
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants	Proposed oil pipelines Operating Agreement(s)	Anglian RBD	2012	Industry leads; Environment Agency
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Provide development planning standing advice	Anglian RBD	Implemented	Environment Agency
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	Anglian RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and	Re-engineer existing discharges to avoid direct discharges of pollutants to groundwater	Anglian RBD	Implemented	Environment Agency; Water companies

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Specific Pollutants				
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and 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)	Anglian RBD	2012	Water companies; Land managers and owners; Industry leads; Environment Agency
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants	Targeted advice and enforcement in high risk areas, Pollution Prevention visits works notices	Cam And Ely Ouse Chalk	2010	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Total Oil Operating agreement	Anglian RBD	Implemented	Environment Agency; Industry leads
Nitrate	Waste exemptions - low risk approach to waste regulation activities	Anglian RBD	Implemented	Environment Agency
Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: England Catchment Sensitive Farming Initiative to produce best land management practices. Identify risk points of diffuse pollution from agriculture because of siltation caused by livestock. Propose mitigation measures to avoid damage of fish population.	Anglian RBD	Implemented	Environment Agency; Natural England; Ruskin University; Game and

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
				Wildlife Conservation Trust
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Guidance for planners to ensure new development is more efficient in its consumption of water (lower per capita consumption)	Anglian RBD	Implemented	Waterwise East
Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Sitewise - pilot Environment Agency project in Anglian RBD to promote resource efficiency in the construction industry and to limits its impact on the environment.	Anglian RBD	2012	Construction Industry; Environment Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Implementation of the Remediation Strategy for the Helpston project.	Anglian RBD	Implemented	Environment Agency
Investigations				
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants	Further investigation - Local urban partnerships / PPC	Cam And Ely Ouse Chalk	2010	Environment Agency
Dredging and trawling (commercial fishing and shellfish)	Investigation into the impact of commercial shell 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.	Anglian RBD	2010	Environment Agency
Natura 2000 and Site of Special Scientific Interest actions				
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)	Anglian RBD	2012	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Sediments (as a direct pollutant);Nutrients	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)	Anglian RBD	2012	Environment Agency
Natura 2000 Investigations				
None				

C.9 Local and regional government

The Anglian RBD includes 12 counties. Seven of these cover the majority of the RBD: Bedfordshire, Cambridgeshire, Essex, Lincolnshire, Norfolk, Northamptonshire and Suffolk, with Buckinghamshire, Hertfordshire and Leicestershire having small areas within the RBD. The RBD also touches Nottinghamshire and Oxfordshire. Four unitary authorities lie within the RBD: Milton Keynes, Peterborough, Rutland and Southend. There are also 54 second-tier authorities.

Table C9: Action for local and regional government

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants	Fire service Memorandum of Understanding on implementing pollution control measures in emergencies	Anglian RBD	Implemented	Local Authorities; Environment Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve pesticide use through the Amenity Forum	Anglian RBD	Implemented	Amenity Forum
Abstraction and other artificial flow pressures	Influence development of the LDF to ensure that policies require water efficiency standards in new development that exceed extant Buildings Regulations. Standards should be linked to the Code for Sustainable Homes level 3 and above, and Building Research Establishment Environmental Assessment Method (Breeam) standards	Combined Essex Catchment	2012	Abstractors; Developers; Environment Agency; Local Authorities; Water companies

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
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.	Anglian RBD	2010	Environment Agency
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants; Nitrate	Implement DCLG (Department for Communities and Local Government) Planning Policy Guidance Statement 23 (PPS23) on controlling pollution of groundwater	Anglian RBD	Implemented	Local Authorities
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Education and influence of developers in the issues of water efficiency	Anglian RBD	2012	Local Authorities; Environment Agency
Sediments (as a direct pollutant); Abstraction and other artificial flow pressures; Physical modification; Organic pollutants	LOCALLY DERIVED MEASURE: Ensure that the proposed Ecotown at Rackheath (north of Norwich) is implemented in such a manner so as to cause no deterioration in the catchment.	Broadland Rivers Catchment	2012	Local Authorities
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Include water efficiency policies in Spatial Strategies and Local Development Plans/Frameworks.	Anglian RBD	2012	Local Authorities; Regional Assemblies
Abstraction and other artificial flow pressures; Nutrients; Organic	LOCALLY DERIVED MEASURE: Natural England advice to Local Planning Authorities, Government Offices, Regional Spatial Strategy about developments and wetland habitat	Anglian RBD	2012	Local Authorities; Natural

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
pollutants	protection.			England; Regional Authorities
Physical modification	LOCALLY DERIVED MEASURE: River Nene Regional Park - part of the growth area agenda. Key aim is to deliver green infrastructure as an integral element of the proposed development of housing in the growth areas. Action through: Government funding - 10% top slice of all development monies of growth areas, developer contributions.	Nene Catchment	2012	River Nene Regional Park
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Waterwise East - has the remit to influence planners and developers to encourage water efficiency. Initially, a "no deterioration" measure - could lead to need for less abstraction in the longer term, less need to import water in the short term.	Anglian RBD	2010	Developers; Local Authorities; Water companies
Investigations				
Physical modification	Investigations into the ecological outcomes of measures to mitigate against effects of FCERM (flood and coastal erosion risk management) 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.	Anglian RBD	2010	Environment Agency
Natura 2000 and Site of Special Scientific Interest actions				
Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Flood Management Programme (See Annex D)	Anglian RBD	2012	Environment Agency; Local Authorities
Direct biological	Contribute to maintenance of, or restoration to, favourable	Anglian RBD	2010	Local

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
pressures; Physical modification	conservation status on Natura 2000 Protected Areas through planning permission enforcement (See Annex D)			Authorities
Direct biological pressures; Physical modification	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through planning permission enforcement (See Annex D)	Anglian RBD	2011	Local Authorities
Direct biological pressures	Contribute to achievement of favourable condition on Swanholme Lakes Site of Special Scientific Interest by undertaking specific management works	Witham Catchment	Implemented	Lincoln City Council; Lincolnshire County Council
Natura 2000 Investigations				
None				

C.10 Mining and quarrying

There are no deep mines within the RBD. Extractive industries however do include brick clay in Peterborough and Bedfordshire, and extensive sand and gravel extraction across the RBD.

Table C10: Mining and quarrying sector

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous 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	Anglian RBD	Implemented	Land managers and owners
Hazardous substances and non-hazardous pollutants; Priority Substances and 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	Anglian RBD	Implemented	Industry leads
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Comply with local authority contaminated land remediation notices - Make use of site specific notices to remove pollution risk to groundwater	Anglian RBD	Implemented	Local Authorities; Industry leads
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Groundwater protection advice to Veterinary Medicines Directorate products approvals process	Anglian RBD	Implemented	Industry leads

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances and 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)	Anglian RBD	2012	Environment Agency; Industry leads; Land managers and owners; Water companies
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)	Anglian RBD	2012	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: A 50 Year Vision for Wetlands Action through: Awareness and education campaign and the delivery of Wetland Habitat Action Plan.	Anglian RBD	Implemented	Natural England; English Heritage; Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Assessment of extractive sites potential benefit to the water environment whilst operating and through restoration provisions i.e. Flood storage, nature reserves (Wetland), recreation etc. and the realisation of these benefits through partnership working with Environment Agency, Natural England and Non Governmental Organisations such as, the Royal Society for the Protection of Birds, Local Wildlife Trusts etc.	Anglian RBD	2012	Natural England; environment NGOs Quarry owners; Environment Agency
Abstraction and other artificial flow pressures; Sediments (as a direct	LOCALLY DERIVED MEASURE: East of England Biodiversity Mapping Project - application of research	Witham Catchment; Welland Catchment; Nene Catchment; Cam and Ely Ouse (including	2012	East of England Environmental

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients		South Level) Catchment		Forum; Anglian Water Services; East of England Biodiversity Forum
Investigations				
None				
Natura 2000 and Site of Special Scientific Interest actions				
None				
Natura 2000 Investigations				
None				

C.11 Navigation

Ports at Felixstowe and Harwich provide nationally significant facilities for container and general cargo handling. Great Yarmouth and Lowestoft ports also provide support for the North Sea offshore oil and gas industries. Great Yarmouth is undergoing major expansion with the construction of an outer harbour. There are also major port developments at Harwich and the redevelopment of Shellhaven (in the adjacent Thames River Basin District) that could have ecological implications e.g. on estuary fisheries.

Smaller ports include Boston, King's Lynn, Sutton Bridge and Wisbech.

The RBD has significant lengths of inland waterways including the navigations of the River Nene, River Great Ouse and the River Cam. Also included are the important navigations of the Norfolk and Suffolk Broads and the Middle Level.

Table C11: **Actions for the Navigation sector**

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Hazardous Substances, Priority Substances and Specific Pollutants	Develop national guidance framework on dredging to inform Programme of Measures to meet WFD objectives	Alde & Ore; Benacre Broad; Blackwater & Colne; Blackwater Outer; Blakeney Spit Lagoon; Blyth (S); Bure & Waveney & Yare & Lothing; Burn & Mow & Overy & Norton; Covehithe Broad; Crouch; Deben; Essex; Great Ouse; Hamord water; Harwich Approaches; Nene; Norfolk East; Norfolk North; Orwell; Steeping; Stiffkey/Glaven; Stour (Essex); Suffolk;	2010	Defra

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
		Walberswick Marshes; Wash Inner; Wash Outer ; Welland; Witham; Wolferston Lagoon Complex		
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	Alde & Ore; Benacre Broad; Blackwater & Colne; Blackwater Outer; Blakeney Spit Lagoon; Blyth (S); Bure & Waveney & Yare & Lothing; Burn & Mow & Overy & Norton; Covehithe Broad; Crouch; Deben; Essex; Great Ouse; Hamord water; Harwich Approaches; Nene; Norfolk East; Norfolk North; Orwell; Steeping; Stiffkey/Glaven; Stour (Essex); Suffolk; Walberswick Marshes; Wash Inner; Wash Outer ; Welland; Witham; Wolferston Lagoon Complex	2010	Defra
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)	Alde & Ore; Benacre Broad; Blackwater & Colne; Blackwater Outer; Blakeney Spit Lagoon; Blyth (S); Bure & Waveney & Yare & Lothing; Burn & Mow & Overy & Norton; Covehithe Broad; Crouch; Deben; Essex; Great	2012	Marine and Fisheries Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
		Ouse; Hamord water; Harwich Approaches; Nene; Norfolk East; Norfolk North; Orwell; Steeping; Stiffkey/Glaven; Stour (Essex); Suffolk; Walberswick Marshes; Wash Inner; Wash Outer ; Welland; Witham; Wolferston Lagoon Complex		
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)	Alde & Ore; Benacre Broad; Blackwater & Colne; Blackwater Outer; Blakeney Spit Lagoon; Blyth (S); Bure & Waveney & Yare & Lothing; Burn & Mow & Overy & Norton; Covehithe Broad; Crouch; Deben; Essex; Great Ouse; Hamord water; Harwich Approaches; Nene; Norfolk East; Norfolk North; Orwell; Steeping; Stiffkey/Glaven; Stour (Essex); Suffolk; Walberswick Marshes; Wash Inner; Wash Outer ; Welland; Witham; Wolferston Lagoon Complex	2012	Marine and Fisheries Agency
Dredging (sediment management)	Apply national guidance framework on dredging and dredged material disposal (ports sector) to provide guidance to all those undertaking or permitting navigation dredging and dredged	Alde & Ore; Benacre Broad; Blackwater & Colne; Blackwater Outer; Blakeney	2012	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	material disposal activities to assist in achieving the statutory objectives of the WFD and related EQS Directive (2008/105/EEC) and refine local measures as appropriate (where not disproportionately costly or technically infeasible)	Spit Lagoon; Blyth (S); Bure & Waveney & Yare & Lothing; Burn & Mow & Overy & Norton; Covehithe Broad; Crouch; Deben; Essex; Great Ouse; Hamord water; Harwich Approaches; Nene; Norfolk East; Norfolk North; Orwell; Steeping; Stiffkey/Glaven; Stour (Essex); Suffolk; Walberswick Marshes; Wash Inner; Wash Outer ; Welland; Witham; Wolferston Lagoon Complex		
Tributyltin (TBT) compounds	EU-wide ban on marketing of Tributyltin (TBT) as a biocide in the EU	Anglian RBD	Implemented	EU
Tributyltin (TBT) compounds	EU-wide non-application of Tributyltin (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	Anglian RBD	Implemented	EU
Tributyltin (TBT) compounds	Help prevent illegal use of old Tributyltin (TBT) containing products	Anglian RBD	Implemented	Royal Yachting Association; British Marine Federation; British Waterways; Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Hazardous Substances, Priority Substances and Specific Pollutants	Review existing controls for disposal of dredgings inside and outside harbour limits as appropriate .	Alde & Ore; Benacre Broad; Blackwater & Colne; Blackwater Outer; Blakeney Spit Lagoon; Blyth (S); Bure & Waveney & Yare & Lothing; Burn & Mow & Overy & Norton; Covehithe Broad; Crouch; Deben; Essex; Great Ouse; Hamord water; Harwich Approaches; Nene; Norfolk East; Norfolk North; Orwell; Steeping; Stiffkey/Glaven; Stour (Essex); Suffolk; Walberswick Marshes; Wash Inner; Wash Outer ; Welland; Witham; Wolferston Lagoon Complex	2012	Marine and Fisheries Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants	Review existing controls for dredging inside and outside harbour limits as appropriate.	Alde & Ore; Benacre Broad; Blackwater & Colne; Blackwater Outer; Blakeney Spit Lagoon; Blyth (S); Bure & Waveney & Yare & Lothing; Burn & Mow & Overy & Norton; Covehithe Broad; Crouch; Deben; Essex; Great Ouse; Hamord water; Harwich Approaches; Nene; Norfolk East; Norfolk North; Orwell; Steeping; Stiffkey/Glaven;	2012	Marine and Fisheries Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
		Stour (Essex); Suffolk; Walberswick Marshes; Wash Inner; Wash Outer ; Welland; Witham; Wolferston Lagoon Complex		
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)	Anglian RBD	2012	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: All consent processes (whether under FEPA, CPA, EIA, planning or Habitats Directive etc, or a port's own works and dredging consents) need to be "WFD-proof" i.e. ensure that all WFD issues are taken properly into account.	Anglian RBD	2012	Defra; Local Authorities; Ports and Harbours Authorities
Direct biological pressures; Physical modification	LOCALLY DERIVED MEASURE: British Canoe Union Code of Conduct. Deals with issues such as washing down boats, working with other river users etc.	Anglian RBD	2012	British Canoe Union
Nutrients; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Catchment dredging to maintain watercourses/drains throughout navigable waterways in accordance with best practice guidance.	Anglian RBD	2012	Environment Agency
Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Development of AINA Best Practise Guidelines on the Depositing of Dredgings. Have been drawn up by a group including representatives from British Waterways, Environment Agency, Middle Level Commissioners, DEFRA to reach a multi acceptable position as to how dredgings arising from watercourses can be properly disposed of.	Anglian RBD	2012	Defra
Physical modification; Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Education campaigns to increase awareness of boat wash, and its impacts. Publication of leaflet by Broads Authority and The Environment	Broadland Rivers Catchment	Implemented	Broads Authority

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	Agency/British waterways Boaters Handbook.			
Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Education of best practice for anti fouling.	Broadland Rivers Catchment	2012	Environment Agency; Green Blue Initiative; Broads Authority
Physical modification	LOCALLY DERIVED MEASURE: Enforcement of measures, to limit and reduce boat wash. The promotion of speed poles.	Anglian RBD	2012	Environment Agency; Navigation Authorities
Direct biological pressures	LOCALLY DERIVED MEASURE: Enforcement of regulations for sewage disposal from boats.	Cam and Ely Ouse (including South Level) Catchment	2012	Conservators of the River Cam; Environment Agency
Sediments (as a direct pollutant); Nutrients; Physical modification	LOCALLY DERIVED MEASURE: Ormsby Board mud pumping (dredging).	Broadland Rivers Catchment	2011	Broads Authority; Environment Agency
Sediments (as a direct pollutant)	LOCALLY DERIVED MEASURE: Ouse Washes Technical Advisory Group looking into sedimentation from Earith to Ouse outfall into The Wash. Regime of control and maintenance measures to improve control of sedimentation.	Cam and Ely Ouse (including South Level) Catchment	2012	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: River Great Ouse Waterways Plan 2006-2011	Old Bedford including the Middle Level Catchment; Upper and Bedford Ouse Catchment; Cam and Ely Ouse (including South Level)	Implemented	Environment Agency; Great Ouse Boating Association

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
		Catchment		
Physical modification	LOCALLY DERIVED MEASURE: River Nene Waterways Plan 2006-2011	Nene Catchment	Implemented	Environment Agency; Great Ouse Boating Association
Sediments (as a direct pollutant); Direct biological pressures; Organic pollutants; Physical modification	LOCALLY DERIVED MEASURE: Royal Yachting Association and the British Marine Federation joint venture called the "Green Blue" which aims to educate users and the industry in the measures/behaviour/products available to achieve sustainable boating.	Anglian RBD	2012	Royal Yachting Association
Physical modification; Sediments (as a direct pollutant); Nutrients	LOCALLY DERIVED MEASURE: Sediment Management Strategy - catchment approach to sediment management to reduce inputs and balance with dredging to achieve waterways specification for users.	Broadland Rivers Catchment	2012	Broads Authority
Physical modification	LOCALLY DERIVED MEASURE: Standard Operating Procedures to provide guidance and standards to be achieved when undertaking maintenance works on navigable channels.	Broadland Rivers Catchment	Implemented	Broads Authority
Direct biological pressures	LOCALLY DERIVED MEASURE: With the support of the Environment Agency, volunteer working parties have cleared the extensive growth of floating pennywort that formerly affected the navigation, using hand picking, and have subsequently kept the channel clear of this weed. In co-operation with the Environment Agency, we will continue to control growth of this invasive species in the waterway.	Combined Essex Catchment	Implemented	Environment Agency; Essex Waterways Ltd

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Investigations				
Tributyltin (TBT) compounds	Investigate the reason for failure: to assess the contribution from dredging or disposal activities on EQS compliance as appropriate	South Forty Foot Drain; Stour Ds Lamarsh; River Chelmer; River Blackwater; Colne; Witham; Bure; Old West River; River Flit; Mortons Leam; Nene; Welland; Stour Us Lamarsh; North West Norfolk Catchment; Welland; Lower Witham	2012	Environment Agency
Physical modification	LOCALLY DERIVED MEASURE: Trialling of soft bank protection methods along the River Cam between Milton and Waterbeach to prevent bank erosion and protect towpath.	Cam and Ely Ouse (including South Level) Catchment	Implemented	Conservators of the River Cam; Environment Agency
Natura 2000 and Site of Special Scientific Interest actions				
Sediments (as a direct pollutant)	Contribute to achievement of favourable condition on Kilby - Foxtan Canal Site of Special Scientific Interest by implementing appropriate dredging programme	Welland Catchment	2012	British Waterways
Natura 2000 Investigations				
None				

C.12 Urban and transport

The Anglian RBD is home to over 5.2 million people. The RBD has several major urban centres including Milton Keynes (207,057), Northampton (194,458) and Peterborough (156,061). A substantial portion of the Anglian RBD is covered by the Sustainable Communities Plan. Two of the four growth areas are included largely within the Anglian RBD – the Milton Keynes-South Midland area and the London-Stansted-Cambridge growth corridor.

The highway and rail network shows a strong radial pattern focused on London. The national north-south movements are catered for by M1, M11/A14/A1(M) and the East Coast Main Rail Line. The A14 also provides the main east-west connection between the East Coast ports and the industrial heartlands of the Midlands, north-west and the north-east. Rail freight is mainly train-load e.g. sand and aggregate, however the largest freight volume is the movement of maritime boxes from Felixstowe and Harwich ports to London, the Midlands and the north.

Many thousands of homes and hundreds of kilometres of road, rail, power distribution and water infrastructure in the river basin district are protected from inundation by flood water by the drainage activities of the Environment Agency and numerous Internal Drainage Boards.

Within the RBD is the international airport at Norwich and the regional airport at Southend.

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

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous 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	Anglian RBD	Implemented	Land managers and owners
Hazardous substances and non-hazardous pollutants; Priority	Comply with Environment Agency Notice (WRA S86 and S161, Groundwater Regulations) Make use of site specific notices to remove pollution risks to groundwater	Anglian RBD	Implemented	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Substances and Specific Pollutants				
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants	Comply with new EC Sustainable Use of Pesticides Directive to control use of Plant Protection Products	Anglian RBD	2012	Land managers and owners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Comply with WRA consent conditions	Anglian RBD	Implemented	Environment Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Sediments (as a direct pollutant); Microbiology; Nutrients	Environment Agency and Highways Agency Memorandum of Understanding and associated initiatives	Anglian RBD	Implemented	Highways Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow Pesticides Code of Practice - comply with published advice for operators on control of plant protection products	Anglian RBD	Implemented	Industry leads
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow SUDS (sustainable drainage systems). Code of Practice – comply with published advice for operators on sustainable drainage systems	Anglian RBD	Implemented	Industry leads

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve pesticide use through the Amenity Forum	Anglian RBD	Implemented	Amenity Forum
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Groundwater protection advice to Veterinary Medicines Directorate products approvals process	Anglian RBD	Implemented	Industry leads
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants	Highways Agency Programme to investigate soakaways	Anglian RBD	Implemented	Highways Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Implementation of Network Rail pesticide protocol	Anglian RBD	Implemented	Environment Agency; Industry leads
Microbiology; Nutrients; 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	Anglian RBD	Implemented	National Fire Service
Priority Substances and Specific Pollutants ; Hazardous substances	Registrations (in conjunction with Standard Rules) - Implement new regulatory approach (via Environmental Permitting Regulations) arising from implementation of new	Anglian RBD	2012	Environment Agency; Industry

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
and non-hazardous pollutants; Nitrate	Groundwater Directive (2006/116/EC)			leads; Land managers and owners; Water companies
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.	Anglian RBD	2010	Environment Agency
Abstraction and other artificial flow pressures; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification; Organic pollutants; Nutrients	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Braintree to address the impact of development on infrastructure capacity, water resources and receiving waters.	Combined Essex Catchment	Implemented	Braintree District Council; St Edmundsbury Borough Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Breckland to address the impact of development on infrastructure capacity, water resources and receiving waters.	Cam and Ely Ouse (including South Level) Catchment	Implemented	Breckland District Council
Abstraction and other	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy	Combined Essex Catchment	Implemented	Chelmsford

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	for Chelmsford to address the impact of development on infrastructure capacity, water resources and receiving waters.			Borough Council
Abstraction and other artificial flow pressures; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification; Nutrients; Organic pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Fakenham to address the impact of development on infrastructure capacity, water resources and receiving waters.	Broadland Rivers Catchment	Implemented	North Norfolk District Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Fenland and East Cambridgeshire to address the impact of development on infrastructure capacity, water resources and receiving waters.	Nene Catchment; Old Bedford including the Middle Level Catchment; Cam and Ely Ouse (including South Level) Catchment	Implemented	Fenland District Council; East Cambs District Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances,	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Forest Heath and St Edmundsbury to address the impact of development on infrastructure capacity, water resources and receiving waters.	Cam and Ely Ouse (including South Level) Catchment	Implemented	Forest Heath District Council; St Edmundsbury Borough Council

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Substances and Specific Pollutants				
Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Abstraction and other artificial flow pressures; Organic pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Greater Norwich to address the impact of development on infrastructure capacity, water resources and receiving waters.	Broadland Rivers Catchment	Implemented	Breckland District Council; Broadland District Council; Norwich City; South Norfolk District Council
Physical modification; Priority Hazardous Substances and Specific Pollutants; Nutrients; Organic pollutants; Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Haven Gateway to address the impact of development on infrastructure capacity, water resources and receiving waters.	East Suffolk Catchment; Combined Essex Catchment	Implemented	Suffolk Coastal District Council; Tendring Hundred District Council; Ipswich Borough Council; Colchester Borough Council
Abstraction and other artificial flow pressures; Nutrients; Organic	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Huntingdon to address the impact of development on infrastructure capacity, water resources and receiving waters.	Upper and Bedford Ouse Catchment	Implemented	Huntingdon District Council

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification				
Physical modification; Abstraction and other artificial flow pressures; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for King's Lynn and West Norfolk to address the impact of development on infrastructure capacity, water resources and receiving waters.	North West Norfolk Catchment	Implemented	King's Lynn and West Norfolk Borough Council
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Physical modification; Abstraction and other artificial flow pressures; Organic pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Luton Borough Council and South Bedfordshire District Council to address the impact of development on infrastructure capacity, water resources and receiving waters.	Upper and Bedford Ouse Catchment	Implemented	Central Bedfordshire District Council; Luton Borough Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Marston Vale Eco-town and Bedford to address the impact of development on infrastructure capacity, water resources and receiving waters.	Upper and Bedford Ouse Catchment	Implemented	Bedford Borough Council Central Bedfordshire District Council

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Abstraction and other artificial flow pressures; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification; Nutrients; Organic pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for the City of Cambridge to address the impact of development on infrastructure capacity, water resources and receiving waters.	Cam and Ely Ouse (including South Level) Catchment	Implemented	Cambridge City; South Cambs District Council
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for the City of Peterborough to address the impact of development on infrastructure capacity, water resources and receiving waters.	Welland Catchment; Nene Catchment	Implemented	City of Peterborough
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification; Abstraction and other artificial flow pressures; Organic pollutants; Nutrients	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Thetford to address the impact of development on infrastructure capacity, water resources and receiving waters.	Cam and Ely Ouse (including South Level) Catchment	Implemented	Breckland District Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Uttlesford to address the impact of development on infrastructure capacity, water resources and receiving waters.	Combined Essex Catchment	Implemented	Uttlesford District Council

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Hazardous Substances, Priority Substances and Specific Pollutants				
Abstraction and other artificial flow pressures; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification; Nutrients; Organic pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Waveney and Great Yarmouth to address the impact of development on infrastructure capacity, water resources and receiving waters.	Broadland Rivers Catchment	Implemented	Great Yarmouth Borough Council; Waveney District Council
Organic pollutants	LOCALLY DERIVED MEASURE: Water Quality partnership for the Broads, providing partnership co-ordination for projects to address diffuse non-agricultural impacts.	Broadland Rivers Catchment	Implemented	Broads Authority; Environment Agency; Essex & Suffolk Water; Natural England
Investigations				
Physical modification	Investigations into the ecological outcomes of measures to mitigate against effects of FCERM (flood and coastal erosion risk management) 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.	Anglian RBD	2010	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
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.	Anglian RBD	2010	Environment Agency
Abstraction and other artificial flow pressures; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification; Organic pollutants; Nutrients	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Braintree to address the impact of development on infrastructure capacity, water resources and receiving waters.	Combined Essex Catchment	Implemented	Braintree District Council; St Edmundsbury Borough Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Breckland to address the impact of development on infrastructure capacity, water resources and receiving waters.	Cam and Ely Ouse (including South Level) Catchment	Implemented	Breckland District Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances,	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Chelmsford to address the impact of development on infrastructure capacity, water resources and receiving waters.	Combined Essex Catchment	Implemented	Chelmsford Borough Council

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Substances and Specific Pollutants				
Abstraction and other artificial flow pressures; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification; Nutrients; Organic pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Fakenham to address the impact of development on infrastructure capacity, water resources and receiving waters.	Broadland Rivers Catchment	Implemented	North Norfolk District Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Fenland and East Cambridgeshire to address the impact of development on infrastructure capacity, water resources and receiving waters.	Nene Catchment; Old Bedford including the Middle Level Catchment; Cam and Ely Ouse (including South Level) Catchment	Implemented	Fenland District Council; East Cambs District Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Forest Heath and St Edmundsbury to address the impact of development on infrastructure capacity, water resources and receiving waters.	Cam and Ely Ouse (including South Level) Catchment	Implemented	Forest Heath District Council; St Edmundsbury Borough Council
Physical modification; Priority Hazardous Substances, Priority	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Greater Norwich to address the impact of development on infrastructure capacity, water resources and receiving waters.	Broadland Rivers Catchment	Implemented	Breckland District Council;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Substances and Specific Pollutants; Nutrients; Abstraction and other artificial flow pressures; Organic pollutants				Broadland District Council; Norwich City; South Norfolk District Council
Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Organic pollutants; Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Haven Gateway to address the impact of development on infrastructure capacity, water resources and receiving waters.	East Suffolk Catchment; Combined Essex Catchment	Implemented	Suffolk Coastal District Council; Tendring Hundred District Council; Ipswich Borough Council; Colchester Borough Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Huntingdon to address the impact of development on infrastructure capacity, water resources and receiving waters.	Upper and Bedford Ouse Catchment	Implemented	Huntingdon District Council

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Physical modification; Abstraction and other artificial flow pressures; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for King's Lynn and West Norfolk to address the impact of development on infrastructure capacity, water resources and receiving waters.	North West Norfolk Catchment	Implemented	King's Lynn and West Norfolk Borough Council
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Physical modification; Abstraction and other artificial flow pressures; Organic pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Luton Borough Council and South Bedfordshire District Council to address the impact of development on infrastructure capacity, water resources and receiving waters.	Upper and Bedford Ouse Catchment	Implemented	Central Bedfordshire District Council; Luton Borough Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Marston Vale Eco-town and Bedford to address the impact of development on infrastructure capacity, water resources and receiving waters.	Upper and Bedford Ouse Catchment	Implemented	Bedford Borough Council Central Bedfordshire District Council
Abstraction and other artificial flow pressures; Priority Hazardous Substances, Priority Substances and Specific	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for the City of Cambridge to address the impact of development on infrastructure capacity, water resources and receiving waters.	Cam and Ely Ouse (including South Level) Catchment	Implemented	Cambridge City; South Cambs District Council

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Pollutants; Physical modification; Nutrients; Organic pollutants				
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for the City of Peterborough to address the impact of development on infrastructure capacity, water resources and receiving waters.	Welland Catchment; Nene Catchment	Implemented	City of Peterborough
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification; Abstraction and other artificial flow pressures; Organic pollutants; Nutrients	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Thetford to address the impact of development on infrastructure capacity, water resources and receiving waters.	Cam and Ely Ouse (including South Level) Catchment	Implemented	Breckland District Council
Abstraction and other artificial flow pressures; Nutrients; Organic pollutants; Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Uttlesford to address the impact of development on infrastructure capacity, water resources and receiving waters.	Combined Essex Catchment	Implemented	Uttlesford District Council
Abstraction and other artificial flow pressures;	LOCALLY DERIVED MEASURE: Water Cycle Study/Strategy for Waveney and Great Yarmouth to address the impact of	Broadland Rivers Catchment	Implemented	Great Yarmouth

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Physical modification; Nutrients; Organic pollutants	development on infrastructure capacity, water resources and receiving waters.			Borough Council; Waveney District Council
Organic pollutants	LOCALLY DERIVED MEASURE: Water Quality partnership for the Broads, providing partnership co-ordination for projects to address diffuse non-agricultural impacts.	Broadland Rivers Catchment	Implemented	Broads Authority; Environment Agency; Essex & Suffolk Water; Natural England
Natura 2000 and Site of Special Scientific Interest actions				
None				
Natura 2000 Investigations				
None				

C.13 Water industry

Anglian Water Services Ltd is the principal provider of mains sewerage within the RBD (the other being Thames Water in the extreme south west). It also delivers water supplies to the majority of domestic and industrial consumers. Other water-only providers are: Essex and Suffolk Water, Cambridge Water, Tendring Hundred Water Services and Three Valleys Water

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

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Saline intrusion	CAMS – Implement abstraction licensing controls to minimise and manage risks from saline intrusion	Anglian RBD	Implemented	Environment Agency; Water companies
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous pollutants; Nitrate	Comply with discharge consent conditions	Anglian RBD	Implemented	Water companies
Priority Substances and Specific Pollutants ; Hazardous substances and non-hazardous 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	Anglian RBD	Implemented	Land managers and owners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Comply with local authority contaminated land remediation notices - Make use of site specific notices to remove pollution risk to groundwater	Anglian RBD	Implemented	Local Authorities
Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve pesticide use through the Amenity Forum	Anglian RBD	Implemented	Amenity Forum

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Implement Groundwater Protection: Policy & Practice - External education on GW pollution prevention	Anglian RBD	Implemented	Environment Agency; Land managers and owners
Nitrate	Make use of site specific notices to remove nitrate pollution risk to groundwater. (WRA S86 and S161, Groundwater Regulations, contaminated land legislation)	Anglian RBD	Implemented	Local Authorities
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the Broadland Rivers Catchment under the next round of company investment (PR09), including: Improved treatment at five sewage treatment works to ensure no deterioration in river quality for BOD and Ammonia.	Broadland Rivers	2015	Anglian Water Services
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the Cam and Ely Ouse (including South Level) under the next round of company investment (PR09), including: Improved treatment at eight sewage treatment works to ensure no deterioration in river quality for BOD and/or Ammonia.	Cam and Ely Ouse (including South Level)	2015	Anglian Water Services
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the Combine Essex catchment under the next round of	Combined Essex	2015	Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	company investment (PR09), including: Improved treatment at eight sewage treatment works to ensure no deterioration in river quality for BOD and/or Ammonia.			
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the East Suffolk catchment under the next round of company investment (PR09), including: Improved treatment at five sewage treatment works to ensure no deterioration in river quality for BOD and/or Ammonia.	East Suffolk	2015	Anglian Water Services
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the Nene catchment under the next round of company investment (PR09), including: Improved treatment at 12 sewage treatment works to ensure no deterioration in river quality for BOD and/or Ammonia.	Nene	2015	Anglian Water Services
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the North Norfolk catchment under the next round of company investment (PR09), including: Improved treatment at two sewage treatment works to ensure no deterioration in river quality for BOD and/or Ammonia.	North Norfolk	2015	Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the Northwest Norfolk catchment under the next round of company investment (PR09), including: Improved treatment at one sewage treatment works to ensure no deterioration in river quality for BOD and/or Ammonia.	Northwest Norfolk	2015	Anglian Water Services
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the Old Bedford including the Middle Level catchment under the next round of company investment (PR09), including: Improved treatment at one sewage treatment works to ensure no deterioration in river quality for BOD and/or Ammonia.	Old Bedford including the Middle Level	2015	Anglian Water Services
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the Upper and Bedford Ouse catchment under the next round of company investment (PR09), including: Improved treatment at three sewage treatment works to ensure no deterioration in river quality for BOD and/or Ammonia.	Upper and Bedford Ouse	2015	Anglian Water Services
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the Welland catchment under the next round of company	Welland	2015	Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	investment (PR09), including: Improved treatment at two sewage treatment works to ensure no deterioration in river quality for BOD and/or Ammonia.			
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the Witham catchment under the next round of company investment (PR09), including: Improved treatment at six sewage treatment works to ensure no deterioration in river quality for BOD and/or Ammonia.	Witham	2015	Anglian Water Services
Micro-biology (Faecal Indicator Organisms)	Improvement of water company assets under the next round of company investment (PR09), including: Improvements to reduce bacterial impacts to improve designated shellfish waters at seven sites including river and transitional waterbodies	Combined Essex, North Norfolk, Blackwater & Colne, Crouch	2013	Anglian Water Services
Hazardous Substances, Priority Substances and Specific Pollutants	Improvement of water company assets under the next round of company investment (PR09), including: Improvements to ensure discharges do not impact on groundwater at three sites in the Cam and Ely Ouse Catchment and One site in the Upper Ouse and	Cam and Ely Ouse (including South Level), Upper Ouse and Bedford Ouse	2012	Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	Bedford Ouse Catchment			
Micro-biology (Faecal Indicator Organisms)	Improvement of water company assets under the next round of company investment (PR09), including: Improvements to two waste water treatment sites to improve designated bathing waters	Combined Essex	2012	Anglian Water Services
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets under the next round of company investment (PR09), including: More stringent Biochemical Oxygen Demand (BOD) and Ammonia limit to achieve compliance with WFD standard at six sites.	Cam and Ely Ouse (including South Level); Combine Essex; Old Bedford including the Middle Level; Welland; Witham	2012	Anglian Water Services
Nutrients (Phosphate)	Improvement of water company assets under the next round of company investment (PR09), including: Phosphate removal to meet the requirements of Urban Wastewater Treatment Directive at one site in the River Nene Catchment	Nene	2015	Anglian Water Services
Nutrients (Phosphate)	Improvement of water company assets under the next round of company investment (PR09), including: Phosphate removal to achieve compliance with WFD	Broadland Rivers; Cam and Ely Ouse (including South Level); Old Bedford including the Middle	2012	Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	standard at twelve sites.	Level; Upper and Bedford Ouse		
Nutrients (Phosphate)	Improvement of water company assets under the next round of company investment (PR09), including: Phosphate removal to protect and improve eight designated Natura 2000 sites	Broadland Rivers; Northwest Norfolk	2012	Anglian Water Services
Nutrients (Phosphate)	Improvement of water company assets under the next round of company investment (PR09), including: Phosphate removal to protect and improve five designated Natura 2000 sites	Broadland Rivers; East Suffolk	2015	Anglian Water Services
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets under the next round of company investment (PR09), including: Provision of storm tanks at four sites to meet requirements of Urban Wastewater Treatment Directive	Welland; Witham; Nene	2015	Anglian Water Services
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	PR04 – Water Company spending review	Anglian RBD	Implemented	Central Government
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	PR09 – Water Company spending review. WFD specific obligations	Anglian RBD	2012	Central Government
Nitrate	Provision of first time rural sewerage schemes	Anglian RBD	Implemented	Water companies
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Re-engineer existing discharges to avoid direct discharges of pollutants	Anglian RBD	Implemented	Environment Agency;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	to groundwater			Water companies
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants ; Nitrate	Registrations (in conjunction with Standard Rules) - Implement new regulatory approach (via Environmental Permitting Regulations) arising from implementation of new Groundwater Directive (2006/116/EC)	Anglian RBD	2012	Environment Agency; Industry leads; Water companies; Land managers and owners
Nitrate	Sludge Regulations - advice to operators	Anglian RBD	Implemented	Environment Agency; Water companies
Nitrate	Sludge Regulations – monitoring and enforcement	Anglian RBD	Implemented	Environment Agency; Water companies
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).	Anglian RBD	2012	Environment Agency
Abstraction	Coordinated education and awareness on water efficiency and re-use to promote value of water	Anglian RBD	2012	Environment Agency
Abstraction	Ensure the need for appropriate Water Cycle Studies are included in	Anglian RBD	2012	Developers; Environment

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	regional and local plans, particularly in growth or high risk areas			Agency; Local Authorities; Water companies
Abstraction	Include strong water efficiency policies in Spatial Strategies and Local Development Plans / Frameworks	Anglian RBD	2012	Regional Assemblies; Local Authorities; Central Government
Abstraction	Reduction of water demand through installation of domestic meters on change of occupier	Anglian RBD	Implemented	Water companies
Abstraction	Reduction of water demand through promotion of free domestic meters	Anglian RBD	Implemented	Water companies
Abstraction	Reduction of water demand through use of innovative tariffs for metered properties	Anglian RBD	2012	Water companies
Abstraction	Reduction of leakage through active leakage control and customer supply pipe repair policies	Anglian RBD	Implemented	Water companies
Abstraction	Schools based education and awareness campaigns for sustainable water use	Anglian RBD	2012	Water companies
Nitrate	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment	Pitsford Water	2010	Natural England
Clopyralid	Re-direct existing Catchment Sensitive Farming (CSF) resource to	River Blackwater	2010	Natural England

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	address issue.			
Clopyralid	Re-direct existing Catchment Sensitive Farming (CSF) resource to address issue.	River Chelmer	2010	Natural England
Clopyralid	Re-direct existing Catchment Sensitive Farming (CSF) resource to address issue.	Stour DS Lamarsh	2010	Natural England
Bentazone	Re-direct existing Catchment Sensitive Farming (CSF) resource to address issue.	River Waveney	2010	Environment Agency
Nitrate	Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Nene	2010	Environment Agency
Nitrate	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment. Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Welland	2010	Natural England
Nitrate	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment. Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Willow Brook	2010	Natural England
Nitrate	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment. Address drinking water abstraction through	Salary Brook	2010	Natural England

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	Nitrates Action Programme in Nitrates Vulnerable Zone			
Nitrate	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment. Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Ouse	2010	Natural England
Nitrate	Address issue as priority action within this Catchment Sensitive Farming (CSF) catchment. Address drinking water abstraction through Nitrates Action Programme in Nitrates Vulnerable Zone	Ouse	2010	Natural England
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Examine the role of effluent re-use, through the Anglian Region Water Efficiency Group and Waterwise East.	Anglian RBD	2012	Waterwise East; Water companies
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Expand metering of domestic water supplies.	Cam and Ely Ouse (including South Level) Catchment	2012	Environment Agency; Water companies
Abstraction and other artificial flow pressures	LOCALLY DERIVED MEASURE: Public education of pressures and wise use of water, through the actions of Waterwise East.	Anglian RBD	2012	Environment Agency; Waterwise East
Physical modification	LOCALLY DERIVED MEASURE: River Care. Adopt-a-river initiative.	Anglian RBD	2012	Environment Agency;

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	This is carried out in consultation with local landowners and all other bodies involved in river management. Advice, co-ordinator assistance, free insurance, starter kits provided.			Anglian Water Services; Environmental Campaigns (ENCAMS)
Organic pollutants; Nutrients; Microbiology	LOCALLY DERIVED MEASURE: Volumetric conditions on discharge consents measure. Bringing in a flow percentile rather than dry weather flows.	Nene Catchment; Witham Catchment	2012	Anglian Water Services; Environment Agency
Investigations				
Organic Pollutants (Ammonia), Nutrients (Phosphate), Micro-biology (Faecal Indicator Organisms), Hazardous Substances, Priority Substances and Specific Pollutants	Water Company investigations/Catchment management to determine and reduce risks to drinking water quality through catchment management including: Hazard investigations, monitoring, stakeholder engagement, land use surveys, site investigations and education	Anglian RBD	2012	Anglian Water Services
Organic Pollutants (Ammonia), Nutrients (Phosphate), Micro-biology (Faecal Indicator Organisms), Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Broadland Rivers Catchment under the next round of company investment (PR09). Investigation to ensure discharges comply with WFD requirements at nine sites	Broadland Rivers	2012	Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Organic Pollutants (Ammonia), Nutrients (Phosphate), Micro-biology (Faecal Indicator Organisms), Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Cam and Ely Ouse (including South Level) Catchment under the next round of company investment (PR09). Investigation to ensure discharges comply with WFD requirements at seven sites	Cam and Ely Ouse (including South Level)	2012	Anglian Water Services
Organic Pollutants (Ammonia), Nutrients (Phosphate), Micro-biology (Faecal Indicator Organisms), Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Combined Essex Catchment under the next round of company investment (PR09). Investigation to ensure discharges comply with WFD requirements at two sites	Combined Essex	2012	Anglian Water Services
Organic Pollutants (Ammonia), Nutrients (Phosphate), Micro-biology (Faecal Indicator Organisms), Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Northwest Norfolk Catchment under the next round of company investment (PR09). Investigation to ensure discharges comply with WFD requirements at five sites	Northwest Norfolk	2012	Anglian Water Services
Organic Pollutants (Ammonia), Nutrients (Phosphate), Micro-biology (Faecal Indicator Organisms), Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Upper Ouse and Bedford Ouse catchment under the next round of company investment (PR09). Investigation to ensure discharges comply with WFD requirements at three sites	Upper and Bedford Ouse	2012	Anglian Water Services
Organic Pollutants (Ammonia), Nutrients (Phosphate),	Investigation of water company	Witham	2012	Anglian Water

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Micro-biology (Faecal Indicator Organisms), Hazardous Substances, Priority Substances and Specific Pollutants	assets in the Witham catchment under the next round of company investment (PR09). Investigation to ensure discharges comply with WFD requirements at two sites			Services
Organic Pollutants (Ammonia), Nutrients (Phosphate), Micro-biology (Faecal Indicator Organisms), Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets under the next round of company investment (PR09). Investigations to determine impact of three water company assets on designated bathing waters	GB65050319000; Combined Essex, Northwest Norfolk	2012	Anglian Water Services
Nutrients (Phosphate)	Investigation of water company assets under the next round of company investment (PR09). Investigations to determine the proportional input of phosphate from sewage treatment works at five sites.	Combined Essex, Cam and Ely Ouse (including South Level), Welland, Witham	2012	Anglian Water Services
Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Broadland rivers Catchment under the next round of company investment (PR09). Investigations to quantify risk of STW breaching EQS for priority substances and assessing treatment options at one site	Broadland Rivers	2011	Anglian Water Services
Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Cam and Ely Ouse (including South Level) Catchment under the next round of company	Cam and Ely Ouse (including South Level)	2011	Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	investment (PR09). including: Investigations to quantify risk of STW breaching EQS for priority substances and assessing treatment options at eight sites			
Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Combined Essex Catchment under the next round of company investment (PR09). Including: Investigations to quantify risk of STW breaching EQS for priority substances and assessing treatment options at nine sites	Combined Essex	2011	Anglian Water Services
Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the East Suffolk catchment under the next round of company investment (PR09). Including: Investigations to quantify risk of STW breaching EQS for priority substances and assessing treatment options at one site	East Suffolk	2011	Anglian Water Services
Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Nene catchment under the next round of company investment (PR09). Including: Investigations to quantify risk of STW breaching EQS for priority substances and assessing treatment options at two sites	Nene	2011	Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Old Bedford including the Middle Level catchment under the next round of company investment (PR09). Including: Investigations to quantify risk of STW breaching EQS for priority substances and assessing treatment options at three sites	Old Bedford including the Middle Level	2011	Anglian Water Services
Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Upper Ouse and Bedford Ouse catchment under the next round of company investment (PR09). Including: Investigations to quantify risk of STW breaching EQS for priority substances and assessing treatment options at eight sites	Upper and Bedford Ouse	2011	Anglian Water Services
Hazardous Substances, Priority Substances and Specific Pollutants	Investigation of water company assets in the Witham catchment under the next round of company investment (PR09). Including: Investigations to quantify risk of STW breaching EQS for priority substances and assessing treatment options at three sites	Witham	2011	Anglian Water Services
Phosphate	R&D on fate and transport of P in groundwater to determine impact on surface water	Anglian RBD	2012	Water companies; Environment

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
				Agency
Abstraction and other artificial flow pressures	Investigation at Biodiversity Action Plan site perceived to be adversely affected by abstraction : River Stiffkey, North Kilworth and River Stour	North Norfolk Catchment North Norfolk Chalk; Welland catchment; Combined Essex; North Essex Chalk	2012	Environment Agency; Anglian Water Services; Essex & Suffolk Water
Abstraction and other artificial flow pressures	Investigation to determine cost effective action to manage abstraction to support good ecological potential: Broughton Brook	Broughton Brook; Upper Bedford Ouse Woburn Sands	2012	Anglian Water Services; Environment Agency
Abstraction and other artificial flow pressures	Investigation to determine cost effective action to manage abstraction to support good ecological potential: Millbridge-Common Brook	Upper Bedford Ouse Woburn Sands; Millbridge-common Brooks	2012	Anglian Water Services; Environment Agency
Pressures on groundwater dependent ecosystems	Investigation to determine cost effective action to manage abstraction to support good Groundwater quantitative status	North Norfolk Chalk	2012	Environment Agency
Nutrients	Anglian Water catchment investigation at Glandford to establish source of pollutant	North Norfolk Chalk	2012	Anglian Water Services
Nutrients	Anglian Water catchment investigation at North Pickenham to source of pollutant	Cam and Ely Ouse Chalk	2012	Anglian Water Services
Priority Hazardous Substances, Priority Substances and Specific Pollutants	Anglian Water catchment investigation at Riddlesworth to	Cam and Ely Ouse Chalk	2012	Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	establish source of pollutant			
Priority Hazardous Substances, Priority Substances and Specific Pollutants	Anglian Water catchment investigation at Great Wratting to establish source of pollutant	Cam and Ely Ouse Chalk	2012	Anglian Water Services
Pressures on groundwater (GW) balance; Pressures on groundwater dependent ecosystems; Abstraction	Investigation to improve confidence in Groundwater quantitative status result	Upper Bedford Ouse Chalk; North West Norfolk Chalk; Welland Limestone Unit - Broadland Rivers Chalk & Crag; North Essex Lower London Tertiaries; Welland Limestone Unit; Welland Mid Jurassic Unit; Witham Limestone Unit - This Body Should Probably Be Combined With The Witham Limestone Unit G44800.; Upper Bedford Ouse Woburn Sands; North Essex Chalk; Cam And Ely Ouse Chalk	2012	Environment Agency
Saline intrusion; Pressures on groundwater dependent ecosystems; Abstraction	Investigation to verify risk of deterioration in Ground Water quantitative status	Cornbrash; Witham Lias U; Welland Lower Jurassic Unit;	2012	Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
		Welland Limestone Unit; Blisworth Limestone Rutland Formation; Witham Limestone Unit; Steeping Great Eau Long Eau / Witham Spilsby Sandstone Unit; Steeping Long Eau Little Eau Chalk Unit; Waveney And East Suffolk Chalk & Crag; North West Norfolk Sandringham Sands; Broadland Rivers Chalk & Crag; North Norfolk Chalk; North West Norfolk Chalk; Felixstowe Peninsula Crag & Chalk		
Abstraction and other artificial flow pressures	Options appraisal for action at BAP site perceived to be adversely affected by abstraction : River Granta & Catchment	River Granta	2012	Cambridge Water; Environment Agency
Abstraction and other artificial flow pressures	Options appraisal for action at local nature conservation site perceived to be adversely affected by abstraction : River Lark & Catchment	River Lark; Cam And Ely Ouse Chalk	2012	Anglian Water Services; Environment Agency

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Abstraction and other artificial flow pressures	Programme of investigation of ecological impacts of managed flows in Heavily Modified Waterbodies with Water supply use	Anglian RBD	2012	Water companies; Environment Agency
Natura 2000 and Site of Special Scientific Interest actions				
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)	Anglian RBD	2012	Environment Agency
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)	Anglian RBD	2012	Environment Agency
Physical modification; Abstraction and other artificial flow pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through a special project to address hydrology pressures (See Annex D)	Anglian RBD	2012	Natural England
Nutrients; Abstraction and other artificial flow pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Implementing AMP Schemes (See Annex D)	Anglian RBD	2012	Water companies

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Physical modification; Nutrients; Abstraction and other artificial flow pressures	Contribute to maintenance of, or restoration to, favourable conservation status on Natura 2000 Protected Areas through Specific Management Works to address water quality and morphology pressures (See Annex D)	Anglian RBD	2012	Natural England; Environmental NGOs; Land managers and owners; Water companies
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: Blackwater Estuary	Blackwater & Colne	2015	Essex & Suffolk Water; Environment Agency
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: Cavenham and Icklingham Heath	Cam And Ely Ouse Chalk; River Lark Us Mill St Bridge	2015	Anglian Water Services; Environment Agency
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: East Walton and Adcock's Common	Country Drain; North West Norfolk Chalk	2015	Environment Agency; Anglian Water Services
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: Geldeston Meadows Site of Special Scientific Interest.	Broadland Rivers Chalk & Crag; River Waveney	2015	Environment Agency; Essex & Suffolk Water
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: North Norfolk Coast Site of Special Scientific Interest.	North Norfolk Chalk; Heacham River	2015	Environment Agency; Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: River Wensum Site of Special Scientific Interest.	Broadland Rivers Chalk & Crag; Wensum	2015	Anglian Water Services; Environment Agency
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: Sheringham & Beeston Regis Commons Site of Special Scientific Interest.	Mun; North Norfolk Chalk	2015	Environment Agency; Anglian Water Services
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: Thompson Common	Thompson Stream; Cam And Ely Ouse Chalk	2015	Environment Agency; Anglian Water Services
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: Upper Thurne Broads and Marshes Site of Special Scientific Interest.	Thurne; Broadland Rivers Chalk & Crag	2015	Anglian Water Services; Environment Agency
Nutrients	Contribute to achievement of favourable condition on River Nar Site of Special Scientific Interest by implementing AMP scheme	North West Norfolk Catchment	2010	Anglian Water Services
Natura 2000 Investigations				
Nutrients (Phosphate)	Investigation of water company assets in the Northwest Norfolk Catchment under the next round of company investment (PR09). Investigation to determine impact of STW Phosphate load on designated	Northwest Norfolk	2012	Anglian Water Services

Pressure	What Will Happen?	Where Will It Happen?	Date	Lead Organisation and Partners
	SSSI			
Nutrients (Phosphate)	Investigation of water company assets in the Northwest Norfolk Catchment to determine the impact of direct to ground discharges, and fate of phosphate in relation to River Nar SSSI	Northwest Norfolk	2012	Anglian Water Services