



Water for life and livelihoods

River Basin Management Plan
South West River Basin District

Annex C: Actions to deliver
objectives

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C.1 Introduction

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

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

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

Tables of actions

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

The sectors are set out in table C1a below.

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

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

Table C1a: **Sectors**

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

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

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 affect Natura 2000 sites. Whether a negative effect is likely depends on the exact location, spatial scale, nature and timing of the measure. The details necessary to make reasonable predictions about the effects on Natura 2000 sites will not be developed until the measures are progressed towards implementation.

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

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

C. 2 Actions we can all take

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

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

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

C.3 All sectors

Many actions will apply to all sectors.

Table C3: **Actions for all sectors**

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Acidification, Direct biological pressures, Microbiology, Nutrients, Organic Pollutants, Physical Modification, Priority Hazardous Substances, Priority Substances and Specific Pollutants, Sediments.	<p>Where appropriate, subject to the Environment Agency carrying out a 12 week public consultation and making an appropriate case to the Secretary of State, designate a limited number of Water Protection Zones.</p> <p>Regulatory tool to control diffuse pollution in high risk areas where other mechanisms are not working or are unlikely to work</p> <p>Initially around 8 candidate locations across England. Potential for designation from 2010 with possibility of further WPZs by 2012</p>	South West RBD	2012	Environment Agency

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	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).	South West RBD	2010	Environment Agency
Radioactivity; Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants; Microbiology; Nitrate	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, Catchment Sensitive Farming, or Water Protection Zones .	South West RBD	2010	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Pollution Prevention advice and campaigns - targeted oil care advice in high risk areas	South West RBD	2012	Environment Agency
Abstraction	Reduction of water demand through specification of water efficient fittings in new and refurbished homes under Building Regulations	South West RBD	2010	Department for Communities and Local Government

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Microbiology; Nutrients; Organic pollutants	Influence Town and Country Planning Act authorisation process to help minimise risk of diffuse pollution from new developments (e.g. implement SUDs and use of Water Resource Act Planning Guidance)	South West RBD	Implemented	Local Authorities
Ammonia; Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Isles of Scilly - establish effective groundwater monitoring programme	St Mary's; St Martin's; Bryher And Tresco; St Agnes	2015	Environment Agency
Hazardous substances and non-hazardous pollutants; Nitrate; Phosphate; Priority Substances and Specific Pollutants	Isles of Scilly - Review applicability of national legislation and implementation of dependant measures	St Mary's; St Martin's; Bryher And Tresco; St Agnes	2015	Environment Agency

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
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) in two ways: i) mitigation measures required to reach good ecological potential that can 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	South West RBD	Implemented	Environment Agency
Abstraction and other artificial flow pressures	Extension of abstraction control to include previously exempt areas (abstractions by Ports and Harbour authorities from tidal waters under certain conditions likely to remain exempt)	East Devon Catchment; North Devon Catchment; South & West Somerset Catchment; South Devon Catchment	2012	Environment Agency
Investigations				
Radioactivity; Priority Substances and Specific Pollutants; Nitrate; Hazardous substances and non-hazardous pollutants; Microbiology	Designation of Safeguard Zones - investigation of source-pathway-target linkages to support development of a pollution action plan to identify specific measures	South West RBD	2010	Environment Agency

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Physical modification	Monitoring and investigation into mitigation measures techniques to establish the effectiveness of these measures and improve understanding of hydro-morph-ecological interactions. Outcomes will have a national application	South West RBD	2011	Environment Agency
Abstraction and other artificial flow pressures	Improve flow estimates for surface water bodies	South West RBD	2010	Environment Agency
Abstraction and other artificial flow pressures	Investigations at sites identified under the Restoring Sustainable Abstraction Programme (where funded)	South West RBD	2010	Environment Agency
Physical modification	Monitoring and investigation of the effectiveness of river restoration measures design and outcomes	Hampshire Avon Catchment	2010	Environment Agency

C.4 Agriculture and rural land management

Around three quarters of the South West is farmed. Permanent grassland occupies the majority of agricultural land with arable farming making up the next most extensive agricultural activity, supporting many lowland livestock farms. The agricultural sector is dynamic and reacts to changing consumer habits, regulatory control and the impact of commodity prices at both a global and local level. This means that many farmers face considerable pressures as small businesses, but can make a major contribution to the river basin district in terms of the economy, food security, landscape, water quality and water storage, biodiversity and recreation.

Farmers and landowners are natural champions of the environment, and most regard the soils they farm as their key asset and the water that flows through it as a major resource. The agricultural sector provides many public benefits but can also impact on water quality in a number of ways. The fragile soils that are found across large areas of the South West are easily degraded as a result of inappropriate management, causing local flooding, mud on roads, and damage to property. Pollution of our water environment also results, as sediment, manure, fertilisers and pesticides enter our rivers, estuaries and groundwater causing ecological impacts and affecting the quality of water supplies, driving expensive and unsustainable water treatment. These runoff problems are likely to be exacerbated by predicted climate change. Agriculture is also an abstractor of water.

Resolving these problems will have clear benefits to the ecology of our waters and water users. There will also be a range of significant additional benefits to farmers from delivering better soil management, to water customers through a reduction in the costs and impacts arising from drinking water treatment and to householders in areas vulnerable to surface water flooding.

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

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Microbiology; Sediments (as a direct pollutant)	Co-ordinate all the efforts to deliver environmental benefits under a strong regional partnership focussed on farm pollution prevention	South West RBD	2012	Bournemouth and West Hampshire Water; Wessex Water; Bristol Water; Cholderton Water; Environment Agency; National Farmers' Union; Natural England; South West Water; Local Authorities
Microbiology; Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Maintain a nationally funded advice-led partnership under the England Catchment Sensitive Farming Initiative to reduce diffuse water pollution from agriculture in at risk catchments	Dorset Catchment; East Devon Catchment; Hampshire Avon Catchment; North Cornwall, Seaton, Looe and Fowey Catchment; South Devon Catchment; West Cornwall and the Fal Catchment;	2010	Natural England; Environment Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant); Organic pollutants; Nutrients; Microbiology	Establish Strategic Partnership Catchments in river catchments at risk from agricultural diffuse water pollution that are not currently covered by the England Catchment Sensitive Farming Initiative	North Devon Catchment; South & West Somerset Catchment	2012	Environment Agency
Nitrate	Advise farmers on nutrient planning and best practice to reduce nitrogen loading to land -	South West RBD	2010	Land managers and owners

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	England Catchment Sensitive Farming Initiative			
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients; Microbiology; Sediments (as a direct pollutant)	Establish and enforce Nitrate Vulnerable Zones in catchments at a high risk from nitrate pollution, requiring farmers to follow a programme of measures to reduce nitrate entering the water from farmland, with potential benefits in terms of other pollutants (see map D6 in annex D)	South West RBD	Implemented	Environment Agency; Government; Defra
Nitrate	Implementation of Nitrates Directive Nitrate Vulnerable Zones (NVZ) Action Plan	South West RBD	Implemented	Land managers and owners; Environment Agency
Nitrate	Enforcement of nitrate input restrictions through NVZ action plan by Cross compliance	South West RBD	Implemented	Land managers and owners; Environment Agency
Nitrate	Nitrates Action Programme in Nitrate Vulnerable Zones will help address high nitrate concentrations in drinking water abstractions	Drift Reservoir	2010	Environment Agency
Nitrate	Address issue as priority action within this CSF catchment. Nitrates Action Programme in Nitrate Vulnerable Zones will help address high nitrate concentrations in drinking water	Argal Reservoir; College Reservoir; Stithians Reservoir	2010	Natural England

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Sediments (as a direct pollutant); Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Microbiology; Nitrate	<p>abstractions</p> <p>Maintain and 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</p>	South West RBD	Implemented	Defra; Natural England; Land managers and owners
Sediments (as a direct pollutant); Nutrients; Microbiology; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants	<p>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</p>	South West RBD	Implemented	Defra; Natural England
Sediments (as a direct pollutant); Microbiology; Priority Hazardous Substances, Priority Substances and Specific	Commission programmes of work under the South West Agricultural Resource Management Programme (SWARM) to deliver	South West RBD	2012	Natural England; Environment Agency

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Pollutants; Nutrients; Organic pollutants	environmental protection and improvement as well as enhanced economic efficiency, for instance through Soils for Profit, Resources for Farming and Innovation Fund.			
Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Microbiology; Organic pollutants	Develop and deliver a programme of Farm Pollution Prevention visits, targeted at high risk soils and farming activities, including those impacts associated with soils and land driven problems	South West 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 carrying out a 12 week public consultation and making an appropriate case to the Secretary of State, designate a limited number of Water Protection Zones. Regulatory tool to control diffuse pollution in high risk areas where other mechanisms are not working or are unlikely to work Initially around 8 candidate locations across England. Potential for designation from 2010 with possibility of further WPZs by 2012	South West RBD	2012	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Sediments (as a direct pollutant); Nutrients; Organic pollutants; Microbiology; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Progress delivery of cross-compliance inspection and enforcement	South West RBD	2010	Environment Agency; Rural Payments Agency; Defra
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Enforcement of Groundwater Regulations to control agricultural chemicals through Cross Compliance	South West RBD	Implemented	Environment Agency
Sediments (as a direct pollutant); Organic pollutants; Nutrients; Abstraction and other artificial flow pressures	Deliver Water Framework Directive priorities through the SW Regional Woodland and Forestry Framework Implementation Plan. This is a regional partnership approach to shape our woods and forests for the future, helping to set priorities and target public investment	South West RBD	2012	Forestry Commission
Sediments (as a direct pollutant); Microbiology; Nutrients; Organic pollutants	The Cplus project will contribute to maintaining and improving river morphology, river water quantity and quality in over 10 of the rivers in the South West, and develop a model for delivering carbon sequestration payments for ecosystems services	South West RBD	2012	Westcountry Rivers Trust
Sediments (as a direct pollutant); Nutrients; Priority	Protect drinking water sources from accidental contamination	Dorset Catchment; East Devon Catchment;	2012	Bristol Water; Westcountry Rivers

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Microbiology	through the provision of targeted advice and projects to improve catchment management	Hampshire Avon Catchment; North Cornwall, Seaton, Looe and Fowey Catchment		Trust; Wessex Water; South West Water; Natural England; Farming and Wildlife Advisory Group; Environment Agency; Cholderton Water; Bournemouth and West Hampshire Water
Sediments (as a direct pollutant); Organic pollutants; Nutrients; Microbiology	Restore wetlands through an advisory approach with landowners through the 'Working Wetlands Project'. This project will restore valuable habitats and reduce land-use impacts on water quality	East Devon Catchment; North Devon Catchment	Implemented	South West Water; Devon Wildlife Trust; Environment Agency
Sediments (as a direct pollutant); Organic pollutants; Nutrients; Microbiology	Continue to develop funding for river improvement projects that are ready for delivery, including the Camel Fisheries Project, AARC Project and other projects on the Upper Tamar, Fowey, Lynher, Tavy and Plym	North Cornwall, Seaton, Looe and Fowey Catchment	2012	Westcountry Rivers Trust
Sediments (as a direct pollutant); Organic pollutants; Microbiology; Nutrients; Physical modification	Killerton Estate Integrated Management Project targeting the Rivers Clyst, Culm and Crannybrook working towards sustainable farming, through an advisory approach for tenant	East Devon Catchment	2012	National Trust

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	farmers on the estate			
Nitrate	Enforcement of Sludge Regulations through cross compliance	South West RBD	Implemented	Land managers and owners; Environment Agency
Nitrate; Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Follow The Code of Good Agricultural Practice - Published advice for operators on nitrate and agri-chemical control	South West RBD	Implemented	Land managers and owners
Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Comply with EA Notice (WRA and S86 and S161, Groundwater Regulations, SSAFO) – make use of site specific notices to remove nitrate and agri-chemical pollution risk to groundwater	South West RBD	Implemented	Land managers and owners; Environment Agency
Nitrate	Make use of site specific notices to remove nitrate pollution risk to groundwater. (WRA and S86 and S161, Groundwater Regulations, contaminated land legislation)	South West RBD	Implemented	Local Authorities
Nitrate	Use of statutory notice powers (WRA S86 and S161, Groundwater Regulations, Silage Slurry and Agricultural Fuel Oils Regulations)	South West RBD	Implemented	Environment Agency
Nitrate	Development planning - planning liaison. Site specific groundwater pollution prevention advice and recommendations. Implement DCLG (Department for	South West RBD	Implemented	Local Authorities

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	Communities and Local Government) Planning Policy Guidance Statement 23 (PPS23) on controlling pollution of groundwater that may arise from development of land			
Priority Substances and Specific Pollutants; Nitrate; Hazardous substances and non-hazardous pollutants	Development planning structure plans - influence location of development to protect groundwater	South West RBD	Implemented	Environment Agency; Water companies
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Provide development planning standing advice	South West RBD	Implemented	Environment Agency
Nitrate	Follow advice on controlling nitrate releases to land and water	South West RBD	Implemented	Land managers and owners
Microbiology; Sediments (as a direct pollutant); Organic pollutants; Nutrients	Linking Environment and Farming (LEAF) educating and advising the farming community on Integrated Farm Management, through the production of publications and resources and a national network of volunteer demonstration farms	South West RBD	Implemented	Linking Environment and Farming
Nitrate; Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Local agricultural partnerships e.g. LEAF, NGOs such as Rivers Trusts, Landcare, Farming & Wildlife Advisory Group - advice to farmers on nitrate and agri-	South West RBD	Implemented	Land managers and owners

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	chemical control			
Microbiology; Nutrients; Organic pollutants; Sediments (as a direct pollutant)	The WATER project will contribute to maintaining and improving the ecological status of over 240km of river in the Axe and Exe catchments and develop a region-wide Payments for Ecosystem Services model based on work to protect these important areas	South West RBD	2012	Westcountry Rivers Trust
Nutrients; Organic pollutants	"Tried and Tested" Nutrient Management Plan offers practical advice to farmers and growers to help plan fertiliser and manure use in a way that protects the environment and saves money	South West RBD	Implemented	National Farmers' Union; Linking Environment and Farming; Farming and Wildlife Advisory Group; Country Landowners Association; Agricultural Industries Confederation
Nutrients	Partnership approach to managing land use and other impacts around Loe Pool to prevent toxic algal blooms through the Loe Pool Forum	The Loe	2012	Loe Pool Forum
Nutrients; Sediments (as a direct pollutant); Organic pollutants; Microbiology	River Exe Project will contribute to maintaining and improving fish habitat and water quality in over 100km of river in the Exe catchment by coppicing, fencing and buffering the river from the risks of land use impacts	Bathern; Haddeo; Lowman; Pulham; Haddeo	Implemented	Westcountry Rivers Trust; River Exe and Tributaries Association

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Algae; Ammonia; Nitrate	Address issue as priority action within this CSF catchment	Argal Reservoir; College Reservoir; Crowdy Reservoir; Stithians Reservoir; Upper Tamar Lake; Wistlandpound Reservoir; Exe	2010	Natural England
Physical modification	Targeted land use interventions (e.g. best farming practice, provision of fencing, etc.), where salmon habitats are directly impacted by land use activities	East Devon Catchment; Hampshire Avon Catchment; North Cornwall, Seaton, Looe and Fowey Catchment; North Devon Catchment; South Devon Catchment	2012	Westcountry Rivers Trust; Natural England; Environment Agency
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Implement pesticides statutory Code of Practice. Comply with published advice for operators on control of plant protection products	South West 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	South West RBD	2012	Land managers and owners; Central Government
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	EU review of approvals for Plant Protection Products	South West RBD	Implemented	EU
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	South West RBD	2012	Central Government

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Groundwater protection advice to Veterinary Medicines Directorate products approvals process	South West RBD	Implemented	Central Government
Priority Hazardous Substances; Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Voluntary Initiative Educational and advice programme to improve and reduce agricultural chemical use	South West RBD	Implemented	Land managers and owners; Voluntary Initiative Partnership
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Implement Groundwater Protection: Policy & Practice - external education on GW pollution prevention	South West RBD	Implemented	Land managers and owners; Environment Agency
Priority Substances and Specific Pollutants; Nitrate; Hazardous substances and non-hazardous pollutants	Proactive targeted farmer education on control of agri-chemicals and nitrate	South West RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants; Nitrate	NetRegs (Environmental Guidance to Business) - external education on GW pollution legislation	South West RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Re-engineer existing discharges to avoid direct discharges of pollutants to groundwater	South West RBD	Implemented	Water companies; Environment Agency
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Registrations (in conjunction with Standard Rules) - implement new regulatory approach arising from implementation of new	South West RBD	2012	Water companies; Environment Agency; Industry leads; Land managers and owners

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	Groundwater Directive (2006/116/EC)			
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Groundwater protection advice to Chemicals Regulation Directorate (formerly the Pesticides Safety Directorate) approvals process and research into amenity use of pesticides	South West RBD	Implemented	Central Government; Environment Agency
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Environmental Permitting – effluent discharges to ground	South West RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Environmental Permitting – disposal of sheep dip and pesticides	South West RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow Sheep Dip Statutory Code of Practice - advice for operators	South West RBD	Implemented	Land managers and owners
Priority Hazardous Substances, Priority Substances and Specific Pollutants	Stop Every Drop - an industry led campaign promoting best practice for the use and disposal of sheep dip to reduce pollution incidents associated with the use of these types of chemicals	South West RBD	Implemented	National Farmers' Union; Farming and Wildlife Advisory Group; Country Landowners Association; Agricultural Industries Confederation; Linking Environment and Farming

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Cypermethrin	UK-wide suspension (temporary) on use as sheep-dip	South West RBD	Implemented	Veterinary Medicines Directorate
Dichlobenil	Targeted action to address diffuse pollution causing Freshwater Fish Directive failures	Yeo (Barnstaple)	2010	Water companies
Isoproturon	Recently introduced UK-wide restrictions will see decreasing trend in emissions and probable compliance by 2015 with no further action	South West RBD	Implemented	Chemicals Regulation Directorate
Metaldehyde	Develop detailed 5-year Catchment Action Plan for Safeguard Zone. Proactive implementation of Metaldehyde Steering Group 'Get Pelletwise' measures	Cannington Bk; Sutton Bingham Reservoir; Durleigh Reservoir	2010	Metaldehyde Steering Group, Water Companies., farmers
Metaldehyde	Water industry scheme to address diffuse pollution in the catchment	Durleigh Reservoir	2010	Wessex Water
Diuron; Methabenzthiazuron; Simazine; Atrazine; Mecoprop; Isoproturon; Diazinon; Dalapon	This substance has been banned/shortly to be withdrawn from use in the UK. No further measures should be required although surveillance monitoring will be done to confirm this	Withey Brook; Stour (lower); Tone, Wellington To Taunton; Yeo Us Over Compton; Durleigh Bk; Lower River Fowey; Hampshire Avon (lower); Upper Tamar Lake; Dart; Sutton Bingham Reservoir; Drift Reservoir; Exe; Durleigh Reservoir	2010	Central Government; Environment Agency

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Abstraction	Reduction in water demand by promoting water abstractor groups	South West RBD	2012	Environment Agency
Abstraction	Water efficiency campaigns (e.g. National Farmers' Union "Water Matters")	South West RBD	Implemented	Regional Stakeholder organisations; National Farmers' Union
Abstraction	Extension of abstraction control to include previously exempt uses	South West RBD	2012	Environment Agency
Abstraction	Promote small-scale storage reservoirs, where they can be justified in the context of the twin track approach of resource development and water demand management	South West RBD	Implemented	Environment Agency
Abstraction	Availability of grants for construction of irrigation and industrial supply reservoirs	South West RBD	2012	Regional Development Agencies
Abstraction and other artificial flow pressures	Registration for previously exempt activity: abstraction of water within water meadow systems	South West RBD	2012	Environment Agency
Abstraction and other artificial flow pressures; Physical modification	As part of South West Water's 'Upstream Thinking' project, the Mires on the Moors project will restore upland blanket bogs and mires on Exmoor and Dartmoor using sustainable management techniques, with flow, ecological and carbon capture benefits	East Devon Catchment; North Devon Catchment; South & West Somerset Catchment; South Devon Catchment	2012	National Park Authorities; South West Water; Environment Agency; Natural England
Direct biological pressures	Contain and control invasive non-	South West RBD	2012	Environment Agency;

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	native species at priority sites through partnership working			Forestry Commission; Land managers and owners; Local Authorities; Natural England; Riparian owners; Environmental NGOs
Direct biological pressures	Ensure that native species are protected and non-native invasive species do not spread as a result of weed cutting activity by establishing a weed removal Code of Practice	South West RBD	2012	Environment Agency; Natural England
Natura 2000 and SSSI actions				
Abstraction and other artificial flow pressures; Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by Application of works notice and s85 of 1991 WRA 1991 (See Annex D)	South West RBD	2010	Environment Agency
Sediments (as a direct pollutant); Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by developing a pollution action plan for protected areas (See Annex D)	South West RBD	2012	Environment Agency; Natural England

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Sediments (as a direct pollutant); Direct biological pressures; Nutrients; Abstraction and other artificial flow pressures; Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by implementing agri-environment scheme (See Annex D)	South West RBD	2012	Natural England
Abstraction and other artificial flow pressures; Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by revoking or amending abstraction licences (See Annex D)	South West RBD	2010	Environment Agency
Nutrients; Sediments (as a direct pollutant)	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by revoking or amending Discharge/PPC Consents (See Annex D)	South West RBD	2012	Environment Agency
Nutrients; Physical modification; Sediments (as a direct pollutant)	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through England Catchment Sensitive Farming Initiative (See Annex D)	South West RBD	2012	Natural England
Physical modification; Sediments (as a direct pollutant)	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Compulsory Management Scheme to address invasive species, morphology and	South West RBD	2012	Natural England

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	hydrology pressures (See Annex D)			
Direct biological pressures; Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through existing local projects to address water quality and invasive species pressures (See Annex D)	South West RBD	2012	Natural England
Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Flood Management Programme (See Annex D)	South West RBD	2012	Local Authorities; Environment Agency
Physical modification; Abstraction and other artificial flow pressures	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through land drainage consents (See Annex D)	South West RBD	2012	Environment Agency
Nutrients; Sediments (as a direct pollutant)	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Regulatory Investigation into diffuse pollution (See Annex D)	South West RBD	2010	Environment Agency; Natural England
Physical modification; Sediments (as a direct pollutant); Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through River Restoration	South West RBD	2012	Natural England; Environment Agency

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	Scheme (See Annex D)			
Abstraction and other artificial flow pressures; Nutrients; Physical modification; Sediments (as a direct pollutant)	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Specific Management Works to address water quality, invasive species, hydrology and morphology pressures (See Annex D)	South West RBD	2012	Environmental NGOs; Land managers and owners; Local Authorities; Natural England; Water companies
Nutrients; Abstraction and other artificial flow pressures; Direct biological pressures; Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through SSSI Management Agreement (See Annex D)	South West RBD	2012	Natural England
Physical modification; Abstraction and other artificial flow pressures	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Water Level Management Plans (See Annex D)	South West RBD	2012	Agriculture and rural land management (under query); Environment Agency
Abstraction and other artificial flow pressures; Physical modification	Contribute to achievement of favourable condition on River Frome SSSI, Amble Marshes SSSI and North Moor SSSI by implementing water level management plans	Dorset Catchment; North Cornwall, Seaton, Looe and Fowey Catchment; South & West Somerset Catchment	2010	North Somerset Internal Drainage Board; West Mendip Internal Drainage Board; Environment Agency
Investigations				
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants;	Continue programme of Soil Structural Survey work, focussing on high risk catchments with little	East Devon Catchment; South & West Somerset Catchment; South Devon	2012	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Nutrients; Microbiology; Sediments (as a direct pollutant)	current data. Ensure results feed into the evidence base to support catchment advisory work	Catchment		
Propetamphos; Algae; Picloram; Pentachlorophenol; Methyl-isoborneol; Geosmin; pesticides; Metazachlor; MCPB; MCPA; IPU; Sulcofuron; Flusilazole; Dichlobenil; Dicamba; Chlortoluron; Carbetamide; Carbendazim; Bentazone; Ammonia; 2,4-D; Nitrate	Further investigation required to confirm risk of failure of WFD Article 7	Dart; Durleigh Reservoir; Stour (lower); Hampshire Avon (lower); Exe; Lower River Tamar; Tone, Wellington To Taunton; Yeo Us Over Compton; Yeo (Barnstaple); Lower River Fowey; Ashford Reservoir; Sutton Bingham Reservoir; Colliford Lake; Argal Reservoir; Drift Reservoir; Durleigh Bk	2010	Environment Agency; Water companies
Nitrate; Phosphate; Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Investigation of Groundwater Dependant Terrestrial Ecosystems (GWDTEs) to assess if they have been significantly damaged as a result of groundwater pollution	South West RBD	Implemented	Environment Agency
Nutrients; Sediments (as a direct pollutant)	Investigate run-off incidents logged on the Environment Agency National Incident Response System so that the Environment Agency can identify and work to resolve reoccurring issues	South West RBD	Implemented	Environment Agency; Natural England
Nutrients; Sediments (as a direct	Where we have clear evidence of	South West RBD	Implemented	Natural England;

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
pollutant)	impacts, investigate sources and impacts of sediments making use of techniques such as sediment fingerprinting and sediment trapping where appropriate. This will be supported by farm advisory initiatives			Environment Agency
Pressures on groundwater (GW) balance; Abstraction	Investigation to improve confidence in groundwater quantitative status result	Yeovil Bridport Sands / Inferior Oolite; Fullers Earth (southeast Yeovil); Forest Marble (east of Bruton)	2012	Environment Agency
DrWPA substance	An investigation into the source of the failures for aluminium	Lower Frome And Piddle	2010	Environment Agency
Organic pollutants; Microbiology; Nutrients; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Demonstrations Catchment Project to test and demonstrate the effect of agricultural diffuse pollution control measures in a representative range of catchment types	Hampshire Avon Catchment	Implemented	Defra; Environment Agency
Phosphate	Further investigation - review fate of phosphate in groundwater / England Catchment Sensitive Farming Initiative	Tamar	2012	Environment Agency
Metaldehyde	Investigate reasons for failure of WFD Article 7 so safeguard zone and development of detailed 5-year catchment action plan can be considered. Proactive implementation of Metaldehyde	Hampshire Avon (lower); Stour (lower)	2010	Metaldehyde Steering Group

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	Steering Group 'Get Pelletwise' measures			

C.5 Angling and conservation

The South West has a rich and diverse range of wildlife, and retains a significant proportion of the UK's overall resource of important wildlife sites, habitats and species. Nearly a tenth of the Region's land area is designated as nationally and internationally important wildlife sites, many of which are unique in Europe. At a more local level, areas of wildlife value may be designated as local nature reserves, county wildlife sites or non-statutory nature reserves.

However, there have been significant declines in certain habitats and species in past years and much of our wildlife is still under threat. Biodiversity in the South West is particularly threatened by land use changes (development, agriculture and water management), climate change and environmental pollution. Locally, other pressures are significant - such as fishing methods in the marine environment.

Fish are one of the best indicators of the state of the water environment, and in the South West, fisheries play an important conservation role as well as providing great recreational opportunities. Work in developing angling creates significant contributions to the Governments' social and economic priorities. Our figures show that there were over 85,000 licence holders resident in the South West in 2005 and that visiting anglers, mainly from the South East, London and the West Midlands, accounted for a quarter of the fishing and associated economic activity. Anglers' annual expenditure on fishing inland waters in the South West totalled about £100 million, supporting approximately 2300 jobs and £50 million of household income. It is crucial that we conserve the fish stocks on which angling depends, and prevent parasites, diseases or inappropriate fish species spreading.

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	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Physical modification	Develop and start to deliver a programme to resolve the 30 most significant physical barriers to fish movement, for instance at Evans on the Tavy, at Holne on the Dart, at Silverton on the Exe, on the Okement at Jacobstowe, on the Somerset Frome and on the Stour at Lydden	South West RBD	2012	Environment Agency
Physical modification	Develop and start delivering a habitat creation program to offset losses of important coastal habitats through sea-level rise and climate change, focusing on opportunities in the Severn, Exe and Tamar Estuaries and in Poole Harbour in the first instance	South West RBD	2012	Environment Agency
Physical modification	Continue to develop and implement programme of river habitat improvement works	South West RBD	2012	Environment Agency; Westcountry Rivers Trust
Abstraction and other artificial flow pressures; Physical modification	As part of South West Water's 'Upstream Thinking' project, the Mires on the Moors project will restore upland blanket bogs and mires on Exmoor and Dartmoor using sustainable management techniques, with flow, ecological and carbon capture benefits	East Devon Catchment; North Devon Catchment; South & West Somerset Catchment; South Devon Catchment	2012	National Park Authorities; South West Water; Environment Agency; Natural England
Physical modification	Undertake habitat creation and enhancement work in urban areas under the 'Trout in the Town' Programme	South West RBD	2012	Wild Trout Trust

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Biota removal (including commercial fish take and weed control)	Complete a comprehensive assessment and prioritisation of all obstructions to eel migration in the South West River Basin District as part of Eel Management Plan delivery	South West RBD	2012	Environment Agency
Biota removal (including commercial fish take and weed control)	Install eel passes at the top five priority sites in the South West River Basin District as part of Eel Management Plan delivery, to include sites on the River Parrett, King Sedgemoor Drain, South Drain and North Drain	Parrett; Kings Sedgemoor Drain; South Drain; North Drain	2014	Environment Agency
Physical modification	Continue to develop funding for fish passes at five weirs on the Rivers Taw and Exe improving ecological conditions in almost 90km of river	East Devon Catchment; North Devon Catchment	2012	Westcountry Rivers Trust
Physical modification	AFTERLIFE Project following on from the STREAM project to carry out river restoration on the Hampshire Avon and River Frome	Dorset Catchment; Hampshire Avon Catchment	Implemented	Natural England; Wessex Water; Environment Agency
Physical modification	Identification of priority landscapes for delivery of Biodiversity Action Plan Objectives to focus landscape scale restoration of habitats including wetlands, wet woodlands and native woodlands	South West RBD	2012	Biodiversity South West
Physical modification	Kings Sedgemoor Wetland Restoration project on the Somerset Levels	Kings Sedgemoor Drain	2012	Somerset County Council; Royal Society for Protection of Birds
Physical modification	The Westcountry Angling Passport project will contribute to improved bank	South West RBD	2012	Westcountry Rivers Trust

Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
Pressure	What Will Happen			
	morphology in over 30km of river in over 20 catchments of the Westcountry by bringing areas of fishing into an angling scheme so farmers derive a profit from their river			
Physical modification; Nutrients	Landscape scale habitat restoration through the 'Wild Penwith Project', aiming to restore and link wetland, heath and river habitats from the North to the South Coast of the Penwith Peninsula	West Cornwall and the Fal Catchment	2012	Cornwall Wildlife Trust
Physical modification; Sediments (as a direct pollutant); Direct biological pressures	Wessex Chalk Streams Project is a partnership approach acting as a 'one stop shop', working with riparian landowners and managers to promote wildlife-friendly river enhancement and management of the River Avon system	Hampshire Avon Catchment	Implemented	Environment Agency; Natural England; Wiltshire Wildlife Trust
Sediments (as a direct pollutant)	Black Poplar and Woody Debris Project, using woody debris to help mitigate siltation problems on impacted fish spawning areas in the Axe Catchment. Where bankside tree cover has been removed the project will seek to replant where appropriate	South West RBD	Implemented	Environment Agency
Sediments (as a direct pollutant); Microbiology; Nutrients; Physical modification; Organic pollutants	Dartmoor Wet Woodland Partnership aiming to enhance the extent and value of Dartmoor's wet woodlands by working with landowners in selected valleys	South West RBD	Implemented	Dartmoor National Park Authority
Sediments (as a direct pollutant)	Freshwater Pearl Mussel Project - as part	North Devon	Implemented	Environment Agency

Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
Pressure	What Will Happen			
pollutant); Nutrients	of the national recovery project for species, continue the captive breeding programmes and undertake river restoration to allow juveniles to be reintroduced to the wild in the Taw and Torridge catchments	Catchment		
Sediments (as a direct pollutant); Physical modification; Direct biological pressures	Living River Project aims to increase awareness and appreciation of the Hampshire Avon and its tributaries. Working with local communities to educate and provide resources as well as involving local people in the practical management of the river	Hampshire Avon Catchment	Implemented	Environment Agency; Local Authorities; Natural England; Wessex Water; Wildlife Trusts
Nutrients; Microbiology; Organic pollutants; Physical modification; Sediments (as a direct pollutant)	'Green Blue' Programme, and associated advisory initiatives (for example in Areas of Outstanding Natural Beauty) promote environmental best practice to the recreational boating community including dealing with sewage and other waste from their boats	South West RBD	Implemented	British Marine Federation; Royal Yachting Association
Nutrients; Organic pollutants; Microbiology; Sediments (as a direct pollutant)	The Cplus project will contribute to maintaining and improving river morphology, river water quantity and quality in over 10 of the rivers in the South West, and develop a model for delivering carbon sequestration payments for ecosystems services	South West RBD	2012	Westcountry Rivers Trust
Nutrients; Organic pollutants; Sediments (as a	Exeter and East Devon, Plymouth, Newton Abbot and North Devon Green	East Devon Catchment; North	2012	Natural England; Plymouth City Council; Exeter City

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
direct pollutant); Microbiology; Physical modification	Infrastructure Study to protect and enhance the environment whilst planning for significant new growth. Opportunities will be identified for creating linked habitat networks.	Devon Catchment		Council; East Devon District Council; Devon County Council; Teignbridge District Council
Nutrients; Sediments (as a direct pollutant); Physical modification; Organic pollutants; Microbiology	Continue to develop new river improvement projects to contribute to maintaining and improving water quality, for instance on the Yealm, Devon Avon and Erme, Tale Valley and White River	South West RBD	2012	Westcountry Rivers Trust
Nutrients; Sediments (as a direct pollutant); Microbiology; Organic pollutants	Dart REDDS Project will contribute to maintaining and improving water quality in over 140km of river in the Dart catchment by coppicing, fencing and buffering the river from the risks of land use impacts	South Devon Catchment	2012	Westcountry Rivers Trust
Nutrients	Partnership approach to managing land use and other impacts around Loe Pool to prevent toxic algal blooms through the Loe Pool Forum	The Loe	2012	Loe Pool Forum
Microbiology; Nutrients; Organic pollutants; Sediments (as a direct pollutant)	Woodland establishment targeted at vulnerable soils within England Catchment Sensitive Farming Initiative areas through the England Woodland Grant Scheme	South West RBD	Implemented	Forestry Commission
Microbiology; Nutrients; Organic pollutants; Physical modification; Sediments (as a direct pollutant)	Survey and advisory work in County Wildlife Sites (CWS) to support the maintenance and enhancement of habitats, including river and wetland habitat which act as buffer strips	North Cornwall, Seaton, Looe and Fowey Catchment; West Cornwall and the Fal Catchment	2012	Cornwall Wildlife Trust; Farming and Wildlife Advisory Group
Microbiology; Organic	Restore wetlands through an advisory	East Devon	Implemented	Devon Wildlife Trust; South

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
pollutants; Sediments (as a direct pollutant); Nutrients	approach with landowners through the 'Working Wetlands Project'. This project will restore valuable habitats and reduce land-use impacts on water quality	Catchment; North Devon Catchment		West Water, Environment Agency
Organic pollutants; Nutrients; Physical modification; Sediments (as a direct pollutant); Microbiology	Brue Valley Living Landscapes Project - a new wetland landscape scale project targeting habitat enhancement and creation including ambitious targets for the restoration of Wetland and other priority habitats	South & West Somerset Catchment	2012	Somerset County Council; Natural England; Somerset Wildlife Trust
Microbiology; Nutrients; Organic pollutants; Physical modification; Sediments (as a direct pollutant)	The River Teign & Tributaries project will help restore natural channel form over 16km of river and the improvement of ecological status on nearly 50km of river	South Devon Catchment	2012	Westcountry Rivers Trust
Microbiology; Nutrients; Organic pollutants; Sediments (as a direct pollutant)	River Exe Project will contribute to maintaining and improving fish habitat and water quality in over 100km of river in the Exe catchment by coppicing, fencing and buffering the river from the risks of land use impacts	Bathern; Haddeo; Pulham; Lowman	Implemented	Westcountry Rivers Trust; River Exe and Tributaries Association
Microbiology; Sediments (as a direct pollutant); Nutrients; Organic pollutants	Continue to develop funding for river improvement projects that are ready for delivery, including the Camel Fisheries Project, AARC Project and other projects on the Upper Tamar, Fowey, Lynher, Tavy and Plym	North Cornwall, Seaton, Looe and Fowey Catchment	2012	Westcountry Rivers Trust
Microbiology; Sediments (as a direct pollutant);	Develop partnerships to create more new woodlands on the River Tone	South & West Somerset Catchment	2012	Woodland Trust

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Nutrients; Physical modification; Organic pollutants				
Organic pollutants	Stakeholder groups will monitor selected sample sites using the Riverfly Partnership Anglers Monitoring Initiative methodology to compliment long-term EA invertebrate monitoring and identify problems	South West RBD	2013	Riverfly Partnership; Westcountry Rivers Trust
Organic pollutants; Nutrients; Physical modification; Sediments (as a direct pollutant); Microbiology	The Somerset Water Management Partnership following on from the Parrett Catchment Project offering farm advice to help manage runoff contributing to increased flood risk and water quality issues	South & West Somerset Catchment	2012	Somerset County Council; Farming and Wildlife Advisory Group
Biota removal (including commercial fish take and weed control)	Implement monitoring of silver eel escapement on the River Huntspill and one other location, still to be identified as part of Eel Management Plan delivery	Huntspill	2012	Environment Agency
Biota removal (including commercial fish take and weed control)	Monitor commercial eel fisheries catch returns and through the assessment of import and export data as part of Eel Management Plan delivery. Target any illegal exploitation of yellow eels and glass eels through Environment Agency enforcement teams	South West RBD	2012	Environment Agency
Biota removal (including commercial fish take and weed control)	Repeat Somerset Levels eel trapping study at the same 30 sites as were used in the last round of survey	South & West Somerset Catchment	2012	Environment Agency
Biota removal (including	Re-stock glass eels to catchments as part	South West RBD	2016	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
commercial fish take and weed control)	of Eel Management Plan delivery. This is to include pre and post stocking surveys			
Biota removal (including commercial fish take and weed control)	Assess yellow and glass eel populations as part of Eel Management Plan delivery, to include monitoring of Glass eels at Oath Lock and Greylake Sluice	Kings Sedgemoor Drain; Parrett	2012	Environment Agency
Biota removal (including commercial fish take and weed control)	Marine biodiversity project to gather data on the condition of the reef habitats around the Isles of Scilly, and to work with fishermen to secure long term site protection	Isles of Scilly	2010	Isles of Scilly Wildlife Trust
Direct biological pressures	Contain and control invasive non-native species at priority sites through partnership working	South West RBD	2012	Environmental NGOs; Environment Agency; Forestry Commission; Local Authorities; Natural England; Riparian owners; Land managers and owners
Direct biological pressures	Implement the action plan to support the GB Invasive Non-Native Species Strategy (see Annex F) focusing on ensuring no deterioration in status, and encourage the establishment of partnerships to coordinate efforts where necessary	South West RBD	2012	Environment Agency
Alien species	Continue to develop our understanding of the location of non-native invasive species in Cornwall, including public participation in survey work to record extent of six key aquatic invasive species	North Cornwall, Seaton, Looe and Fowey Catchment; West Cornwall and the Fal Catchment	Implemented	Cornwall Wildlife Trust
Alien species	Mitigate the spread and impact of non-	South West RBD	Implemented	Bristol Zoo Gardens

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	native invasive crayfish through the South West White-Clawed Crayfish Conservation Project			
Alien species	The Camel Invasive Weeds Project will remove invasive weed from tens of kilometres of the River Camel SAC by controlling Himalayan Balsam and Japanese Knotweed on the river Camel using community pulling groups and contractors	North Cornwall, Seaton, Looe and Fowey Catchment	2012	Westcountry Rivers Trust
Direct biological pressures	Audit high-risk fish movements and enforce against illegal activity	South West RBD	Implemented	Environment Agency
Direct biological pressures	Continue to monitor for impacts from fish farm escapes on native fish populations	South West RBD	Implemented	Environment Agency
Direct biological pressures	Increase awareness and education on fish stocking hazards and regulations, and develop an accreditation scheme	South West RBD	2010	Environment Agency
Direct biological pressures	Support well designed artificial propagation (hatchery) options, that meet National Salmon Stocking policy, to overcome factors limiting natural salmon spawning success	South West RBD	Implemented	Environment Agency
Direct biological pressures	Continue to monitor for undesirable fish species and undertake control where possible	South West RBD	Implemented	Environment Agency
Direct biological pressures	Continue to monitor natural predation of salmon populations and consider appropriate action by third parties where there is a well proven need	South West RBD	Implemented	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Direct biological pressures	Designate Marine Protected Areas as part of the Finding Sanctuary Initiative, extended Bass Nursery Areas and explore exclusion of the most damaging fishing methods from certain areas	South West RBD	Implemented	Natural England
Direct biological pressures	South West Water Vole Project aiming to improve river habitat management in the South West through practical habitat creation and enhancement, control of non-native invasive species, water vole reintroduction and education and awareness raising	South West RBD	2010	Cornwall Wildlife Trust; Environment Agency; British Association for Shooting and Conservation; Dorset Wildlife Trust; East Devon District Council
Direct biological pressures; Physical modification; Sediments (as a direct pollutant)	The Stepping Stones Project carrying out habitat management and creation on chalk streams	Dorset Catchment; Hampshire Avon Catchment	Implemented	Dorset Wildlife Trust; Environment Agency
Direct biological pressures; Physical modification; Sediments (as a direct pollutant)	Winterbournes Project looking after and promoting rare species in winterbournes (spring fed rivers), carrying out physical habitat restoration work to enhance degraded stretches	Dorset Catchment; Hampshire Avon Catchment	Implemented	Dorset Wildlife Trust; Farming and Wildlife Advisory Group; Natural England
Direct biological pressures	The Tamar Hatchery project will improve the ecological status of fish in the Tamar Catchment and promote best practice hatchery conservation work to protect genetic stocks	Tamar catchment	2012	Westcountry Rivers Trust
Direct biological pressures	The SeaTorbay partnership will improve understanding of coastal wildlife and conservation and how the public can	South Devon Catchment	2010	Living Coasts

Pressure	Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
	What Will Happen				
		become involved. A key project is to map the uses of Tor Bay sea bed and the activities affecting it			
Abstraction		Extension of abstraction control to include previously exempt uses	South West RBD	2012	Environment Agency
Abstraction and other artificial flow pressures		Registration for previously exempt activity: abstraction of water within water meadow systems	South West RBD	2012	Environment Agency
Abstraction and other artificial flow pressures; Physical modification		Explore feasibility and identify candidate sites for piloting beaver reintroduction to deliver habitat, flow and biodiversity benefits	South West RBD	2012	Natural England; South West Water; Peoples Trust for Endangered Species
Abstraction and other artificial flow pressures; Physical modification		Purbeck Keystone Project, a partnership approach supporting farming practices to encourage biodiversity and protect habitats through monitoring, water level management plan implementation and habitat management and creation work	Dorset Catchment	Implemented	Purbeck District Council
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Biota removal (including commercial fish take and weed control); Alien species		Education and liaison with recreational anglers promoting catch and release, carrying out invasive species surveys and preventing use of illegal antifoulants, targeted at five Voluntary Marine Conservation Areas in Cornwall	North Cornwall, Seaton, Looe and Fowey Catchment; West Cornwall and the Fal Catchment	2010	Cornwall Wildlife Trust
Natura 2000 and SSSI actions					
Abstraction and other artificial flow pressures; Physical modification		Water Level Management Plans will be	Hampshire Avon Catchment; South & West Somerset	Implemented	Internal Drainage Boards

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	developed and implemented to help bring sites designated under the Habitats Directive into Favourable Conservation Status	Catchment		
Investigations				
Biota removal (including commercial fish take and weed control)	Continue investigation of eel populations at Marazion Marsh and Slapton Ley as part of Eel Management Plan delivery, including the use of traps at tidal barriers on the Taw and Parrett in order to assess recruitment of eels to rivers	Slapton Ley; Marazion River; Parrett; Taw / Torridge	2012	Environment Agency
Alien species	The South West White-Clawed Crayfish Conservation Project will carry out survey work to monitor the distribution of native and non-native crayfish and establish 'Ark' sites to ensure the long-term survival of the species	South West RBD	Implemented	Environment Agency

C.6 Central government

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

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

Other Government Departments

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

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

Table C6: **Actions for central government**

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Sediments (as a direct pollutant); Organic pollutants; Nutrients; Microbiology	Woodland establishment targeted at vulnerable soils within England Catchment Sensitive Farming Initiative areas through the England Woodland Grant Scheme.	South West RBD	Implemented	Forestry Commission
Alien species	Contribute to the development of any EU level initiatives to improve legislation and controls relating to invasive non-native species.	South West RBD	2012	Central Government
Alien species	Control and eradication of topmouth gudgeon (<i>Pseudorasbora parva</i>) and water primrose (<i>Ludwigia grandiflora</i>) at selected sites	South West RBD	2012	Environment Agency; Central Government
Alien species	Develop a national early warning system with contingencies for rapid response control measures to eradicate new invasions	South West RBD	2012	Central Government
Alien species	Develop and implement codes of practice to reduce the spread of invasive non-native species	South West 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	South West 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	South West RBD	2012	Central Government; Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Alien species	Establish a central repository for holding data on invasive non-native species distribution.	South West RBD	2012	Central Government
Alien species	Establish National Invasive Non-Native Species Forums to plan, prioritise and coordinate action	South West 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.	South West RBD	2010	Central Government
Alien species	Integrate invasive non-native species control measures across all policy areas	South West RBD	2012	Central Government; Environment Agency
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; EA Fisheries byelaws; Convention on biological diversity; NERC Act; Habitats Directive; IMO convention on ballast water)	South West 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.	South West RBD	2012	Central Government; Environment Agency
Alien species	Set up and maintain a website that acts as a "one stop shop" for information and advice on invasive non-native species.	South West RBD	Implemented	Central Government

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Alien species	Support established local fora by providing advice and guidance and support control actions by selected local fora	South West 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	South West RBD	2010	Central Government
Natura 2000 and SSSI actions				
Direct biological pressures	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by developing an Invasive species control programme for protected areas (See Annex D)	South West RBD	2012	Natural England
Direct biological pressures; Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through existing local projects to address water quality and invasive species pressures (See Annex D)	South West RBD	2012	Natural England
Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Flood Management Programme (See Annex D)	South West RBD	2012	Environment Agency; Local Authorities
Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Investigation into water quality, hydrology and morphology pressures (See Annex D)	South West RBD	2012	Environment Agency; Natural England
Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through River Restoration	South West RBD	2012	Environment Agency; Natural England

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	Programme for Protected Areas (See Annex D)			
Sediments (as a direct pollutant); Nutrients; Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through River Restoration Scheme (See Annex D)	South West RBD	2012	Natural England; Environment Agency
Nutrients; Physical modification; Sediments (as a direct pollutant); Abstraction and other artificial flow pressures	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Specific Management Works to address water quality, invasive species, hydrology and morphology pressures (See Annex D)	South West RBD	2012	Land managers and owners; Environmental NGOs; Water companies; Natural England; Local Authorities
Alien species	Eradication and control at selected SSSIs and Natura 2000 sites	South West RBD	2012	; Natural England
Nutrients	Contribute to achievement of favourable condition on Amble Marshes SSSI by compulsory management scheme/notice	North Cornwall, Seaton, Looe and Fowey Catchment	2012	Natural England
Direct biological pressures	Contribute to achievement of favourable condition on Moors River System SSSI and River Frome SSSI by implementing invasive species control programme	Dorset Catchment	2010	Environment Agency; Natural England
Physical modification	Contribute to achievement of favourable condition on Moors River System SSSI and River Frome SSSI by implementing river restoration project	Dorset Catchment	2012	Natural England; Environment Agency
Nutrients	Contribute to achievement of favourable condition on Moors River System SSSI, River Frome SSSI, Avon Valley (Bickton To	Dorset Catchment; Hampshire Avon Catchment; North Cornwall, Seaton, Looe and	2012	Environment Agency; Natural England

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	Christchurch) SSSI, Amble Marshes SSSI, Langmead and Weston Level SSSI , North Moor SSSI, Stover Park SSSI, Loe Pool SSSI, Bere Stream SSSI and Langmead and Weston Level SSSI by developing a pollution action plan	Fowey Catchment; South & West Somerset Catchment; South Devon Catchment; West Cornwall and the Fal Catchment		
Abstraction and other artificial flow pressures; Direct biological pressures; Physical modification	Contribute to achievement of favourable condition on Moors River System SSSI, River Frome SSSI, North Exmoor SSSI, Avon Valley (Bickton To Christchurch) SSSI and Dunsdon Farm SSSI by implementing SSSI management agreement	Dorset Catchment; East Devon Catchment; Hampshire Avon Catchment	2012	Natural England
Nutrients; Physical modification; Direct biological pressures; Abstraction and other artificial flow pressures	Contribute to achievement of favourable condition on Moors River System SSSI, River Frome SSSI, North Exmoor SSSI, Avon Valley (Bickton To Christchurch) SSSI, The New Forest SSSI, Amble Marshes SSSI, Langmead and Weston Level SSSI, North Moor SSSI, Stover Park SSSI and Loe Pool SSSI by implementing agri-environment scheme	Dorset Catchment; East Devon Catchment; Hampshire Avon Catchment; North Cornwall, Seaton, Looe and Fowey Catchment; South & West Somerset Catchment; South Devon Catchment; West Cornwall and the Fal Catchment	2012	Natural England
Nutrients	Contribute to achievement of favourable condition on Stover Park SSSI by implementing lake restoration project	South Devon Catchment	2012	Environment Agency; Natural England
Investigations				
Alien species	Seek sustainable and cost-effective methods for managing established invasions, such as biological control	South West RBD	2012	Central Government; Environment Agency
Alien species	Undertake risk assessments to identify	South West RBD	2012	Central Government

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	priority invasive species for mitigation and control action at GB and national levels			

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	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Nutrients; Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Microbiology; Sediments (as a direct pollutant)	Co-ordinate all the efforts to deliver environmental benefits under a strong regional partnership focussed on farm pollution prevention	South West RBD	2012	Bournemouth and West Hampshire Water; Wessex Water; Bristol Water; Cholderton Water; Environment Agency; National Farmers' Union; Natural England; South West Water; Local Authorities
Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients; Microbiology; Organic pollutants	Develop and deliver a programme of Farm Pollution Prevention visits, targeted at high risk soils and farming activities, including those impacts associated with soils and land driven problems	South West RBD	Implemented	Environment Agency
Sediments (as a direct pollutant); Nutrients; Organic pollutants; Microbiology; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Continue the Axe Action Project, which is identifying and resolving problems caused by land use through targeted enforcement and monitoring including wet weather survey	Yarty; Axe (Devon. lower); Axe (Devon. lower); Clyst; Blackwater River; Axe; Corry Brook; Kit Brook; Axe	Implemented	Environment Agency
Nutrients; Organic pollutants; Sediments (as a direct pollutant)	Desilting Programme on the Somerset Levels & Moors will deliver flood benefits, reduce fish kills and improve water quality. Areas nominated for	Sedgemoor Old Rhyne; Yeo Us Over Compton; Yeo Ds Over Compton; South Drain; North Drain;	Implemented	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	dredging include the South Drain, Mark Yeo, West Sedgemoor and Northmoor Main Drain	Mark Yeo		
Physical modification	Continue to develop and implement programme of river habitat improvement works	South West RBD	2012	Westcountry Rivers Trust; Environment Agency
Physical modification	Develop and start to deliver a programme to resolve the 30 most significant physical barriers to fish movement, for instance at Evans on the Tavy, at Holne on the Dart, at Silverton on the Exe, on the Somerset Frome and on the Stour at Lydden	South West RBD	2012	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 results in minimal ecological damage	South West RBD	2010	Environment Agency
Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Develop and deliver guidance and advice to planners to ensure potential impacts from development are avoided and opportunities for	South West RBD	2012	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	improvements realised			
Physical modification	Establish and implement a project on the Lower Clyst to create new intertidal and other habitats through changes to flood risk management infrastructure	Clyst	2012	Royal Society for Protection of Birds; Natural England; Land managers and owners; Environment Agency; East Devon District Council
Physical modification	Taw Torridge Strategy to determine the long-term solutions to sustainable flood and coastal risk management and habitat restoration	Taw / Torridge	2012	Torridge District Council; Environment Agency; Natural England; North Devon District Council; Taw-Torridge Estuary Forum
Biota removal (including commercial fish take and weed control)	Complete a comprehensive assessment and prioritisation of all obstructions to eel migration in the South West River Basin District as part of Eel Management Plan delivery	South West RBD	2015	Environment Agency
Biota removal (including commercial fish take and weed control)	Monitor commercial eel fisheries catch returns and through the assessment of import and export data as part of Eel Management Plan delivery. Target any illegal exploitation of yellow eels and glass eels through Environment Agency enforcement teams	South West RBD	2012	Environment Agency
Biota removal (including commercial fish take and weed control)	Re-stock glass eels to catchments as part of Eel Management Plan delivery. This is to include pre and post	South West RBD	2016	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	stocking surveys			
Biota removal (including commercial fish take and weed control)	Implement monitoring of silver eel escapement on the River Huntspill and one other location, still to be identified as part of Eel Management Plan delivery	Huntspill	2012	Environment Agency
Biota removal (including commercial fish take and weed control)	Install eel passes at the top 5 priority sites in the South West River Basin District as part of Eel Management Plan delivery, to include sites on the River Parrett, King Sedgemoor Drain, South Drain and North Drain	Kings Sedgemoor Drain; Parrett; South Drain; North Drain; Kings Sedgemoor Drain	2014	Environment Agency
Biota removal (including commercial fish take and weed control)	Assess yellow and glass eel populations as part of Eel Management Plan delivery, to include monitoring of Glass eels at Oath Lock and Greylake Sluice	Parrett; Kings Sedgemoor Drain	2012	Environment Agency
Biota removal (including commercial fish take and weed control)	Repeat Somerset Levels eel trapping study at the same 30 sites as were used in the last round of survey	South & West Somerset Catchment	2012	Environment Agency
Direct biological pressures	Contain and control invasive non-native species at priority sites through partnership working	South West RBD	2012	Natural England; Riparian owners; Environment Agency; Local Authorities; Environmental NGOs; Forestry Commission; Land managers and owners
Direct biological pressures	Ensure exploitation of migratory salmonids is maintained at	South West RBD	2012	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	sustainable levels through enforcement and periodic review of Net Limitation Orders			
Direct biological pressures	Minimise illegal Fishing on Coast, rivers and stillwaters through targeted enforcement activity	South West RBD	2012	Environment Agency
Alien species	Control and eradication of topmouth gudgeon (<i>Pseudorasbora parva</i>) and water primrose (<i>Ludwigia grandiflora</i>) at selected sites	South West RBD	2012	Environment Agency; Central Government
Alien species	Develop and implement codes of practice to reduce the spread of invasive non-native species	South West RBD	2012	Central Government; Environment Agency
Alien species	Draw up Individual Species Action Plans for species identified as presenting particular risk levels, to minimise the risks associated with them	South West RBD	2012	Environment Agency; Central Government
Alien species	Integrate invasive non-native species control measures across all policy areas	South West RBD	2012	Central Government; Environment Agency
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; EA Fisheries byelaws; Convention on biological diversity; NERC Act; Habitats Directive; IMO	South West RBD	2012	Central Government; Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	convention on ballast water)			
Organic pollutants	Stakeholder groups will monitor selected sample sites using the Riverfly Partnership Anglers Monitoring Initiative methodology to compliment long-term EA invertebrate monitoring and identify problems	South West RBD	2013	Westcountry Rivers Trust; Riverfly Partnership
Alien species	Provide advice and training on identification, control and disposal of invasive non-native species to all relevant groups and encourage monitoring schemes	South West RBD	2012	Central Government; Environment Agency
Alien species	Reduction of extent of invasive non-native species by operations	South West RBD	2012	Environment Agency
Alien species	Support established local fora by providing advice and guidance and support control actions by selected local fora	South West RBD	2012	Environment Agency; Central Government
Alien species	Work to raise awareness of the of the risks transferring non-native species to the wild amongst the public and target groups	South West RBD	2010	Central Government
Direct biological pressures	Continue to promote 'Catch and Release' for recreational angling and key commercial fisheries operations (for instance in Christchurch Harbour), in order to protect spawning fish stocks	East Devon Catchment; North Cornwall, Seaton, Looe and Fowey Catchment; North Devon Catchment; South Devon Catchment	2012	Environment Agency
Abstraction and other	Continue to deliver investigations and	South West RBD	2012	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
artificial flow pressures	measures relating to understanding and resolving flow related impacts through the Environment Agency Restoring Sustainable Abstraction programme			
Abstraction and other artificial flow pressures; Direct biological pressures	Ensure all significant abstractions and discharges are appropriately screened to minimise the entrainment of key fish species at key life stages	South West RBD	2012	Environment Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants	Enforce REACH Annex 17 restrictions	South West RBD	Implemented	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	South West RBD	2012	Environment Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Microbiology; Sediments (as a direct pollutant); Organic pollutants; Nutrients; Temperature	Floodplain Woodland Project - A project to create and enhance wet woodland and riparian woodland, initially focussing on sites within Devon and Cornwall. Target areas have been identified within those waterbodies most affected by diffuse pollution	River Otter; Culm; Little Dart River; Waldon; Lud Brook; Little Dart River; Am Brook; Wray Brook; Taw	Implemented	Forestry Commission; Woodland Trust; Natural England; Environment Agency; Devon Wildlife Trust; Dartmoor National Park Authority; South West Water
Priority Hazardous Substances, Priority Substances and Specific	Work with the Isles of Scilly Council to review and update waste management practices on the islands	St Agnes; St Mary's; Bryher And Tresco; St Martin's	2012	Environment Agency

Pressure	Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
	What Will Happen				
Pollutants; Nutrients	to minimise the known risk to drinking water supplies				
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate techniques (invasive species)		Exe	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Retain marginal aquatic and riparian habitats (channel alteration)		Exe; Hawcombe Str; Nadder (lower); Hampshire Avon (lower)	2011	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		Hampshire Avon (lower)	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)		Hampshire Avon (lower)	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate vegetation control technique		Hampshire Avon (lower)	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Re-opening existing culverts		Hampshire Avon (lower)	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Sediment management strategies (develop and revise) which could include a)		Hampshire Avon (lower)	2011	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	substrate reinstatement, b) sediment traps, c) allow 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 - Bank rehabilitation / reprofiling	Hampshire Avon (lower); Hawcombe Str	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	Hampshire Avon (lower); Hawcombe Str	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Flood bunds (earth banks) (in place of floodwalls)	Hawcombe Str	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Flow manipulation (e.g. construct structures to normalise flow; realign frontage)	Hawcombe Str	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Removal of hard bank reinforcement / revetment, or replacement with soft engineering solution	Hawcombe Str	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Set-back embankments (a type of managed	Hawcombe Str	2011	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	retreat)			
Physical modification	Flood/Coastal Erosion Risk Management Measure - Increase in-channel morphological diversity	Hawcombe Str; Hampshire Avon (lower)	2011	Environment 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	Hawcombe Str; Hampshire Avon (lower)	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve and, where possible, restore historic aquatic habitats	Hawcombe Str; Hayle; Hampshire Avon (lower)	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate water level management strategies, including timing and volume of water moved	Hawcombe Str; Nadder (lower); Hampshire Avon (lower); Exe	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Managed realignment of flood defence	Hawcombe Str; Taw Estuary	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Selective vegetation control regime	Hayle	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Improve floodplain connectivity	Hayle; Hawcombe Str; Hampshire Avon (lower); Nadder (lower)	2011	Environment Agency
Physical modification	Flood/Coastal Erosion Risk	Nadder (lower);	2011	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	Management Measure - Structures or other mechanisms in place and managed to enable fish to access waters upstream and downstream of the impounding works	Hampshire Avon (lower)		
Physical modification	Flood/Coastal Erosion Risk Management Measure - Operational and structural changes to locks, sluices, weirs, beach control, etc	Nadder (lower); Hawcombe Str; Hampshire Avon (lower)	2011	Environment Agency
Physical modification	Public communications campaign to raise awareness of the ecological impact of small in river dams constructed for fun, known locally as 'Tripper Dams' because they are generally built by day-trippers	North Devon Catchment; South Devon Catchment	2012	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Alteration of channel bed (within culvert)	Plymouth Sound	2027	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	Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate channel maintenance strategies and techniques e.g. remove woody debris only upstream of, or within, areas of urban flood risk	Plymouth Sound	2027	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate techniques (invasive species)	Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Flow manipulation (e.g. construct structures to normalise flow; realign frontage)	Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Managed realignment of flood defence	Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Operational and structural changes to locks, sluices, weirs, beach control, etc	Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Re-opening existing culverts	Plymouth Sound	2027	Environment Agency
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	Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate water level management strategies, including timing and volume of water moved	Plymouth Sound; St. Austell River	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk	Plymouth Sound; St.	2027	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	Management Measure - Preserve (e.g. fencing) and where possible enhance ecological value of marginal aquatic habitat, banks and riparian zone	Austell River		
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	Plymouth Sound; St. Austell River	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Selective vegetation control regime	Plymouth Sound; St. Austell River	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Flood bunds (earth banks) (in place of floodwalls)	St. Austell River	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Increase in-channel morphological diversity	St. Austell River	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Set-back embankments (a type of managed retreat)	St. Austell River	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk	St. Austell River;	2027	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	Management Measure - Appropriate techniques to align and attenuate flow to limit detrimental effects of these features (drainage)	Plymouth Sound		
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate timing (vegetation control)	St. Austell River; Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Appropriate vegetation control technique	St. Austell River; Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Bank rehabilitation / reprofiling	St. Austell River; Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Improve floodplain connectivity	St. Austell River; Plymouth Sound	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	St. Austell River; Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Preserve and, where possible, restore historic aquatic habitats	St. Austell River; Plymouth Sound	2027	Environment Agency
Physical modification	Flood/Coastal Erosion Risk Management Measure - Removal of hard bank reinforcement / revetment, or replacement with soft engineering	St. Austell River; Plymouth Sound	2027	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	solution			
Physical modification	Flood/Coastal Erosion Risk Management Measure - Retain marginal aquatic and riparian habitats (channel alteration)	St. Austell River; Plymouth Sound	2027	Environment Agency
Natura 2000 and SSSI actions				
Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Fisheries Enhancement Project (See Annex D)	South West RBD	2010	Environment Agency
Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Flood Management Programme (See Annex D)	South West RBD	2012	Local Authorities; Environment Agency
Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Investigation into water quality, hydrology and morphology pressures (See Annex D)	South West RBD	2012	Environment Agency; Natural England
Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through River Restoration Programme for Protected Areas (See Annex D)	South West RBD	2012	Natural England; Environment Agency
Physical modification; Abstraction and other	Contribute to achievement of Favourable Conservation Status on	South West RBD	2012	Environment Agency; Agriculture and rural land

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
artificial flow pressures	Natura 2000 Protected Areas through Water Level Management Plans (See Annex D)			management (under query)
Physical modification; Sediments (as a direct pollutant); Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through River Restoration Scheme (See Annex D)	South West RBD	2012	Environment Agency; Natural England
Alien species	Seek sustainable and cost-effective methods for managing established invasions, such as biological control	South West RBD	2012	Environment Agency; Central Government
Alien species	The South West White-Clawed Crayfish Conservation Project will carry out survey work to monitor the distribution of native and non-native crayfish and establish 'Ark' sites to ensure the long-term survival of the species	South West RBD	Implemented	Environment Agency
Direct biological pressures	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by developing an Invasive species control programme for protected areas (See Annex D)	South West RBD	2012	Natural England
Temperature	Investigate the impact of rising river temperatures on fish populations, and where required undertake actions to manage them	South West RBD	2012	Environment Agency
Abstraction and other	Contribute to achievement of	South West RBD	2010	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
artificial flow pressures; Nutrients	Favourable Conservation Status on Natura 2000 Protected Areas by Application of works notice and s85 of 1991 WRA 1991 (See Annex D)			
Abstraction and other artificial flow pressures; Physical modification; Direct biological pressures	Review existing hydropower schemes, including commercial schemes, as to the revised Environment Agency Guidance on Hydro Power Schemes and Best Practice in order to minimise ecological impacts	South West RBD	2012	Environment Agency
Abstraction and other artificial flow pressures; Physical modification; Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through land drainage consents (See Annex D)	South West RBD	2012	Environment Agency
Biota removal (including commercial fish take and weed control)	Continue investigation of eel populations at Marazion Marsh and Slapton Ley as part of Eel Management Plan delivery, including the use of traps at tidal barriers on the Taw and Parrett in order to assess recruitment of eels to rivers	Taw / Torridge; Slapton Ley; Marazion River; Parrett	2013	Environment Agency
Nutrients	Contribute to achievement of favourable condition on Moors River System SSSI, River Frome SSSI, Avon Valley (Bickton To Christchurch) SSSI, Amble Marshes SSSI, Langmead and Weston Level SSSI ,	Dorset Catchment; Hampshire Avon Catchment; North Cornwall, Seaton, Looe and Fowey Catchment; South & West Somerset	2012	Environment Agency; Natural England

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	North Moor SSSI, Stover Park SSSI, Loe Pool SSSI, Bere Stream SSSI and Langmead and Weston Level SSSI by developing a pollution action plan	Catchment; South Devon Catchment; West Cornwall and the Fal Catchment		
Nutrients	Contribute to achievement of favourable condition on Bere Stream SSSI, Moors River System SSSI, River Frome SSSI and Loe Pool SSSI by revoking or amending discharge consents	Dorset Catchment; West Cornwall and the Fal Catchment	2012	Environment Agency
Nutrients	Contribute to achievement of favourable condition on Stover Park SSSI by implementing lake restoration project	South Devon Catchment	2012	Natural England; Environment Agency
Physical modification	Contribute to achievement of favourable condition on Moors River System SSSI and River Frome SSSI by implementing river restoration project	Dorset Catchment	2012	Environment Agency; Natural England
Direct biological pressures	Contribute to achievement of favourable condition on Moors River System SSSI and River Frome SSSI by implementing invasive species control programme	Dorset Catchment	2010	Environment Agency; Natural England
Abstraction and other artificial flow pressures; Physical modification	Contribute to achievement of favourable condition on River Frome SSSI, Amble Marshes SSSI and North Moor SSSI by implementing	Dorset Catchment; North Cornwall, Seaton, Looe and Fowey Catchment; South & West Somerset	2010	North Somerset Internal Drainage Board; Environment Agency; West Mendip Internal Drainage

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	water level management plans	Catchment		Board
Investigations				
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Nutrients; Microbiology; Sediments (as a direct pollutant)	Continue programme of Soil Structural Survey work, focussing on high risk catchments with little current data. Ensure results feed into the evidence base to support catchment advisory work	East Devon Catchment; South & West Somerset Catchment; South Devon Catchment	2012	Environment Agency
Nutrients	Continue to develop our understanding of nutrient sources and budgets in areas where there are uncertainties about options for nutrient management	South West RBD	2012	Environment Agency
Nutrients; Sediments (as a direct pollutant)	Where we have clear evidence of impacts, investigate sources and impacts of sediments making use of techniques such as sediment fingerprinting and sediment trapping where appropriate. This will be supported by farm advisory initiatives	South West RBD	Implemented	Environment Agency; Natural England
Nutrients; Sediments (as a direct pollutant)	Investigate run-off incidents logged on the Environment Agency National Incident Response System so that the Environment Agency can identify and work to resolve reoccurring issues	South West RBD	Implemented	Environment Agency; Natural England
Nutrients; Organic pollutants; Direct biological pressures	Investigate the ecological impact of aquaculture	South West RBD	2012	Environment Agency
Acidification, Microbiology,	Undertake investigations to better	South West RBD	2012	Environment Agency

Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
Pressure	What Will Happen			
Nutrients, Organic Pollutants, Physical Modification, Priority Hazardous Substances, Priority Substances and Specific Pollutants, Sediments.	understand problems in waterbodies where extended deadlines have been put in place and identify actions to resolve them where possible.			
Physical modification	Investigations into the ecological outcomes of measures to mitigate against effects of 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	South West RBD	2010	Environment Agency
Microbiology; Organic pollutants; Physical modification; Salinity; Abstraction and other artificial flow pressures; Direct biological pressures; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Acidification;	Work with the Isles of Scilly Council to develop our understanding of the wider pressures and risks to the groundwaters and coastal waters to allow for effective future management	The Isles of Scilly	2012	Environment Agency

Pressure	Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
	What Will Happen				
Nutrients					
Abstraction and other artificial flow pressures	Improve flow estimates for surface water bodies		South West RBD	2012	Environment Agency
Abstraction and other artificial flow pressures	Investigations at sites identified under the Restoring Sustainable Abstraction Programme (where funded)		South West RBD	2012	Environment Agency
Abstraction and other artificial flow pressures	Review and improve Environmental Flow Indicators		South West RBD	2012	Environment Agency

C.8 Industry, manufacturing and other business

The Public administration & defence sector contributes the highest proportion to the output of the South West River Basin District. The wholesale and distribution, retailing and construction sectors are also significant contributors and Transport equipment is the largest manufacturing sector. Retailing, Health, and Hotels & catering are all significant employment sectors in the South West River Basin District reflecting both the high number of tourists visiting the large ageing population. The South West has a vibrant business community, with the highest survival rate for new businesses outside the South East and East of England.

Commercial sea-fishing makes an important economic contribution to some coastal areas. The fishing industry is a small sector but is relatively more important to the regional economy than is typical nationally. In 2005, over 40,000 tonnes of fish & shellfish worth over £50 million were landed by UK vessels into major South West ports including Plymouth, Brixham, Newlyn, Falmouth, Looe, Padstow, Poole and Weymouth.

All businesses have some environmental footprint, by emitting pollution, producing waste or simply using power. The South West Economic Strategy is a key document to manage the impact of future economic growth, by aiming to demonstrate that this growth can be secured within environmental limits to bring prosperity to the region.

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

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Physical modification	'Fishing for Litter' project will involve fishermen on 60 vessels working out of Newlyn, Brixham, Looe and Plymouth in a project to permanently remove marine litter by providing collection bags and dedicated waste reception facilities	South West RBD	Implemented	(under query)
Physical modification; Priority Hazardous Substances, Priority Substances and Specific	Include Sustainable Drainage Systems in new development, and retrofit where possible. For instance, Plymouth City Council are considering potential SuDS (sustainable	South West RBD	2012	Local Authorities

Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
Pressure	What Will Happen			
Pollutants	drainage systems) schemes including Bickleigh down, Sherford and throughout the Derriford area			
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Implementation of SuDS (sustainable drainage systems) Code of Practice. Comply with published advice for operators on sustainable drainage systems	South West RBD	Implemented	Industry leads
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants; Nitrate	Comply with EA Notice (WRA S86 and S161, Groundwater Regulations, contaminated land legislation) – make use of site specific notices to remove pollutant risk to groundwater	South West RBD	Implemented	Environment Agency; Land managers and owners
Nitrate	Waste exemptions - low risk approach to waste regulation activities	South West RBD	Implemented	Environment Agency
Nutrients	Work with industry to develop and implement Watercress growers voluntary code of practice	Sydling Water; Bere Stream	2012	Environment Agency
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	South West RBD	Implemented	Local Authorities; Land managers and owners
Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Provide development planning standing advice	South West RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Development planning structure plans - influence location of development to protect groundwater; Implement DCLG (Department for Communities and Local Government)	South West RBD	Implemented	Local Authorities; Water companies; Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	Planning Policy Guidance Statement 23 (PPS23) on controlling pollution of groundwater			
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	South West RBD	Implemented	Local Authorities; Environment Agency
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Groundwater protection advice to Veterinary Medicines Directorate products approvals process	South West RBD	Implemented	Land managers and owners
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Registrations (in conjunction with Standard Rules) - Implement new regulatory approach arising from implementation of new Groundwater Directive (2006/116/EC)	South West RBD	2012	Water companies; Land managers and owners; Industry leads; Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow Petrol Retailing Code of Practice (Groundwater Regulations) - advice for operators	South West RBD	Implemented	Industry leads
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow Solvents Code of Practice (Groundwater Regulations) - advice for operators	South West RBD	Implemented	Industry leads
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Implement Groundwater Protection: Policy & Practice - External education on GW pollution prevention	South West RBD	Implemented	Industry leads
Priority Substances and	Local initiative to agree voluntary pollution	South West RBD	2012	Land managers and

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Specific Pollutants; Hazardous substances and non-hazardous pollutants	prevention and remediation of existing land contamination for at risk sites. Outcome: bringing land back into beneficial use and remove potential sources of groundwater contamination			owners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants; Nutrients; Microbiology	Pollution Prevention Visits and campaigns targeted in high risk areas to address small and medium enterprises and industrial sites	South West RBD	2012	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	South West RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Local Pollution Prevention Campaign	12 groundwater bodies in the South West RBD	2015	Environment Agency
Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve pesticide use through the Amenity Forum	South West RBD	Implemented	Amenity Forum
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Comply with environmental permit conditions	South West RBD	Implemented	Industry leads
Priority Substances and Specific Pollutants; Hazardous substances and	Environmental Permitting – effluent discharges to ground	South West RBD	Implemented	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
non-hazardous pollutants				
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Environmental Permitting - Process Industries Regulation	South West RBD	Implemented	Environment Agency
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Environmental Permitting - waste disposal	South West RBD	Implemented	Environment Agency
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Implementation of 'oil-filled cables' operating agreement with electricity transmission companies	South West RBD	Implemented	Industry leads; Environment Agency
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Proposed oil pipelines Operating Agreement(s)	South West RBD	2012	Environment Agency; Industry leads
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Total Oil Operating Agreement	South West RBD	Implemented	Environment Agency; Industry leads
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants; Nitrate	Re-engineer existing discharges to avoid direct discharges of pollutants to groundwater	South West RBD	Implemented	Water companies; Environment Agency
Saline intrusion	CAMS – Implement abstraction licensing controls to minimise and manage risks from saline intrusion	South West RBD	Implemented	Environment Agency; Water companies

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Trichloroethylene	EU-wide ban on use	South West RBD	Implemented	EU
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	South West RBD	Implemented	Environment Agency
Fluoranthene; Benzo(a)pyrene; Benzo (ghi) perylene; Indeno (123-cd) pyrene	EU Restriction on use of PAH content in oil used in the manufacture of tyres	South West RBD	Implemented	EU
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Wheal Maid Tailings Dam Inspection and Remediation	South Cornwall	2015	Environment Agency
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Wheal Jane Minewater Treatment	South Cornwall	2015	Environment Agency
Abstraction	Education & liaison at a local level with builders, plumbers and developers to improve water efficiency	South West RBD	2012	Water companies
Abstraction	Promote water recycling and rainwater harvesting where cost-effective, appropriate and used together with other water demand management measures	South West RBD	2012	Regional Development Agencies; Water companies; Environment Agency
Abstraction	Reduction of water demand through labelling scheme for water efficient products	South West RBD	2012	Industry leads; Defra
Abstraction	Reduction of water demand through offering of	South West RBD	Implemented	Defra; HM Revenue

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
	tax incentives (enhanced Capital Allowances) for the purchase and use of efficient plant and fittings by commercial organisations			and Customs
Abstraction	Water efficiency requirements in Environmental Permitting Regulation (EPR) permits	South West RBD	Implemented	Environment Agency
Natura 2000 and SSSI actions				
Abstraction and other artificial flow pressures	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by revoking or amending abstraction licences (See Annex D)	South West RBD	2010	Environment Agency
Sediments (as a direct pollutant); Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by revoking or amending Discharge/PPC Consents (See Annex D)	South West RBD	2012	Environment Agency
Investigations				
Organic pollutants; Direct biological pressures; Nutrients	Investigate the ecological impact of aquaculture	South West RBD	2012	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.	South West RBD	2010	Environment Agency
DrWPA substance	An investigation into the source of the failures for aluminium	Lower Frome And Piddle	2010	Environment Agency
Priority Substances and	Further investigation - Tamar-Sustainable	Tamar	2015	Environment Agency

Pressure	Description of the action		Date	Lead organisation and partners
	What Will Happen	Where it will happen - Summary		
Specific Pollutants; Hazardous substances and non-hazardous pollutants	management of minewater pollution			
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Further investigation in accordance with recommendations of Defra Non Coal Mine Project	West Cornwall; Tamar; North Cornwall; Teign, Avon, Dart And Erme; Looe And Fowey; South Cornwall	2015	Environment Agency
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Part 2a Remediation; Pilot investigation followed by	Lower Dorset Stour And Lower Hampshire Avon	Implemented	Environment Agency

C.9 Local and regional government

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

The South West River Basin District covers all or parts of six Unitary Authorities (Cornwall, Plymouth, Torbay, Poole, Bournemouth and Wiltshire) and all or part of 19 Districts (West Devon, South Hams, Teignbridge, Exeter, Torridge, North Devon, West Somerset, Mid Devon, East Devon, Taunton Deane, Sedgemoor, Mendip, South Somerset, West Dorset, Purbeck, North Dorset, East Dorset, New Forest and Christchurch) and four counties (Devon, Dorset, Hampshire and Somerset).

Unitary Authorities are single tier and deliver the full range of services, including education, social services, council tax and housing benefits, public libraries, museums and art galleries, traffic and transportation, refuse collection, recycling and disposal, planning, environmental health, swimming pools and leisure facilities, parks, open spaces and countryside including footpaths, cemeteries and crematoria, markets and fairs, registration of births, deaths, marriages and electorates, collecting council tax and business rates, and county and district councils.

County and District councils share these responsibilities between the two tiers.

Town and Parish councils provide local representation but have limited powers and responsibilities.

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

Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
Pressure	What Will Happen			
Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Include Sustainable Drainage Systems in new development, and retrofit where possible. For instance, Plymouth City Council are considering potential SuDS (sustainable drainage systems) schemes including Bickleigh down, Sherford and throughout the Derriford area	South West RBD	2012	Local Authorities
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow SUDS Code of Practice - advice for operators on sustainable drainage systems	South West RBD	Implemented	Industry leads
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Development planning structure plans - influence location of development to protect groundwater; Implement DCLG (Department for Communities and Local Government) Planning Policy Guidance Statement 23 (PPS23) on controlling pollution of groundwater	South West RBD	Implemented	Local Authorities; Water companies; Environment Agency

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Physical modification	Develop and start to deliver a programme to resolve the 30 most significant physical barriers to fish movement, for instance at Evans on the Tavy, at Holne on the Dart, at Silverton on the Exe, on the Somerset Frome and on the Stour at Lydden	South West RBD	2012	Environment Agency
Physical modification	Develop water level management improvement schemes to enhance floodplain and habitat connectivity in the Somerset Levels and Moors through the WAVE (Water Adaptation is Valuable for Everyone) Project	South & West Somerset Catchment	2012	Somerset County Council
Microbiology; Nutrients; Organic pollutants; Sediments (as a direct pollutant); Physical modification	Exeter and East Devon, Plymouth, Newton Abbot and North Devon Green Infrastructure Study to protect and enhance the environment whilst planning for significant new growth. Opportunities will be identified for creating linked habitat networks	East Devon Catchment; North Devon Catchment	2012	Devon County Council; East Devon District Council; Exeter City Council; Natural England; Plymouth City Council; Teignbridge District Council

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Direct biological pressures	Contain and control invasive non-native species at priority sites through partnership working	South West RBD	2012	Riparian owners; Environment Agency; Environmental NGOs; Forestry Commission; Land managers and owners; Local Authorities; Natural England
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Fire service Memorandum of Understanding (MoU) on implementing pollution control measures in emergencies	South West RBD	Implemented	Environment Agency; Local Authorities
Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve pesticide use through the Amenity Forum	South West RBD	Implemented	Amenity Forum
Ammonia; Faecal indicator organisms; Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Local initiative / awareness campaign to encourage Local Authority and contractors safe use of pesticides and herbicides in Source Protection Zones in prioritised areas	South West RBD	2012	Environment Agency

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Priority Substances and Specific Pollutants; Ammonia; Faecal indicator organisms; Hazardous substances and non-hazardous pollutants; Nitrate	Local initiative to encourage Local Planning Authorities to use GP3 (Groundwater Protection: Policy and Practice) to promote best practice and PPS23 (Planning Policy Statement 23) to ensure remediation of brownfield land	South West RBD	2012	Local Authorities
Abstraction and other artificial flow pressures	Recommend that all new homes are built to level three of the Code for Sustainable homes, which includes challenging targets for water efficiency	South West RBD	Implemented	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	South West RBD	2010	Environment Agency

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Natura 2000 and SSSI actions				
Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Flood Management Programme (See Annex D)	South West RBD	2012	Local Authorities; Environment Agency
Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Implementation of Appropriate Coastal Management (See Annex D)	South West RBD	2011	Local Authorities
Direct biological pressures; Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through planning permission enforcement (See Annex D)	South West RBD	2011	Local Authorities
Sediments (as a direct pollutant); Abstraction and other artificial flow pressures; Nutrients; Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Specific Management Works to address water quality, invasive species, hydrology and morphology pressures (See Annex D)	South West RBD	2012	Local Authorities; Natural England; Land managers and owners; Environmental NGOs; Water companies

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Investigations				
Physical modification	Investigations into the ecological outcomes of measures to mitigate against effects of 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	South West RBD	2010	Environment Agency

C.10 Mining and quarrying

The varied geology of the South West means that there has been considerable production of industrial and constructional minerals from quarries and underground mines. Building stones and slate have been worked for centuries where suitable rocks occur. The most important environmental impacts are generally around sediment management.

There is a long history of metal and china clay mining in the west of the District. Waters leaching from long abandoned metal mines can be contaminated with toxic metals such as zinc, lead, cadmium, manganese, copper and can also be quite acidic. Such minewater related pollution can have significant ecological impacts, although in some places with a very long history of contamination, wildlife has adapted to the pollution to an extent. Land subjected to china clay extraction makes a smaller, but locally significant contribution to the pollution and sediment load. These contaminants are ultimately transported to our estuaries, where they accumulate in the sediments. Metal concentrations in the sediments of some South West estuaries (for instance The Fal, Fowey and Tamar) are among the highest in Europe.

Current mining and quarrying activity is well regulated. Dealing with the environmental legacy of historic activities will be expensive and presents a major technical challenge. Although we will make progress, it is likely that in places we will need to continue to live with the impacts for years to come.

Table C10: Mining and quarrying sector

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Sediments (as a direct pollutant)	Develop agreements to manage the potential impacts of the withdrawal of the China Clay Industry, in particular in the areas around St Austell and Lee Moor, taking into account the Cornwall Wildlife Trust produced biodiversity vision for the area	North Cornwall, Seaton, Looe and Fowey Catchment; West Cornwall and the Fal Catchment	2012	Environment Agency; Cornwall Wildlife Trust

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Comply with EA Notice (WRA S86 and S161, Groundwater Regulations, contaminated land legislation) – make use of site specific notices to remove pollutant risk to groundwater	South West RBD	Implemented	Industry leads; 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	South West RBD	Implemented	Local Authorities; Industry leads
Direct biological pressures	Contain and control invasive non-native species at priority sites through partnership working	South West RBD	2012	Natural England; Environment Agency; Environmental NGOs; Forestry Commission; Local Authorities; Riparian owners; Land managers and owners
Nitrate; Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Registrations (in conjunction with Standard Rules) - Implement new regulatory approach arising from implementation of new Groundwater Directive (2006/116/EC)	South West RBD	2012	Environment Agency; Industry leads; Water companies; Land managers and owners

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Wheal Maid Tailings Dam Inspection and Remediation	South Cornwall	2015	Environment Agency
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Wheal Jane Minewater Treatment	South Cornwall	2015	Environment Agency
Abstraction	Extension of abstraction control to include previously exempt uses	South West RBD	2012	Environment Agency
Investigations				
Priority Hazardous Substances, Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Investigate discharges from abandoned metal, and other non-coal mines. Prioritise for inclusion in national agreement with relevant mines partner organisations	6 waterbodies in the North Cornwall, Seaton, Looe and Fowey Catchment; 3 waterbodies in the North Devon Catchment; 5 waterbodies in the Tamar Catchment; 25 waterbodies in the West Cornwall and the Fal Catchment	2012	Environment Agency

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Further investigation - Tamar-Sustainable management of minewater pollution	Tamar	2012	Environment Agency
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Further investigation in accordance with recommendations of Defra Non Coal Mine Project	West Cornwall; Tamar; North Cornwall; Teign, Avon, Dart And Erme; Looe And Fowey; South Cornwall	2012	Environment Agency

C.11 Navigation

Ports and marinas provide important regional infrastructure supporting local economies and businesses. Ports handle approximately 95 per cent of UK trade in tonnage terms. Domestic coastal freight services contribute to reducing road congestion and can provide a more environmentally friendly mode of transport than road or rail. This could increase in the future with an increase in coastal shipping. The South West River Basin District has a number of important ports including Plymouth, Poole and Fowey. Over half of Plymouth's throughput is bulk fuels and the remainder is dry bulk, general cargo and ferry traffic to France and Spain. Poole, which is the largest port in the River Basin District also handles bulk and general cargo but its main business at present is ferry traffic. Together with other ports in the South West Poole has a very significant leisure related business. Fowey also has leisure and some cruise calls but the majority of traffic is exported china clay from local quarries. Shipping relies on safe access to water of an adequate depth for access to markets.

Ports authorities are responsible for navigational safety in their areas and generally have a statutory duty to 'maintain and improve' their ports. This leads to the requirement to undertake dredging to maintain and deepen channels to ensure safe access. Metal concentrations in some South West estuarine sediments are among the highest in the country and levels of chemicals used as anti-foulants are also high in a number of locations. This contamination can be released into the water as a result of dredging or disturbance. This causes operational problems for port and harbour authorities that may need to dredge for navigation purposes and for some shellfisheries. Ports and marinas can be directly affected by discharges upstream, leading to water quality issues.

The South West coast is popular with tourists and there are a significant number of marinas for example at Poole, Weymouth, Dartmouth, Plymouth and Falmouth. A British Marine Federation report on marinas and moorings for both inland and coastal sectors illustrated that the demand for moorings exceeds the supply in coastal waters. For inland waters, there is a strong demand for moorings for current and mid term requirements, with current waiting lists indicating an overwhelming demand for power moorings.

Table C11: Actions for the Navigation sector

Pressure	Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
	What Will Happen				
Priority Hazardous Substances, Priority Substances and Specific Pollutants;	Develop national guidance framework on dredging to inform Programme of Measures to meet WFD objectives		48 waterbodies in South West RBD	2010	Defra
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		48 waterbodies in South West RBD	2010	Defra
Priority Hazardous Substances, Priority Substances and Specific Pollutants;	Apply national guidance framework on dredging and disposal of dredgings to refine local measures as appropriate (where not disproportionately costly or technically infeasible)		48 waterbodies in South West RBD	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 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)		48 waterbodies in South West RBD	2010	Environment Agency
Tributyltin compounds	Review existing controls for dredging and disposal of dredgings inside and outside harbour limits as appropriate		48 waterbodies in South West RBD	2012	Marine and Fisheries Agency
Tributyltin compounds	EU-wide ban on marketing of TBT as a biocide in		South West	Implemented	EU

Pressure	Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
	What Will Happen				
	the EU		RBD		
Tributyltin compounds	EU-wide non-application of TBT to boat hulls from July 2003. From January 2008 TBT should not be used on ship hulls or there should be a coating to prevent leaching of underlying TBT anti-foulants		South West RBD	Implemented	EU
Tributyltin compounds	Help prevent illegal use of old TBT containing products		South West RBD	Implemented	British Marine Federation; British Waterways; Environment Agency; Royal Yachting Association
Direct biological pressures	Contain and control invasive non-native species at priority sites through partnership working.		South West RBD	2012	Land managers and owners; Natural England; Riparian owners; Local Authorities; Forestry Commission; Environmental NGOs; Environment Agency
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)		South West RBD	2012	Environment Agency
Nutrients; Microbiology; Organic pollutants; Physical modification; Sediments (as a direct pollutant)	'Green Blue' Programme, and associated advisory initiatives (for example in Areas of Outstanding Natural Beauty) promote environmental best practice to the recreational boating community including dealing with sewage and other waste from their boats		South West RBD	Implemented	British Marine Federation; Royal Yachting Association

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Investigations				
Tributyltin compounds	Investigate the reason for failure: to assess the contribution from dredging or disposal activities on EQS compliance as appropriate	Red River (lower); Stour (lower); Lower River Tavy; Lower River Camel; Lower River Fal; Lower River Carnon And Perranwell Stream; Lower River Tamar; River Lynher; River Teign; Dart; Erme; Axe; Tone, Wellington To Taunton; River Otter; Parrett; River Torridge; Tone Ds Taunton; Brue; Yealm; Plymouth Sound; Carrick Roads Inner; Carrick Roads Outer	2012	Environment Agency

C.12 Urban and transport

Just over 3 million people live in the South West River Basin District making it one of the least densely populated of all of the river basin districts. It does however contain significant urban areas such as Plymouth, Poole, Exeter and Bournemouth, and the population is growing. North Dorset, Torridge, Restormel, West Wiltshire and Exeter were among the fastest growing 10% of local authority areas in England between 1994 and 2004.

The region has a relatively low density of population and this dispersed pattern of settlements reduces accessibility to key services and employment opportunities for many people. The larger cities and towns tend to have a net inflow of commuters drawn mostly from the surrounding area although longer distance commuting on the region's trunk roads and motorways is a growing trend. We must plan for continued economic and population growth.

As economic, industrial and housing development continues, we are seeing an increase in problems related to runoff from urban areas and our highways. Rapid runoff of water from impermeable surfaces enters our sewerage network, washing pollutants with it. In many locations, the sewers that receive this surface water runoff are 'combined', meaning they also carry sewage. The sheer volume of runoff can overwhelm the sewerage network, and although the great majority of problems have now been resolved, maintenance remains a concern. Extreme runoff events are likely to become more frequent as climate change continues. A move to more sustainable drainage systems will reduce the direct impacts associated with urban runoff described above, with benefits for all water users. It will also contribute to managing our water resources better by holding onto our water for longer.

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

Pressure	Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
	What Will Happen				
Sediments (as a direct pollutant); Priority Hazardous Substances, Priority Substances and Specific Pollutants; Organic pollutants; Microbiology; Nutrients	Environment Agency and Highways Agency Memorandum of Understanding (MoU) and associated initiatives		South West RBD	Implemented	Highways Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Highways Agency Programme to investigate soakaways		South West RBD	Implemented	Highways 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 results in minimal ecological damage		South West RBD	2010	Environment Agency
Physical modification; Priority Hazardous Substances, Priority Substances and Specific Pollutants	Include Sustainable Drainage Systems in new development, and retrofit where possible.		South West RBD	2012	Local Authorities
Hazardous substances and	Follow SuDS (sustainable drainage systems) Code		South West	Implemented	Industry leads

Pressure	Description of the action		Where it will happen - Summary	Date	Lead organisation and partners
	What Will Happen				
non-hazardous pollutants; Priority Substances and Specific Pollutants	of Practice - advice for operators on sustainable drainage systems		RBD		
Nitrate; Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants; Faecal indicator organisms; Ammonia	Develop inventory and review current private sewage discharges to ground. Review discharge consent/encourage applicants to apply for consents, and upgrade treatment or improve practice for small sewage treatment works and septic tanks where investigations are found to show non-compliance with legislation		South West RBD	2012	Environment Agency
Nitrate; Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Registrations (in conjunction with Standard Rules) - implement new regulatory approach arising from implementation of new Groundwater Directive (2006/116/EC)		South West RBD	2012	Land managers and owners; Industry leads; Environment Agency; Water companies
Microbiology; Sediments (as a direct pollutant); Organic pollutants; Priority Hazardous Substances, Priority Substances and Specific Pollutants; Nutrients	National Fire Service Protocol to minimise the risk of pollution during fire emergencies		South West RBD	Implemented	National Fire Service
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Comply with EA Notice (WRA S86 and S161, Groundwater Regulations) – make use of site specific notices to remove pollutant risks to groundwater		South West RBD	Implemented	Environment Agency
Hazardous substances and non-hazardous pollutants; Priority Substances and	Comply with new EC Sustainable Use of Pesticides Directive to control use of Plant Protection Products		South West RBD	2012	Land managers and owners

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Specific Pollutants				
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Follow Pesticides Code of Practice - advice for operators on control of plant protection products	South West RBD	Implemented	Industry leads
Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve pesticide use through the Amenity Forum	South West RBD	Implemented	Amenity Forum
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Implementation of Network Rail Pesticide protocol	South West RBD	Implemented	Environment Agency; Industry leads
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Comply with WRA consent conditions	South West RBD	Implemented	Environment Agency
Direct biological pressures	Contain and control invasive non-native species at priority sites through partnership working	South West RBD	2012	Environment Agency; Forestry Commission; Land managers and owners; Local Authorities; Natural England; Environmental NGOs; Riparian owners
Investigations				
Physical modification	Investigations into the ecological outcomes of measures to mitigate against effects of Flood And	South West RBD	2010	Environment Agency

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	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			
Nitrate; Hazardous substances and non-hazardous pollutants; Faecal indicator organisms; Ammonia; Priority Substances and Specific Pollutants	Investigations to identify areas at risk of contaminants from urban and transport activities, and develop targeted pollution prevention partnerships. Outcome: reduction in pollution from non agricultural pesticides, road drainage, road salt, hydrocarbons and foul drainage. Develop Memorandum Of Understanding	South West RBD	2012	Environment Agency
DrWPA substance	An investigation into the source of the failures for aluminium	Lower Frome And Piddle	2010	Environment Agency

C.13 Water industry

There are two water and sewerage service companies operating in the South West River Basin District – South West Water and Wessex Water. All the households served by South West Water are within the SW River Basin District, and over half of the Households served by Wessex Water. In the South West Water area in particular, water and sewerage charges are significantly higher, as a proportion of disposable income, than in the rest of the country.

In addition, three water-only companies also operate in the District. More than half of the Bournemouth and West Hampshire Water Company fall within the South West River Basin District as do all of the households supplied by the Cholderton Water Company and a small number of households served by Bristol Water.

As well as having some of the finest rivers in the country, the South West is also an outstanding coastal environment. Our rivers and coasts support a diverse ecology as well as a range of uses from tourism and recreation to the fishing industry. Protecting our waters and ensuring these uses can continue means that sewage and other effluents need to be treated to very high standards. Achieving these standards is complicated by significant seasonal fluctuations in the population which result from the popularity of the District as a holiday destination.

Although the water industry is regulated consistently across the country as a whole, the challenges companies face vary significantly across the District. For example, one important difference is the source of the drinking water supplied by the industry. For the companies operating in the West, drinking water is predominantly supplied from surface waters, while in the East, the bulk of the water supplied is taken from underground aquifers. This means that the companies in the South West operate in different ways to provide a secure high quality water supply.

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

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Organic Pollutants (BOD, Ammonia), Micro-biology (Faecal Indicator Organisms)	Improvement of water company assets in the West Cornwall and the Fal Catchment under the next round of company investment (PR09), including: - Ensure no deterioration in current water quality as a result of increased volumes of discharge from Praze-An-Beeble STW	West Cornwall and the Fal Catchment	2010	South West Water
Organic Pollutants (Ammonia), Nutrients (Phosphate), Micro-biology (Faecal Indicator Organisms)	Improvement of water company assets in the Dorset Catchment under the next round of company investment (PR09), including: - Ensure no deterioration in current water quality as a result of increased volumes of discharge from Mere STW and Puddletown STW	Dorset Catchment	2010	Wessex Water
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the East Devon Catchment under the next round of company investment (PR09), including: - Ensure no deterioration in current water quality as a result of increased volumes of discharge from Willand (Jaycroft) STW,	East Devon Catchment	2	South West Water

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	Sampford Peverell STW and Dunkeswell STW			
Organic Pollutants (Ammonia) and Micro-biology (Faecal Indicator Organisms)	<p>Improvement of water company assets in the North Cornwall, Seaton, Looe and Fowey Catchment under the next round of company investment (PR09), including:</p> <ul style="list-style-type: none"> - Ensure no deterioration in current water quality as a result of increased volumes of discharge from Menheniot STW, Buckland Brewer STW and Fraddon STW - Improved shellfish waters as a result of the installation of UV treatment at Bodmin (Nantstallon) STW, Bodmin (Scarletts Well) STW, Little Petherick STW, Chapel Amble, Golent and Lostwithiel STWs 	North Cornwall, Seaton Looe and Fowey catchment	2010	South West Water
Organic Pollutants (BOD, Ammonia), Micro-biology (Faecal Indicator Organisms)	<p>Improvement of water company assets in the North Devon Catchment under the next round of company investment (PR09), including:</p> <ul style="list-style-type: none"> - Ensure no deterioration in current water quality as a result of 	North Devon Catchment	2010	South West Water

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	increased volumes of discharge from Hatherleigh STW			
Organic Pollutants (Ammonia), Nutrients (Phosphate)	Improvement of water company assets in the South and West Somerset Catchment under the next round of company investment (PR09), including: - Ensure no deterioration in current water quality as a result of increased volumes of discharge from Bishops Lydeard STW and Taunton Ham STW. - Improve discharges from Evercreech STW, Wells STW, Sherborne STW, Shepton Mallet STW, Glastonbury STW, and Yeovil Pen Mill STW associated with 2007 sensitive areas (eutrophic) designations	South and West Somerset Catchment	2010	Wessex Water
Nutrients (Nitrate), Micro-biology (Faecal Indicator Organisms)	Improvement of water company assets in the South Devon Catchment under AMP4 and the next round of company investment (PR09), including: - Nutrient removal from discharges from Kingsbridge STW. - Improved shellfish waters as a	South Devon Catchment	2010	South West Water

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	result of a scheme to improve discharges from Heathfield STW by installing UV treatment and reducing spills from the inlet works and storm tank (AMP4).			
Organic Pollutants (BOD, Ammonia)	Improvement of water company assets in the Tamar Catchment under the next round of company investment (PR09), including: - Ensure no deterioration in current water quality as a result of increased volumes of discharge from Gratton STW, Lamerton STW and Sparkwell STW	Tamar Catchment	2010	South West Water
Faecal indicator organisms; Hazardous substances and non-hazardous pollutants; Ammonia; Nitrate; Priority Substances and Specific Pollutants	Prioritisation of vulnerable groundwater areas which may need provision of first time rural sewerage under Water Resources Act (1991) s101 targeting Source Protection Zone 1 and Groundwater Flooding areas. Outcome - identification of priority areas to use in liaison with Local Planning Authorities	South West RBD	2012	Environment Agency
Hazardous substances and non-hazardous pollutants; Nitrate; Priority Substances and Specific Pollutants	Comply with discharge consent conditions	South West RBD	Implemented	Water companies

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants	Comply with EA Notice (WRA and S86 and S161, Groundwater Regulations, Contaminated land legislation) – make use of site specific notices to remove pollution risk to groundwater	South West RBD	Implemented	Land managers and owners
Nitrate	Make use of site specific notices to remove nitrate pollution risk to groundwater. (WRA and S86 and S161, Groundwater Regulations, contaminated land legislation)	South West RBD	Implemented	Local Authorities
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	South West RBD	Implemented	Local Authorities
Hazardous substances and non-hazardous pollutants; Priority Substances and Specific Pollutants; Nitrate	PR04 – Water Company spending review	South West RBD	Implemented	Central Government
Nitrate	Provision of first time rural sewerage schemes	South West RBD	Implemented	Water companies
Nitrate	Sludge Regulations - advice to operators	South West RBD	Implemented	Environment Agency; Water companies
Nitrate	Sludge Regulations - enforcement	South West RBD	Implemented	Water companies; Environment Agency
Priority Substances and Specific Pollutants; Nitrate; Hazardous substances and non-hazardous	Re-engineer existing discharges to avoid direct discharges of pollutants to groundwater for	South West RBD	Implemented	Water companies; Environment Agency

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
pollutants	instance at Bosweddon STW, Bickerton and Denbury STW			
Nutrients	Separate surface water drainage and foul drainage where appropriate	South West RBD	Implemented	South West Water; Wessex Water
Nutrients	Trial more sustainable alternatives to existing sewage works processes to reduce or mitigate the impact of nutrient rich effluents	South & West Somerset Catchment	2012	Wessex Water
Priority Hazardous Substances, Priority Substances and Specific Pollutants, Nutrients	Wessex Water catchment schemes to address diffuse pollution of groundwaters at 13 locations across the South West, for example at Friar Waddon, Sturminster Marshall and Shapwick.	South & West Somerset Catchment, Dorset Catchment, Hampshire Avon Catchment	2012	Wessex Water
Priority Hazardous Substances, Priority Substances and Specific Pollutants	General guidance to improve pesticide use through the Amenity Forum	South West RBD	Implemented	Amenity Forum
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants	Control of mine water intrusion by reducing groundwater abstraction	South West RBD	Implemented	Water companies; Environment Agency
Metaldehyde	Develop detailed 5-year Catchment Action Plan for Safeguard Zone. Proactive implementation of Metaldehyde Steering Group 'Get Pelletwise'	Cannington Bk (Ashford Reservoir); Sutton Bingham Reservoir; Durleigh Reservoir	2010	Metaldehyde Steering Group, Water Companies., farmers

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	measures			
Metaldehyde	Water industry scheme to address diffuse pollution in the catchment	Durleigh Reservoir	2010	Wessex Water
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants; Nitrate	Implement Groundwater Protection: Policy & Practice - External education on GW pollution prevention	South West RBD	Implemented	Land managers and owners; Environment Agency
Priority Substances and Specific Pollutants; Hazardous substances and non-hazardous pollutants; Nitrate	Registrations (in conjunction with Standard Rules) - Implement new regulatory approach arising from implementation of new Groundwater Directive (2006/116/EC)	South West RBD	2012	Land managers and owners; Water companies; Industry leads; Environment Agency
Priority Substances and Specific Pollutants; Phosphate; Nitrate; Hazardous substances and non-hazardous pollutants	Investigation of Groundwater Dependant Terrestrial Ecosystems (GWDTEs) to assess if they have been significantly damaged as a result of groundwater pollution	South West RBD	Implemented	Environment Agency
Abstraction	Coordinated education and awareness on water efficiency and re-use to promote value of water	South West RBD	2012	Environment Agency
Abstraction	Ensure the need for appropriate Water Cycle Studies are included in regional and local plans, particularly in growth or high risk areas	South West RBD	2012	Developers; Environment Agency; Local Authorities; Water companies

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Abstraction	Include strong water efficiency policies in Spatial Strategies and Local Development Plans / Frameworks	South West RBD	2012	Regional Assemblies; Local Authorities; Central Government
Abstraction	Reduction of water demand through installation of domestic meters on change of occupier	South West RBD	Implemented	Wessex Water; Bournemouth and West Hampshire Water
Abstraction	Reduction of water demand through promotion of free domestic meters	South West RBD	Implemented	Water companies
Abstraction	Reduction of water demand through use of innovative tariffs for metered properties	South West RBD	2012	Water companies
Abstraction	Reduction of leakage through active leakage control and customer supply pipe repair policies	South West RBD	Implemented	Water companies
Abstraction	Schools based education and awareness campaigns for sustainable water use	South West RBD	2012	Water companies
Abstraction	Extension of abstraction control to include previously exempt uses	South West RBD	2012	Environment Agency
Abstraction and other artificial flow pressures	Coordinated education and awareness campaigns on water efficiency and re-use to promote value of water	South West RBD	2012	South West Water; Wessex Water; Energy Savings Trust; Cholderton Water; Bournemouth and West Hampshire

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
				Water; Bristol Water
Abstraction and other artificial flow pressures	Use of tree planting to deliver water resource protection, including shading of rivers and streams to prevent over-heating	South West RBD	2012	Environment Agency
Abstraction and other artificial flow pressures	Water companies to improve water efficiency through provision of water efficiency devices	South West RBD	2012	Bristol Water; Cholderton Water; Bournemouth and West Hampshire Water; Wessex Water; South West Water
Direct biological pressures	Contain and control invasive non-native species at priority sites through partnership working	South West RBD	2012	Forestry Commission; Environment Agency; Environmental NGOs; Land managers and owners; Local Authorities; Riparian owners; Natural England
Saline intrusion	CAMS – Implement abstraction licensing controls to minimise and manage risks from saline intrusion	South West RBD	Implemented	Environment Agency; Water companies
Natura 2000 and SSSI actions				
Abstraction and other artificial flow pressures; Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by revoking or amending abstraction licences (See Annex	South West RBD	2010	Environment Agency

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	D)			
Nutrients; Sediments (as a direct pollutant)	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas by revoking or amending Discharge/PPC Consents (See Annex D)	South West RBD	2012	Environment Agency
Abstraction and other artificial flow pressures; Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Implementing AMP Investigation (See Annex D)	South West RBD	2012	Water companies
Abstraction and other artificial flow pressures; Nutrients	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Implementing AMP Schemes (See Annex D)	South West RBD	2012	Water companies
Sediments (as a direct pollutant); Abstraction and other artificial flow pressures; Nutrients; Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through Specific Management Works to address water quality, invasive species, hydrology and morphology pressures (See Annex D), including land management schemes by South West Water at Colliford Reservoir, De Lank WTW, Countess Weir STW, Bystock Ponds, Squabmoor	South West RBD	2012	Land managers and owners; Local Authorities; Environmental NGOs; Natural England; Water companies

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	Reservoir, Camelford, Axe Valley, Lopewell Dam, Burrator Quarry, Mary Tavy, Venford Reservoir and Crowdy Reservoir.			
Abstraction and other artificial flow pressures; Direct biological pressures; Nutrients; Physical modification	Contribute to achievement of Favourable Conservation Status on Natura 2000 Protected Areas through SSSI Management Agreement (See Annex D)	South West RBD	2012	Natural England
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site (prevent fish entrainment): Bourne (inc. Nine Mile)	Bourne	2015	Wessex Water; Environment Agency
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: Chitterne Brook Stream Support (post project monitoring)	Chitterne Brook	2015	Wessex Water; Environment Agency
Abstraction and other artificial flow pressures	Modification of Abstraction licence to ensure no adverse effect on integrity of Natura 2000 site: Hampshire Avon SAC	Upper Hampshire Avon	2015	Wessex Water; Environment Agency
Abstraction and other artificial flow pressures	Modification of Abstraction	South Devon Catchment	2015	South West Water; Environment Agency

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	licences to ensure no adverse effect on integrity of Natura 2000 site (prevent fish entrainment): Dartmoor SAC			
Nutrients	Contribute to achievement of favourable condition on Bere Stream SSSI and River Frome SSSI by implementing AMP schemes	Dorset Catchment	2010	Wessex Water
Investigations				
Organic Pollutants (BOD, Ammonia), Micro-biology (Faecal Indicator Organisms)	Investigation of water company assets in the West Cornwall and the Fal Catchment under the next round of company investment (PR09). These include: - Better understanding of the pressures on river and Shellfish Waters through investigations into discharges from a number of consented storm overflows (CSOs), emergency overflows (EOs), and pumping stations (PSs), and from College STW,	West Cornwall and the Fal Catchment	2010	South West Water

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	<p>alongside related investigations into the impacts of water company assets on the Fal Estuary and Helford Shellfish Waters as referenced in the Shellfish Water Pollution Reduction Plan for each water</p>			
<p>Organic Pollutants (Ammonia), Nutrients (Phosphate), Micro-biology (Faecal Indicator Organisms)</p>	<p>Investigation of water company assets in the Dorset Catchment under the next round of company investment (PR09). These include:</p> <ul style="list-style-type: none"> - Investigations to assess the impact of water company assets on Poole Harbour SSSI, Radipole Lake SSSI, Bere stream SSSI and River Frome SSSI (Maiden Newton - Dorchester). - Better understanding of the pressures on Shellfish Waters through investigations into discharges from a number of consented storm overflows (CSOs), emergency overflows (EOs), Storm Sewer Overflows (SSOs) and pumping stations (PSs), alongside related investigations into the impacts of water company assets on 	<p>Dorset Catchment</p>	<p>2010</p>	<p>Wessex Water</p>

Description of the action				
Pressure	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	shellfish waters at Poole Harbour as referenced in the Shellfish Water Pollution Reduction Plan for each water			
Organic Pollutants (BOD, Ammonia)	<p>Investigation of water company assets in the East Devon Catchment under the next round of company investment (PR09). These include:</p> <ul style="list-style-type: none"> - Better understanding of the pressures on Shellfish Waters through investigations into discharges from a number of consented storm overflows (CSOs) and pumping stations (PSs) alongside related investigations into the impacts of water company assets on the Exe Shellfish Water as referenced in the Shellfish Water Pollution Reduction Plan for each water. - Better understanding of the pressures on Bathing Water Quality at Lyme Regis and Teignmouth, and of pressures on the quality of drinking water supplies at Tottiford Water Treatment Works and Wimbleball Reservoir, as a result of 	East Devon Catchment	2010	South West Water

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	investigations			
Organic Pollutants (Ammonia) and Micro-biology (Faecal Indicator Organisms)	Investigation of water company assets in the North Cornwall, Seaton, Looe and Fowey Catchment under the next round of company investment (PR09). These include: - Better understanding of the pressures on Bathing Water Quality at East Looe, and on drinking water quality at Lowermoor, De Lank, Bastreet and St Cleer water treatment works as a result of investigations - Better understanding of the pressures on Shellfish Waters through investigations into discharges from a number of consented storm overflows (CSOs) and Sewage Treatment Works (STWs) to include: Sarah's View CSO, Coulson Park SPS, Lostwithiel STW storm tank and Fowey STW storm tank	North Cornwall, Seaton Looe and Fowey catchment	2010	South West Water
Organic Pollutants (BOD, Ammonia), Micro-biology (Faecal Indicator Organisms)	Investigation of water company assets in the North Devon Catchment under the next round of company investment (PR09). These include:	North Devon Catchment	2010	South West Water

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	<ul style="list-style-type: none"> - Better understanding of the pressures on the Bathing Water Quality at Combe Martin Bathing Water, Ilfracombe Bathing Water, and Taw Torridge Bathing Water (a cBWD mandatory failure under the current Bathing Waters Directive) as a result of investigations. - Better understanding of the pressures on drinking water quality in the Slade and Meldon reservoirs as a result of catchment investigations - Better understanding of the pressures on Shellfish Waters through investigations into discharges from a number of consented storm overflows (CSOs), sewage treatment works (STWs), emergency overflows (EOs), and pumping stations (PSs), alongside related investigations into the impacts of water company assets at Taw-Torridge, as referenced in the Shellfish Water Pollution Reduction Plan for each water 			

Pressure	Description of the action What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Organic Pollutants (Ammonia), Nutrients (Phosphate)	Investigation of water company assets in the South and West Somerset Catchment under the next round of company investment (PR09) to deliver improvements or investigate the need for further investment. These include: - Investigate the impact of water company assets under the Somerset Level and Moors sustainable sewage treatment investigation. - Better understanding of the pressures on Bathing Water Quality at Burnham Jetty and Blue Anchor Bathing Waters as a result of investigations. - Better understanding of the pressures on drinking water quality Sutton Bingham and Durleigh reservoirs as a result of investigations	South and West Somerset Catchment	2010	Wessex Water
Nutrients (Nitrate), Micro-biology (Faecal Indicator Organisms)	Investigation of water company assets in the South Devon Catchment under the next round of company investment (PR09) . These include: - Investigate the impact of water	South Devon Catchment	2010	South West Water

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
	<p>company assets on Loe Pool SSSI and Slapton Ley under the Countryside and Rights of Way Act (CROW Act).</p> <ul style="list-style-type: none"> - Better understanding of the pressures on Bathing Water Quality at Tor Bay, Teignmouth and the Erme (a current cBWD mandatory failure) as a result of investigations. - Better understanding of the pressures on drinking water quality at Avon, Watercombe and Littlehempston water treatment works and Venford reservoir as a result of investigations - Better understanding of the pressures on Shellfish Waters through investigations into discharges from a number of consented storm overflows (CSOs), sewage treatment works (continued on next page) 			

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Nutrients (Nitrate), Micro-biology (Faecal Indicator Organisms) (Continued from previous page)	(STWs) and pumping stations (PSs), alongside related investigations into the impacts of water company assets on the Avon, Dart, Salcombe, Teign Estuary and Yealm Shellfish Waters, as referenced in the Shellfish Water Pollution Reduction Plan for each water	South Devon Catchment	2010	South West Water
Organic Pollutants (BOD, Ammonia)	Investigation of water company assets in the Tamar Catchment under the next round of company investment (PR09) These include: - Better understanding of the pressures on Shellfish Waters through investigations into discharges from a number of consented storm overflows (CSOs), sewage treatment works (STWs), emergency overflows (EOs), and pumping stations (PSs), alongside related investigations into the impacts of (continued on next page)	Tamar Catchment	2010	South West Water

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Organic Pollutants (BOD, Ammonia) (continued from previous page)	water company assets on the Tamar and Lynher Shellfish Waters as referenced in the Shellfish Water Pollution Reduction Plan for each water. - Better understanding of the pressures on drinking water quality at Crownhill, Northcombe and Dousland water treatment works as a result of investigations	Tamar Catchment	2010	South West Water
DrWPA substance	An investigation into the source of the failures for aluminium	1 waterbody in the South West RBD	2010	Environment Agency
Nutrients	Investigations to identify sustainable solutions to protecting Drinking Water Protected Areas as part of South West Water's 'Upstream Thinking' project	East Devon Catchment; North Cornwall, Seaton, Looe and Fowey Catchment; North Devon Catchment; South Devon Catchment; West Cornwall and the Fal Catchment	2012	South West Water
Phosphate	R&D on fate and transport of phosphate in groundwater to determine impact on surface water	South West RBD	2012	Environment Agency; Water companies
Saline intrusion; Pressures on groundwater dependant ecosystems; Pressures on groundwater (GW) balance;	Investigation to verify risk of deterioration in groundwater quantitative status	Bryher And Tresco; St Martin's; St Mary's; Otter Valley; St Agnes	2012	South West Water; Natural England; Environment Agency

Pressure	Description of the action			
	What Will Happen	Where it will happen - Summary	Date	Lead organisation and partners
Abstraction				
Abstraction and other artificial flow pressures	Programme of investigation of ecological impacts of managed flows in HMWBs with water supply use	South West RBD	2012	Environment Agency; Water companies
Metaldehyde	Investigate reasons for failure of WFD Article 7 so safeguard zone and development of detailed 5-year catchment action plan can be considered. Proactive implementation of Metaldehyde Steering Group 'Get Pelletwise' measures	Hampshire Avon (lower); Stour (lower)	2010	Metaldehyde Steering Group
Propetamphos; Algae; Picloram; Pentachlorophenol; Methyl-isoborneol; Geosmin; pesticides; Metazachlor; MCPB; MCPA; IPU; Sulcofuron; Flusilazole; Dichlobenil; Dicamba; Chlortoluron; Carbetamide; Carbendazim; Bentazone; Ammonia; 2,4-D; Nitrate	Further monitoring to confirm risk of failure of WFD Article 7	Dart; Durleigh Reservoir; Stour (lower); Hampshire Avon (lower); Exe; Lower River Tamar; Tone, Wellington To Taunton; Yeo Us Over Compton; Yeo (Barnstaple); Lower River Fowey; Ashford Reservoir; Sutton Bingham Reservoir; Colliford Lake; Argal Reservoir; Drift Reservoir; Durleigh Bk	2010	Environment Agency; Water companies