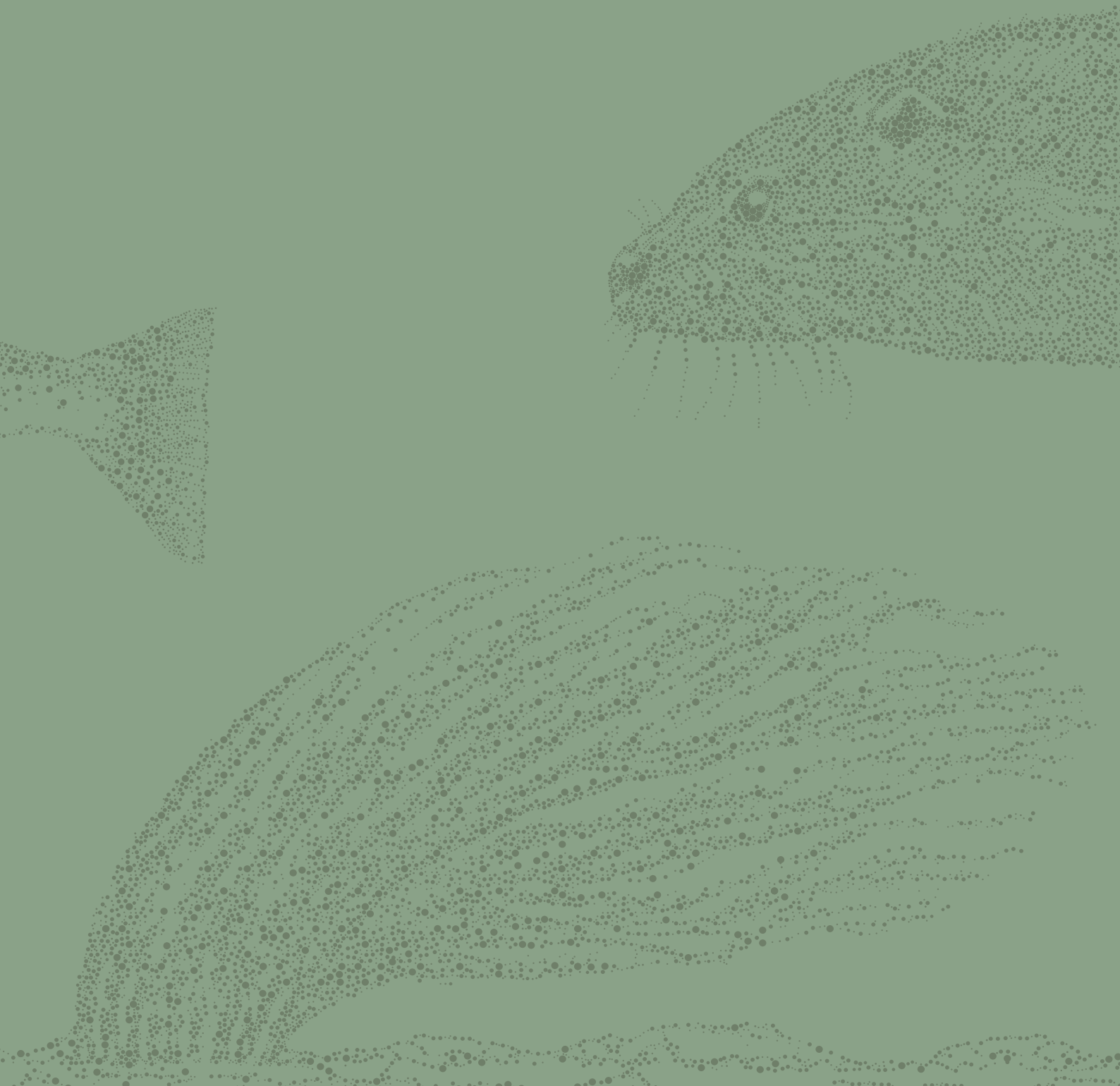




Tweed Catchment Management Plan  
**Executive Summary**

---



## AIMS AND GOALS OF THE TWEED CATCHMENT MANAGEMENT PLANNING INITIATIVE

---

Conserve, enhance and, where appropriate, restore the total river environment through effective land and resources planning across the Tweed catchment.

*In achieving this it will:*

- Enable actions on the ground, which benefit both the water environment and its users
- Engage a wide range of parties from government organisations to local communities, interest groups and landowners
- Build a self generating consensus for action
- Harmonise land and water uses within the catchment to an agreed set of common objectives



Revised and updated 2010

printed on 100% recycled material



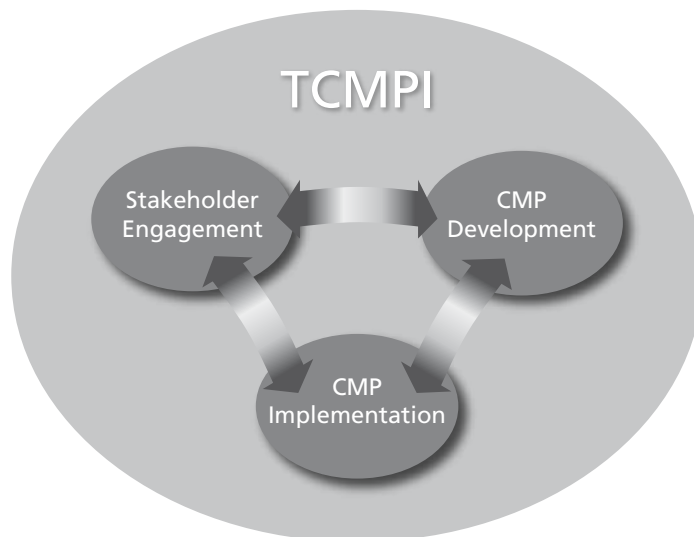
# EXECUTIVE SUMMARY

---

The Tweed Catchment Management Plan (CMP) is a single management framework for the many interacting and interdependent ecosystem services provided by the waters of the Tweed catchment. It offers a way forward to integrate the different administrative, planning and regulatory systems and multiple demands on the catchment. Recognising the links between the health of our rivers and land use, it aims to enable all those with an interest in the river to communicate, liaise and work more effectively together. The CMP provides the framework and context to enable a wide range of interests to determine their role in safeguarding the vital ecosystem services that the waters and wetland habitats of the Tweed provide. It should be used to guide and develop the future work programmes of all those involved with the river’s management and development and is crucial in obtaining funding to deliver specific actions outlined in the management framework.

Developed through extensive consultation and public participation, the Tweed CMP is only part of the more all-encompassing Tweed Catchment Management Planning Initiative (TCMPI), in that it sets out a management framework to help the aims of the TCMPI to be achieved (see Figure 1).

**Figure 1** The relationship between TCMPI and CMP



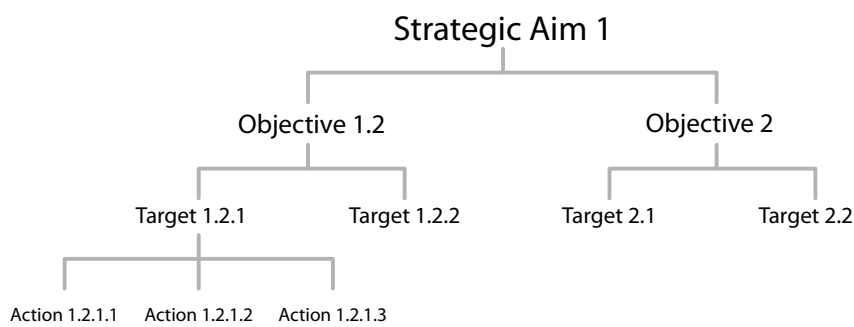
Only through the CMP’s development and implementation will the Tweed CMP stakeholders continue to achieve the aims and goals of the TCMPI. Since 2003, it has become increasingly clear that the TCMPI is more than just a Tweed Forum initiative – it is at the heart of the Forum’s existence and provides strategic focus and direction. It offers a common goal for the Forum membership<sup>1</sup>, binds the members together, and most importantly brings expertise, personnel and funding to achieve action throughout the Tweed catchment.

<sup>1</sup> Tweed Forum is Borders Forest Trust, Environment Agency, Federation of Border Angling Associations, Forestry Commission Scotland, Natural England, Northumberland County Council, Northumberland National Park Authority, Northumbrian Water, Northumberland Wildlife Trust, Royal Society for the Protection of Birds, River Tweed Commission, Scottish Agricultural College, Scottish Borders Council, Scottish Environment Protection Agency, Scottish Government, Scottish Natural Heritage, Scottish Rural Property & Business Association, Scottish Water, Southern Upland Partnership, Tweed Foundation, Visit Scotland Borders

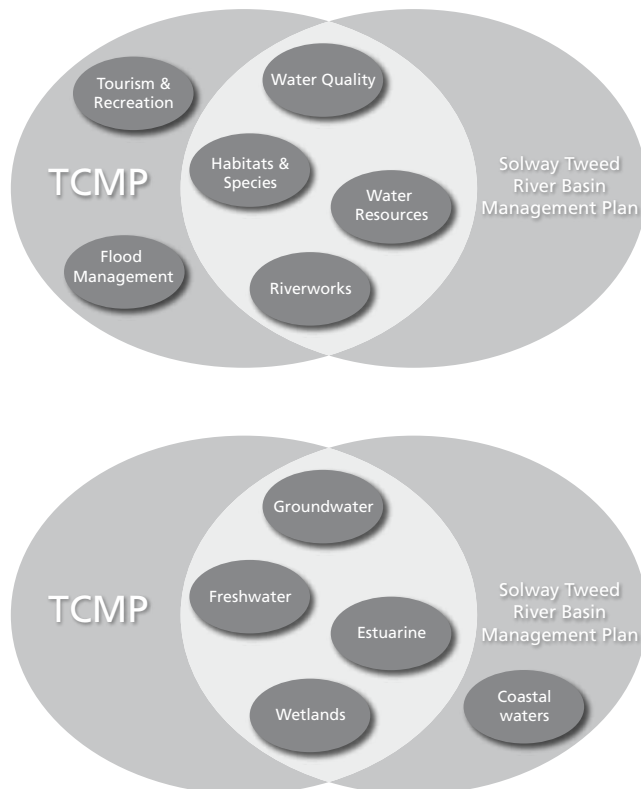


The management framework of the CMP (see Figure 2) is set out under a series of 7 strategic aims. These cover the topics of water quality, water quantity, habitats and species, riverworks, flood management, tourism and recreation and, finally, the delivery and development of the CMP. Following the 2008/09 review of the CMP, it became evident that the majority of Tweed stakeholders desired integration of the CMP process with the Water Framework Directive's river basin planning process as far as possible, therefore delivery and development of the CMP, in this phase of the TCMPI, will also take into consideration the underlying aspirations and processes of the Solway Tweed River Basin Management Plan and the supplementary Tweed Area Management Plan (AMP) [www.sepa.org.uk/water/river\\_basin\\_planning.aspx](http://www.sepa.org.uk/water/river_basin_planning.aspx). Synergy with the requirements of the WFD is fundamental, and the TCMPI will be instrumental in helping deliver the objectives of the Solway Tweed River Basin Management Plan (RBMP), however the CMP enables us to take a truly holistic view and incorporate key issues such as recreation, access and flood defence that lie largely outwith the scope of the RBMP (see Figure 3).

**Figure 2** Structure of CMP Management Framework



**Figure 3** Scope of the Tweed Catchment Management Plan, in the context of the Solway Tweed River Basin Management Plan

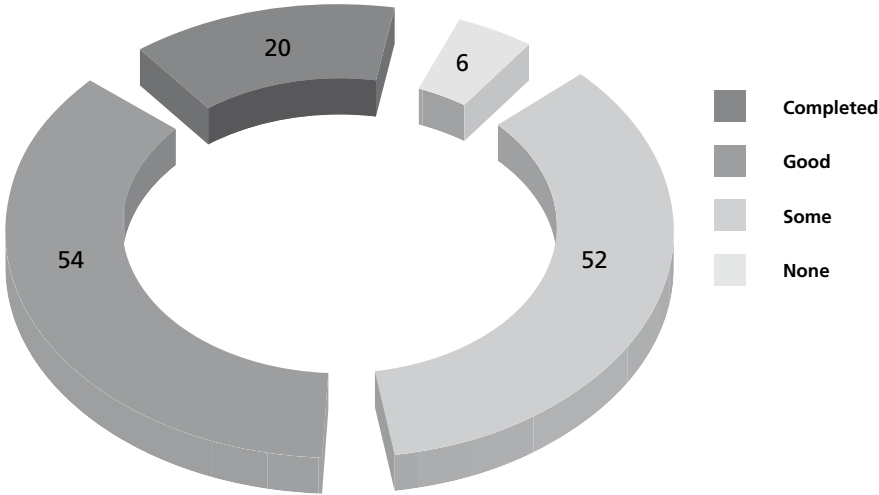


Each of the seven strategic aims sets out a broad, aspirational statement for a given management area for the next 3 years. Many of the strategic aims will help the efficient and effective implementation of national and international legislation including the Water Framework Directive (WFD). While for ease they have been presented separately, it is vital that none of the strategic aims are viewed in isolation as many are inextricably linked.

Targets and actions to tackle specific issues and opportunities identified under the strategic aims are set out in an action table. Key organisations have been identified as contributing to a given action in partnership with other vital parties such as farmers, landowners and community interests and, where possible, timescales have also been given. Implementation of the CMP is overseen by the Tweed Forum Executive Committee plus specialist sub-groups and facilitated and coordinated by all Forum staff. As part of the review process, progress towards actions is monitored (see Figure 4), priorities for action re-examined, additional actions and targets included where appropriate and key funding requirements identified (see [www.tweedforum.com/cmp](http://www.tweedforum.com/cmp) to download reviews of the CMP).

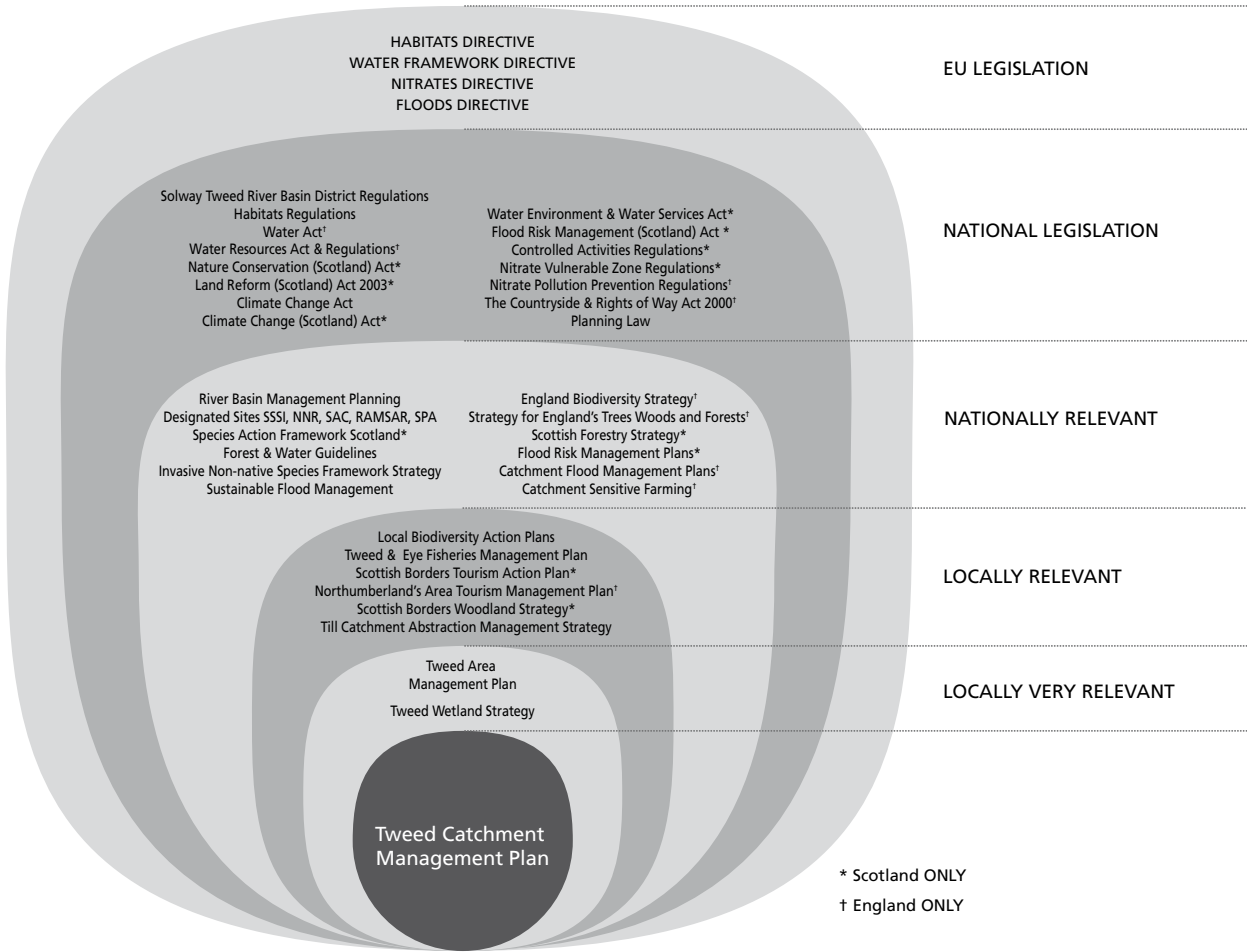
Since the launch of the CMP in 2003, a large amount has been achieved across a very wide spectrum and Tweed Forum has demonstrated the value of the partnership approach in achieving common goals and multiple benefits.

**Figure 4** Progress of all CMP Partners towards achieving CMP actions (2005-09)



**Progress towards achieving CMP actions (%) 2005-2009**

**Figure 5** Legislation, plans and processes relevant to the CMP




Integration with other strategic plans and processes, legislation such as the Floods Directive plus the increasing influence of climate change on all areas of work (see Figure 5), are all challenges we face in both the short and long term. Ultimately, the CMP ensures that we are addressing the key issues, in the right place and at the right scale; to bring about long lasting benefits on multiple strategic fronts.

This document represents a brief summary of the aims and objectives of the full Tweed CMP which can be viewed at [www.tweedforum.com/cmp](http://www.tweedforum.com/cmp)

To view the geographical extent of the Tweed Catchment Management Plan see Figure 6, page 20.

For more information on the work of Tweed Forum, please contact:

Tweed Forum, South Court, Drygrange, Melrose, Roxburghshire TD6 9DJ  
 T 01896 849723 E [info@tweedforum.com](mailto:info@tweedforum.com) [www.tweedforum.com](http://www.tweedforum.com)



## **Strategic Aim 1 – WATER QUALITY**

Maintain and enhance the water quality of the Tweed Catchment

## **Strategic Aim 2 – WATER RESOURCES**

Ensure that there is water available for abstraction while protecting the needs of the natural environment

## **Strategic Aim 3 – HABITATS & SPECIES**

Maintain and enhance the status and distribution of riverine, riparian and wetland species, and habitats of conservation concern

## **Strategic Aim 4 – RIVERWORKS**

Ensure all riverwork operations respect the physical, ecological and aesthetic integrity of the river system

## **Strategic Aim 5 – FLOOD MANAGEMENT**

Adopt a catchment-based approach to flood management which helps to protect the people, property and prosperity of the Tweed catchment, whilst respecting its physical, ecological and aesthetic qualities

## **Strategic Aim 6 – TOURISM & RECREATION**

Promote the sustainable development of river-related tourism and recreational activities to accommodate a variety of interests

## **Strategic Aim 7 – JOINT CMP/AMP DELIVERY & DEVELOPMENT**

Ensure the delivery and development of the Tweed Catchment Management Plan and Tweed Area Management Plan

## STRATEGIC AIMS

Current Status	Key Areas	Key Policy & Process
<b>WATER QUALITY</b>		
Majority of Tweed catchment good to excellent water quality. However there are a number of localised areas of nutrient enrichment resulting in degraded water quality and pollution.	<ul style="list-style-type: none"> <li>• Diffuse agricultural pollution</li> <li>• Impact of industrial and residential development</li> <li>• Failure to meet WFD good ecological status targets</li> </ul>	WFD Nitrates Directive Urban Waste Water Directive Habitats Directive CAR CSF
<b>WATER QUANTITY</b>		
The Tweed catchment is key for meeting public water-supply demands in the Borders and Edinburgh, supplying agriculture and industry and is a vital component of many habitats which support a rich diversity of species.	<ul style="list-style-type: none"> <li>• Ensuring efficient use of water</li> <li>• Ecological impact of reservoir release regimes</li> </ul>	WFD Habitats Directive CAMS CAR
<b>HABITATS &amp; SPECIES</b>		
Great diversity of riverine, wetland and riparian habitats and species, many of which are recognised through local, national and international conservation designations.	<ul style="list-style-type: none"> <li>• Insufficient baseline data</li> <li>• Loss of key habitats such as wetlands, blanket bog, raised bogs, wet woodlands, riparian woodlands and ponds</li> <li>• Non-native, invasive species</li> </ul>	Habitats Directive WFD LBAPs
<b>RIVERWORKS</b>		
Channel modification carried out throughout history, early on to provide water power for the textile industry and more recently to tackle river management issues such as bank erosion, gravel management, flood alleviation, bridge protection and instream habitat improvements.	<ul style="list-style-type: none"> <li>• Lack of understanding of the river system and its response to riverworks</li> <li>• Lack of coordinated advice and guidance for those considering riverworks</li> <li>• Ensuring streamlined and efficient regulation</li> </ul>	WFD Habitats Directive Tweed Riverworks Group CAR
<b>FLOOD MANAGEMENT</b>		
The catchment has a long history of flooding with recent severe floods occurring in 1948, 1977, 1984 and 2008. Currently 9% of the catchment's properties are considered at risk from flooding, mostly from riverine as opposed to coastal flooding.	<ul style="list-style-type: none"> <li>• Development on the floodplain</li> <li>• Lack of a catchment wide approach to flood management issues</li> <li>• The need for Sustainable Flood Management</li> <li>• Potential impact of new developments and land use change on frequency and intensity of flood events</li> </ul>	FLAG WFD Structure and Local Plans Floods Directive Sustainable Flood Management
<b>TOURISM &amp; RECREATION</b>		
Attracting international, national and local visitors, the Tweed catchment is particularly well endowed with outdoor recreational opportunities, which include fishing, walking, cycling, canoeing and a wealth of heritage sites.	<ul style="list-style-type: none"> <li>• Potential conflict between conserving and enhancing the Tweed catchment and increasing tourism and recreational facilities in the area</li> <li>• Potential conflict between river users</li> <li>• Unrealised potential of tourism and recreational activities, based in and around rivers of the catchment, to contribute to the local economy</li> </ul>	Land Reform (Scotland) Act CROW Act Tourism Strategies
<b>DEVELOPMENT &amp; DELIVERY</b>		
Production of the CMP is only the beginning of the process of moving towards the goals and aspirations it sets out. Need to think how we work together as individuals and organisations and commit adequate time and resources.	<ul style="list-style-type: none"> <li>• Lack of effective stakeholder engagement and interaction</li> <li>• Current fragmented, sectoral approach to water resource management</li> <li>• Lack of adequate resources for development and delivery of the CMP</li> </ul>	Tweed Forum WFD and river basin planning
<b>CROSS-CUTTING THEMES</b>		
Climate change	<ul style="list-style-type: none"> <li>• Impact of climate change on the freshwater environment</li> <li>• Level of confidence in climate change predictions</li> </ul>	Climate Change Act Local Climate Impact Profile UK Climate Impacts Programme UK Climate Projections
Planning and Development	<ul style="list-style-type: none"> <li>• Impact of inappropriate planning and development legislation/policy on freshwaters</li> </ul>	UK planning law



# ACTION TABLES

OBJECTIVE 1.1 Monitor, evaluate and address the impact of agriculture & forestry on the water quality in the catchment					
Target	Key Partners	2010	2011	2012	2013+
<b>Target 1.1.1 Reduce the impact of diffuse agricultural pollution on the surface and ground water quality of the Tweed catchment (page 26)</b>					
1.1.1.1 Address those agricultural sectors that contribute most to diffuse agricultural pollution with targeted and coordinated action	EA, FWAG, NE, NFUS, ScAC, SEPA	→			
1.1.1.2 Continue to implement improved farm waste management through nutrient budgeting and other waste minimisation and efficiency measures, where possible	EA, NFUS, ScAC, SEPA	→			
1.1.1.3 Promote the use of Constructed Farm Wetland systems	EA, FWAG, NCC, NE, NFUS, ScAC, SEPA, TForum	→			
1.1.1.4 Increase awareness and promote action amongst farmers of practical ways to reduce diffuse pollution, highlighting the potential economic savings that can be made	EA, FWAG, NE, NFUS, NWT, RSPB, ScAC, SEPA, TForum	→			
1.1.1.5 Continue to reduce the effect of nitrates on ground water in the nitrate vulnerable zone (NVZ) through improved nutrient budgeting	EA, NFUS, NWT, ScAC, SEPA	→			
1.1.1.6 Increase awareness of both statutory and non-statutory diffuse pollution codes of practice	EA, NE, SEPA, TForum	→			
<b>Target 1.1.2 Minimise the potential of agrochemicals and sheep dips to degrade water quality (page 26)</b>					
1.1.2.1 Raise awareness amongst the farming community of the potential effects of sheep dips and other agrochemicals on water quality and associated ecology	EA, FWAG, NFUS, ScAC, SEPA	→			
1.1.2.2 Raise awareness of the legislative requirements surrounding the use of agrochemicals	EA, FWAG, NFUS, ScAC, SEPA	→			
1.1.2.3 Where necessary increase monitoring activity to determine the impact of agrochemical and sheep dip incidents on water quality and associated ecology	EA, SEPA	→			
<b>Target 1.1.3 Continue to reduce the potential of forest management activities to adversely affect water quality in the catchment (page 27)</b>					
1.1.3.1 Encourage compliance with the "Forest and Water Guidelines" by all sectors of the forestry industry	EA, FCS, SEPA	→			

## OBJECTIVE 1.2 Minimise the impact of residential and industrial development on the water quality of the catchment

Target	Key Partners	2010	2011	2012	2013+
<b>Target 1.2.1 Promote and extend the use of sustainable surface water management systems such as Sustainable Urban Drainage Systems (SUDS) (page 27)</b>					
1.2.1.1 Survey, map and assess SUDS currently operating in the catchment	EA, NCC, SEPA				→
1.2.1.2 Develop and disseminate best practice guidance notes for developers and regulators	EA, NCC, NW, SBC, SEPA, SW				→
1.2.1.3 Raise awareness of the benefits of SUDS and the SUDS General Binding Rules through education events, practical trials and the use of demonstration sites	EA, NCC, NW, SEPA, SW				→
1.2.1.4 Investigate and eliminate existing contamination sources in industrial estates	EA, NW, SEPA, SW				→
<b>Target 1.2.2 Ensure discharges from waste water treatment works and septic tanks do not contribute to the deterioration of water quality (page 28)</b>					
1.2.2.1 Review and set discharge consents at appropriate levels to protect and, where appropriate enhance, water quality	EA, SEPA				→
1.2.2.2 Identify and improve those WWTPs and discharges that are currently having a detrimental impact on water quality	EA, NW, SEPA, SW				→
1.2.2.3 Raise awareness of the maintenance requirements of sewage treatment systems	EA, NCC, NW, SEPA, SW				→
1.2.2.4 In the context of the Local Authority Development Plans, agree a prioritised programme for upgrading waste water treatment plants in the catchment	EA, NCC, NW, SEPA, SW				→

## OBJECTIVE 1.3 Locate, investigate and address specific water quality problem areas within the catchment

Target	Key Partners	2010	2011	2012	2013+
<b>Target 1.1.1 Target 1.3.1 Investigate the causes behind failures to meet WFD water quality targets and draw up and implement action plans to ensure future compliance (page 28)</b>					
1.3.1.1 Continue to monitor and address the Bathing Water quality issue at Spittal Beach and draw up and implement action plans to ensure future compliance	EA, EMS, SEPA				→
1.3.1.2 Continue investigations into BOD failures in the lower catchment on stretches of the Till and Wooler water	EA, FWAG				→
1.3.1.3 Continue to address priority catchments and encourage take-up of relevant Rural Development Contracts	SEPA, TForum				→



**OBJECTIVE 2.1 Consider the needs of the environment alongside those of all other water users**

Target	Key Partners	2010	2011	2012	2013+
<b>Target 2.1.1: Reduce the impact of surface and groundwater abstractions on riverine, riparian and wetland ecology (page 32)</b>					
2.1.1.1 Survey, map and where possible quantify abstractions from the Tweed and its tributaries	EA, FWAG, NE, RTC, SEPA			●	
2.1.1.2 Seek reductions in abstractions where negative environmental impact is found	EA, NE, SEPA, TForum	→			
2.1.1.3 Explore demand management and storage measures which encourage water conservation and reduce overall abstraction volumes	EA, NE, NW, SEPA, SNH, SW	→			
2.1.1.4 Assess the potential impact of land use changes on flows and undertake monitoring as required	NCC, SEPA	→			
2.1.1.5 Determine the impact of ground water abstraction on ground water levels and establish means to minimise the pressures on falling ground water levels	EA, NW, SEPA, SW	→			
<b>Target 2.1.2: Ensure flows in the rivers and burns of the Tweed catchment meet the requirements of riverine, riparian and wetland species and habitats (page 34)</b>					
2.1.2.1 Address, via CAMS or CAR, those areas within the catchment where low flows are having a detrimental ecological impact	EA, NE, SEPA, SNH, TFn		●		
2.1.2.2 Where necessary, carry out additional ecological and hydrological research and monitoring to help determine ecologically acceptable flow regimes for the catchment	EA, NE, NWT, SEPA, SNH, TForum, TFn	→			
<b>Target 2.1.3: Ensure reservoir release regimes minimise ecological impacts and where feasible reflect more natural hydrological conditions (page 34)</b>					
2.1.3.1 Carry out a critical review of water orders and freshet release schemes	RTC, SEPA, SNH, SW	→			
2.1.3.2 Continue physical, hydrological, biological and fisheries surveys to gather baseline data to inform future management decisions	SEPA, SNH, TFn	→			
2.1.3.3 Review current decision making processes and monitoring systems regarding reservoir releases	RTC, SEPA, SNH, SW, TForum	→			
2.1.3.4 Continue to disseminate information on the timings and volumes of reservoir releases to agreed parties	SEPA, TForum	→			
2.1.3.5 Publish data annually on how well reservoir releases have met legal requirements	SEPA, SW, TForum	→			

**OBJECTIVE 3.1** Ensure there is sufficient data on riverine, wetland and riparian habitats and species to inform sustainable management practices

Target	Key Partners	2010	2011	2012	2013+
<b>Target 3.1.1: Improve knowledge of the extent, status and distribution of riverine, riparian and wetland habitats (page 39)</b>					
3.1.1.1 Digitally map current and historical wetland sites and use this to target restoration programmes	BFT, EA, FCS, FWAG, LBAP, NE, NNPA, NWT, RSPB, SBBRC, SEPA, SNH, TForum			●	
3.1.1.2 Digitally map current riparian habitat restoration work and use this to inform future work and establish habitat networks	BFT, EA, FCS, LBAP, NE, NNPA, NWT, SEPA, SNH, TFn, TForum		●		
3.1.1.3 Determine the requirement for RHS/MIMAS in the catchment and implement what is practical	EA, LBAP, NE, NWT, SEPA, SNH		●		
3.1.1.4 Identify priority areas of riverine, riparian and wetland habitats that require protection and restoration	BFT, EA, LBAP, NE, NNPA, NWT, RSPB, SBBRC, SEPA, SNH, TForum, TFn			●	
3.1.1.5 Develop and maintain a register of designated riverine, riparian and wetland sites in the catchment which includes information on reasons for designation, potential threats and their relevance to local and national biodiversity	EA, LBAP, NE, NNPA, NWT, SBBRC, SEPA, SNH, TForum	→			
<b>Target 3.1.2 Improve knowledge and understanding of species of conservation interest (page 39)</b>					
3.1.2.1 Review data on all priority species and assess the need to commission further survey and monitoring work	EA, LBAP, NE, NNPA, NWT, RSPB, SBBRC, SNH, TForum	→			
3.1.2.2 Coordinate all existing and incoming species data referenced to the river and river corridor and encourage participation of local experts and recorders to achieve this	EA, LBAP, NE, NNPA, NWT, RSPB, SBBRC, SEPA, SNH, TForum, TFn	→			
3.1.2.3 Ensure that monitoring of designated species and habitats of the River Tweed SAC/SSSI is used to inform future management	EA, FCS, NE, NWT, SNH, TFn	→			
3.1.2.4 Continue monitoring and research programmes for salmon, brown trout, sea trout and other local fish species as set out in the Tweed Fisheries Management Plan	FBAA, RTC, TFn	→			



**OBJECTIVE 3.2 Promote the restoration and expansion of riparian, riverine and wetland habitats and conserve and enhance associated species**

Target	Key Partners	2010	2011	2012	2013+
<b>Target 3.2.1 Encourage the strategic development of habitat networks throughout the catchment, linking riparian, floodplain, wetland, upland and native woodland habitats (page 40)</b>					
3.2.1.1 Monitor and evaluate the outcomes of sub catchment habitat network projects	BFT, FCS, LBAP, SNH, TFn				→
3.2.1.2 Using the Borders Woodland Strategy tools, promote the creation and enhancement of native woodland, and riparian habitats which form part of a strategic network, linking woodlands to other semi natural habitats on a catchment scale	BFT, FCS, LBAP, RSPB, SBBRC, SNH, SUP, TForum				→
<b>Target 3.2.2 Encourage the retention and expansion of wetlands and natural ponds to safeguard and enhance ecosystem services (page 40)</b>					
3.2.2.1 Ensure that Local Plan policy reflects the importance of wetlands and ponds and the planning process encourages the inclusion of ponds and wetlands in landscape development	EA, LBAP, NCC, NNPA, NWT, RSPB, SEPA, TForum				→
3.2.2.2 Raise awareness of the importance of wetland sites with appropriate interpretation and guided walks for the public and schools	BFT, EA, LBAP, NE, NNPA, NWT, RSPB, SEPA, SNH, TForum				→
3.2.2.3 Promote and encourage agricultural practices, which maintain, enhance and create wetland areas and ponds	EA, FWAG, LBAP, NE, NFUS, NNPA, NWT, RSPB, ScAC, TForum				→
<b>Target 3.2.3 Develop and implement a wetland and riparian habitat strategy to inform future management (page 40)</b>					
3.2.3.1 Encourage reduced stock numbers in riparian areas and where appropriate exclude stock to minimise erosion and retain/re-establish bankside vegetation	BFT, EA, FWAG, LBAP, NE, NNPA, NWT, RSPB, SEPA, SNH, SUP, TForum, TFn				→
3.2.3.2 Periodic review of the management of habitat enhancement sites to produce a mosaic of habitats	BFT, EA, LBAP, NE, NNPA, NWT, RSPB, SEPA, SUP, TForum, TFn				→
3.2.3.3 Encourage management of riparian habitats in urban areas and encourage community participation in such schemes	BFT, EA, LBAP, NCC, NE, NWT, SEPA, SNH, SUP, TForum				→
<b>Target 3.2.4 Conserve and enhance the fisheries of the Tweed catchment (page 41)</b>					
3.2.4.1 Implement monitoring of fish stocks, habitat availability and exploitation rates as per the Tweed Fisheries District Management Plan	EA, RTC, TFn				→
3.2.4.2 Implement habitat improvement programmes as set out in the Tweed Fisheries District Management Plan	RTC, TFn				→
3.2.4.3 Continue to implement management policies as required to prevent overexploitation of fish stocks	FBAA, RTC				→

**OBJECTIVE 3.3** Monitor and control the introduction and establishment of non native riverine and riparian species and where appropriate control or eradicate established populations

Target	Key Partners	2010	2011	2012	2013*
<b>Target 3.3.1 Improve knowledge, understanding and awareness of the potential threats of non native riverine and riparian species and the need to prevent their introduction (page 42)</b>					
3.3.1.1 Identify and catalogue non native riverine and riparian species that currently pose a threat to the habitats and species of the Tweed catchment	EA, FWAG, LBAP, NE, NWT, SBBRC, SEPA, SNH, TForum, TFn				→
3.3.1.2 Continue research into the impact and control of non native species on the native habitats and species of the catchment	EA, LBAP, NE, NWT, SNH, TForum, TFn				→
3.3.1.3 Carry out a publicity campaign to raise awareness of the potential threats posed by non-natives, measures to prevent their spread/introduction and methods of control	EA, LBAP, NE, NWT, SNH, TForum, TFn		●		
3.3.1.4 Review, and update when necessary, the "Invasives Plants" leaflet containing information on threats, species identification and control methods	LBAP, NWT, TForum				→
3.3.1.5 Promote the national RAFTS biosecurity planning process and support any local measures that contribute to this process	RTC, SEPA, TForum, TFn				→
<b>Target 3.3.2 Control and where possible eradicate priority non-native species (page 42)</b>					
3.3.2.1 Continue to map the extent of giant hogweed and Japanese knotweed and sources of invasion	LBAP, NWT, SEPA, SNH, TForum				→
3.3.2.2 Continue with the coordinated catchment wide control programme for giant hogweed/Japanese knotweed	EA, LBAP, NE, NW, SEPA, SNH, TForum, TFn				→

**OBJECTIVE 4.1** Continue to develop an understanding of the river system and its response to riverworks

Target	Key Partners	2010	2011	2012	2013*
<b>Target 4.1.1 Improve knowledge of the hydrogeomorphology of the river system (page 46)</b>					
4.1.1.1 Identify, collate and log all information currently available on the hydrogeomorphology of the river system	EA, , NE, RTC, SBC/FLAG, SEPA, SNH, TForum		●		
4.1.1.2 Using historical information such as photographs, maps, remote sensing and logged events establish the past changes of river dynamics within the catchment	BFT, EA, SBC/FLAG, SEPA, SNH, TForum		●		
<b>Target 4.1.2 Improve knowledge of current and historical riverworks throughout the catchment (page 46)</b>					
4.1.2.1 Survey, catalogue, map and assess all current and historical riverworks throughout the catchment	EA, NE, RTC, SEPA, SNH, TForum, TFn		●		
4.1.2.2 Develop, publish and disseminate a catalogue of riverworks best practice examples in the Tweed catchment with appropriate demonstration sites	EA, NE, RTC, SEPA, SNH, TForum, TFn		●		



**OBJECTIVE 4.2** Improve the knowledge, understanding and awareness of river processes and issues surrounding riverworks and seek to address degraded stretches

Target	Key Partners	2010	2011	2012	2013+
<b>Target 4.2.1</b> To further promote best practice and strengthen provision of advice to anyone considering riverworks within the Tweed catchment (page 46)					
4.2.1.1 Ensure information on the legislative requirements surrounding riverworks, the competent authorities involved with their management as well as advice on when to carry out riverworks is available online	EA, NE, RSPB, RTC, SEPA, SNH, TForum	●			
4.2.1.2 Ensure open access to the register of independent fluvio-geomorphological assessors, civil engineers and ecologists who are able to advise on riverworks matters within the Tweed catchment	EA, RTC, SEPA, SNH, TForum	→			
4.2.1.3 Raise awareness of the need to notify the relevant authorities of all riverworks, even those outside statutory controls	EA, NE, RTC, SEPA, TForum	→			
<b>Target 4.2.2</b> Identify the different groups involved in riverworks and develop suitable methods to engage, learn and raise awareness of management issues (page 47)					
4.2.2.1 Continue to raise awareness amongst anglers, fishery managers, riparian owners, ghillies, farmers, landowners and contractors operating within the catchment	EA, FBAA, RTC, SNH, TForum, TFn	→			
<b>Target 4.2.3</b> Encourage all those involved in riverworks to gain the necessary knowledge, expertise and training (page 47)					
4.2.3.1 Develop and implement appropriate training programmes for all those involved in managing riverworks	EA, NE, NWT, SEPA, SNH	→			
<b>Target 4.2.4</b> Investigate and facilitate the restoration of priority waterbodies which are failing WFD targets due to morphological pressures (page 47)					
4.2.4.1 Prioritise those stretches of Tweed which are failing due to morphological pressures.	EA, FCS, NE, SEPA, TForum	→			
4.2.4.2 Facilitate restoration works, in partnership with relevant stakeholders, on priority stretches.	EA, FCS, NE, SEPA, TForum	→			

**OBJECTIVE 4.3** Work with regulatory bodies to ensure that riverworks processes are streamlined and efficient as possible.

Target	Key Partners	2010	2011	2012	2013+
<b>Target 4.3.1</b> Support the Controlled Activities Regulation (CAR) process to ensure transparent and effective regulation (page 47)					
4.3.1.1 Revisit the use of "emergency powers" to ensure they are appropriate in scope and duration	EA, SEPA, TForum	●			
4.3.1.2 Support measures to reduce duplication of effort which may occur during the CAR process	SEPA, TForum	●			
4.3.1.3 Continue the riverworks group as a Forum for sharing best practice, disseminating guidance, discussing forthcoming work in the catchment and ensuring cross-border integration.	EA, SEPA, TForum	→			

**OBJECTIVE 5.1** Improve knowledge, understanding and awareness of flood management issues within the Tweed catchment.

Target	Key Partners	2010	2011	2012	2013+
<b>Target 5.1.1 Identify the different groups involved in and affected by flood management in the catchment and develop suitable methods to educate and raise awareness (page 52)</b>					
5.1.1.1 Update, as necessary, any resources (e.g. Floodline Pack) that assist the public in preparing for floods, including useful contacts and information sources	EA, SBC/FLAG, SEPA, TForum	→			
5.1.1.2 Promote "Floodline" as a means of obtaining up to date information on flood risks and river levels	EA, SBC/FLAG, SEPA	→			
5.1.1.3 Disseminate clear information to residents on what to do before, during and after a flood	EA, SBC/FLAG, SEPA	→			
5.1.1.4 Support, and input to, the flood planning process under the Floods Directive	EA, NE, SBC/FLAG, SEPA, SNH, SW, TForum				●
<b>Target 5.1.2 Improve knowledge of historic flood events within the catchment (page 53)</b>					
5.1.2.1 Gather information from local community groups, landowners and members of the public to share their knowledge of historical flood events	BFT, EA, SBC/FLAG	●			
5.1.2.2 Study and collate historical information such as photographs, archived material and logged events to establish historical flood events.	BFT, EA, SBC/FLAG, TForum	●			
<b>Target 5.1.3 Improve cross-border communication and coordination of issues of flood management (page 53)</b>					
5.1.3.1 Support a cross-border presence at the Scottish Borders Council FLAG meetings	EA, SBC/FLAG, SEPA, TForum	→			
5.1.3.2 Produce and circulate a flood management contacts list for the Tweed catchment, containing the main tasks and responsibilities of individuals involved in flood management as well as their contact information	EA, SBC/FLAG		●		



**OBJECTIVE 5.2 Encourage Sustainable Flood Management, where appropriate**

Target	Key Partners	2010	2011	2012	2013+
<b>Target 5.2.1 Protect the floodplain from inappropriate development (page 54)</b>					
5.2.1.1 Ensure relevant strategic and local planning policies clearly identify flood risk areas and include policies to control development in such areas	EA, NCC, NE, RSPB, SBC/FLAG, SEPA, TForum	→			
5.2.1.2 Develop a framework for the integrated and open consideration of all new floodplain development proposals throughout the catchment	EA, NCC, RSPB, SBC/FLAG, TForum		●		
5.2.1.3 Ensure indicative flood risk maps developed by SEPA and the EA are used to identify non-development areas to planners	EA, NE, SBC/FLAG, SEPA, SNH, TForum	→			
<b>Target 5.2.2 Pursue opportunities for Natural Flood Management (NFM) (page 55)</b>					
5.2.2.1 Create floodplain habitats to alleviate flooding risks, allowing the natural functioning of the floodplain	BFT, EA, NCC, NWT, RSPB, SBC/FLAG, TForum	→			
5.2.2.2 Disseminate and, where appropriate, implement NFM approaches that exploit rather than resist the natural dynamics of rivers and wetlands	BFT, EA, LBAP, RSPB, SBC/FLAG, TForum	→			
5.2.2.3 Monitor/assess NFM activities in the catchment and disseminate findings	EA, NE, SBC/FLAG, SEPA, TForum	→			
5.2.2.4 Investigate opportunities for establishing or enhancing riparian and floodplain woodland	BFT, EA, FCS, FWAG, LBAP, RSPB, SBC/FLAG, TForum	→			
<b>Target 5.2.3 Ensure all flood alleviation schemes respect the physical, ecological and aesthetic integrity of the river system (page 55)</b>					
5.2.3.1 Ensure any flood alleviation schemes are planned and carried out on a catchment scale basis	EA, RSPB, SBC/FLAG, SEPA, TForum	→			
5.2.3.2 Ensure all flood alleviation proposals are developed in relation to other ecological plans to ensure schemes do not exacerbate flooding elsewhere or have a detrimental ecological impact	EA, RSPB, SBC/FLAG, SEPA, TForum	→			

**OBJECTIVE 5.3 Evaluate and address the impact of land management practices on the frequency and intensity of flood events**

Target	Key Partners	2010	2011	2012	2013+
<b>Target 5.3.1 Ensure all new developments take into account their potential impact on the frequency and intensity of flood events (page 55)</b>					
5.3.1.1 Influence relevant strategic and local planning policies to require developers to assess flow impacts and flood risk for all new developments	EA, NCC, RSPB, SBC/FLAG, SEPA, SW	→			
5.3.1.2 Promote the use of SUDS to attenuate surface water and reduce peak run off from all new developments	EA, NCC, RSPB, SBC/FLAG, SEPA, SW	→			
<b>Target 5.3.2 Ensure forestry activities do not adversely impact on flooding frequency and intensity (page 55)</b>					
5.3.2.1 Revisit the Forest and Water Guidelines to ensure that recommendations to reduce the impact of forestry activity on flooding intensity and frequency are based on current science	FCS, LBAP, RSPB, SBC/FLAG	→			
<b>Target 5.3.3 Improve knowledge on the effect of riparian and floodplain woodland on flood flows (page 56)</b>					
5.3.3.1 Continue to carry out research on the impact of floodplain woodland on flood flows to build up evidence base	BFT, FCS, RSPB, SBC/FLAG, SEPA, TForum	→			

**OBJECTIVE 6.1** Support the Scottish Outdoor Access Code and facilitate an access code for the Till sub-catchment which accommodates the widest variety of interests, promotes good practice and does not come into conflict with other aims and objectives set out in this document

Target	Key Partners	2010	2011	2012	2013+
<b>Target 6.1.1 Promote responsible access by all river users (page 60)</b>					
6.1.1.1 Encourage safe, responsible use of the water resource through the promotion of the Scottish Outdoor Access code and the Countryside Code for England.	EA, NE, SNH	→			
6.1.1.2 Encourage adoption of the National Canoeists Code of Conduct developed by the Scottish Canoe Association	EA, VSB, TForum	→			
6.1.1.3 Encourage adoption of the RTCs Tweed Angling Codes	RTC, VSB	→			
<b>Target 6.1.2 Ensure that water users acknowledge and respect each other's rights and responsibilities (page 60)</b>					
6.1.2.1 Formalise a code of conduct between trout and salmon anglers and disseminate widely	EA, FBAA, SBC		●		
6.1.2.2 Address the potential need for mediation between anglers and canoeists and where feasible develop formal agreements and disseminate widely	EA, FBAA, RTC, TForum	→			
6.1.2.3 Increase dialogue between different recreational users and between water based recreational activities and land management and conservation activities through seminars, magazine and newspaper articles and information leaflets	AF, TForum	→			
6.1.2.4. Raise awareness of the risk posed by recreation in the spread/introduction of non native species.	EA, NE, RTC, SEPA, SNH, TForum, TFn	●			

**OBJECTIVE 6.2** Promote and establish tourism and recreational activities based on the built, natural and cultural heritage of Tweed and its tributaries.

Target	Key Partners	2010	2011	2012	2013+
<b>Target 6.2.1 Increase educational and interpretation facilities based on the built, natural and cultural heritage of the Tweed and its tributaries at appropriate sites (page 61)</b>					
6.2.1.1 Continue to identify further interpretation opportunities in the catchment	NE, NNPA, SNH, TForum, TFn, VSB	→			
6.2.1.2 Support the provision of environmental education in the Tweed catchment	NNPA, SEPA, SNH, TForum, TFn	→			
<b>Target 6.2.2 Support tourist and recreational activities based in and around the Tweed and its tributaries, which aid the sustainability of the local economy (page 61)</b>					
6.2.2.1 Maintain and promote Tweed as a world class angling destination	FBAA, RTC, TFn, VSB	→			
6.2.2.2 Update and republish the Borders Angling Guide	EA, FBAA, VSB		●		
6.2.2.3 Improve the brown trout and coarse fishing resource	FBAA, RTC, TFn	→			
6.2.2.4 Encourage nature based tourism based on the Tweed and its tributaries	EA, NE, NNPA, RSPB, SNH, SUP, VSB, TForum	→			
6.2.2.5 Continue to facilitate conservation of the built and cultural heritage associated with the river	NE, SBC, VSB, TForum	→			
<b>Target 6.2.3 Encourage the enhancement and expansion of the access network in and around the Tweed and its tributaries where it does not come into conflict with other objectives set out in this document (page 62)</b>					
6.2.3.1 Maintain and develop the local path network with due regard for other interests	AF, EA, NCC, NNPA, SNH	→			
6.2.3.2 Promote all multipurpose routes that are centred on the river	AF, EA, VSB	→			
6.2.3.3 Improve signage and promotion of the local path network	AF, EA, NNPA, SNH, VSB	→			



**OBJECTIVE 7.1 Continue to ensure effective stakeholder engagement and interaction**

Target	Key Partners	2010	2011	2012	2013+
<b>Target 7.1.1 Ensure opportunities for ongoing involvement and engagement with the Catchment Management Plan and the RBMP process (page 67)</b>					
7.1.1.1 Establish opportunities for stakeholders to learn together to address issues raised in the CMP/Area Management Plan (AMP)	SEPA, TForum	—————→			
7.1.1.2 Ensure wide dissemination of all information relating to the CMP/AMP using a variety of media including the project web page	SEPA, TForum	—————→			
<b>Target 7.1.2 Develop a learning approach to the decision-making, development and delivery of the CMP and RBMP to ensure effective implementation (page 67)</b>					
7.1.2.1 Improve the skills base and capacity amongst stakeholder groups to enable them to collectively address issues raised in the CMP and RBMP process	SEPA, TForum	—————→			

**OBJECTIVE 7.2 Overcome institutional barriers affecting the delivery and development of the CMP/AMP**

Target	Key Partners	2010	2011	2012	2013+
<b>Target 7.2.1 Address the fragmented, sectoral approach to, and the cross-border nature of, water resource management in the Tweed catchment (page 69)</b>					
7.2.1.1 Ensure Tweed Forum continues to enable different stakeholders to meet and engage with each other	TForum	—————→			
7.2.1.2 Continue to improve cross-border communication through the work of Tweed Forum and where necessary develop additional opportunities	TForum	—————→			

**OBJECTIVE 7.3 Review and monitor the effectiveness of the CMP and ensure integration with other relevant plans**

Target	Key Partners	2010	2011	2012	2013+
<b>Target 7.3.1 Review the CMP at appropriate intervals (page 69)</b>					
7.3.1.1 Ensure CMP process dovetails with the objectives of RBMP and Flood Planning process to avoid duplication of effort	EA, SEPA, TForum	—————→			
7.3.1.2 Carry out reviews as appropriate of CMP actions, engaging all stakeholders involved in implementation activities and ensure this review also takes into account the needs of the RBMP Measures Delivery planning process	SEPA, TForum	—————→			
7.3.1.3 Update the CMP and ensure new issues, actions and targets are incorporated where appropriate	SEPA, TForum	—————→			
7.3.1.4 Prioritise, programme and cost, where appropriate, CMP actions and use this information to inform the Working Groups	TForum	—————→			
7.3.1.5 Continue to service the Working Groups and progress the priority actions in the CMP work programmes and RBMP	SEPA, TForum	—————→			
7.3.1.6 Use WFD classification/objectives and the flood planning process to target activity within the catchment	EA, SBC, SEPA, TForum	—————→			
7.3.1.7 Tweed Forum to review research needs and identify gaps	TForum		●		

**OBJECTIVE 7.4** Ensure adequate commitment of time and resources to the TCMPI

Target	Key Partners	2010	2011	2012	2013*
<b>Target 7.4.1 Secure resources to deliver actions identified in the CMP and AMP (page 70)</b>					
7.4.1.1 All Tweed Forum members to identify opportunities and partners to fund CMP and relevant AMP implementation activities	All partners				→
7.4.1.2 All Tweed Forum members to identify where activities in the CMP action plan help meet statutory obligations	All partners				→
7.4.1.3 All Tweed Forum members to identify and build upon existing institutional and community capacities to deliver actions set out in the CMP/AMP	All partners				→
7.4.1.4 Be open and responsive to emergent opportunities, which enable delivery of the CMP/AMP	All partners				→
7.3.1.5 Continue to service the Working Groups and progress the priority actions in the CMP work programmes and RBMP	SEPA, TForum				→

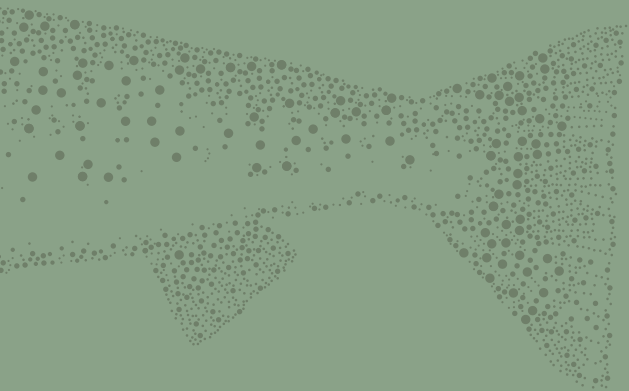
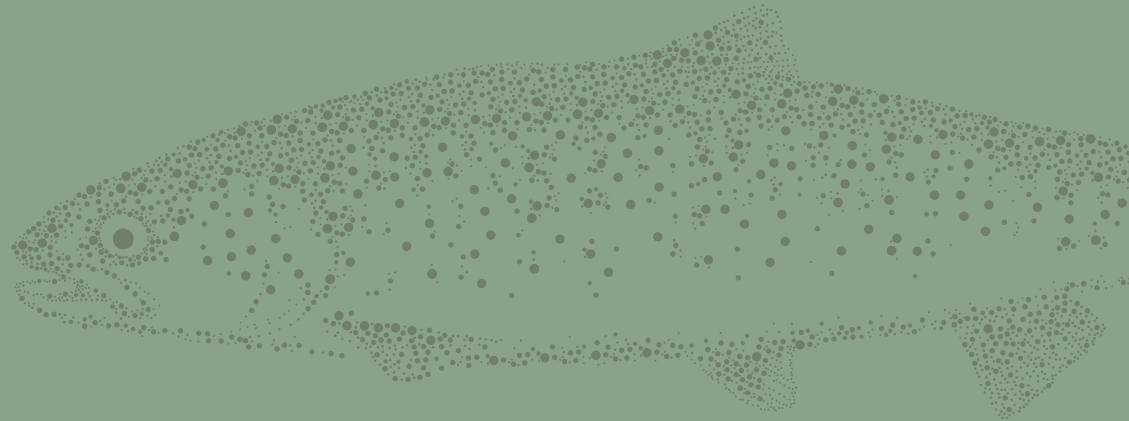
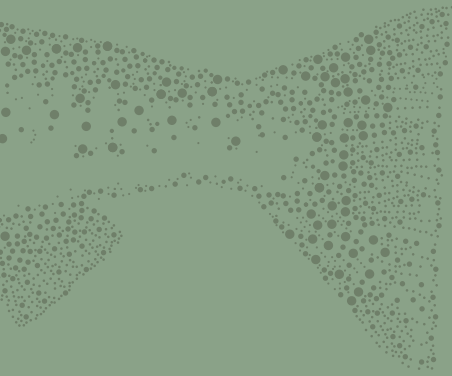
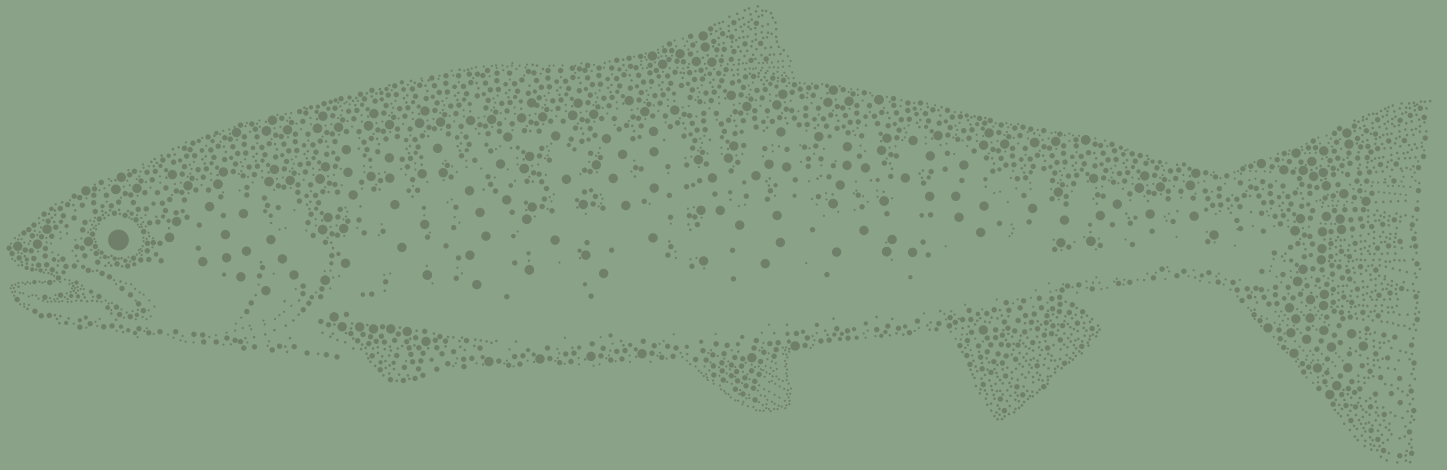
## Acronyms & Abbreviations

AF	Access Forum	NW	Northumbrian Water
AMP	Area Management Plan	NWT	Northumberland Wildlife Trust
BFT	Borders Forest Trust	RAFTS	Rivers and Fisheries Trusts of Scotland
CAMS	Catchment Abstraction Management Strategy	RBMP	River Basin Management Plan
CAR	Controlled Activities Regulations	RHS	River Habitat Survey
CMP	Catchment Management Plan	RSPB	Royal Society for the Protection of Birds
CROW	Countryside and Rights of Way Act	RTC	River Tweed Commission
CSF	Catchment Sensitive Farming	ScAC	Scottish Agricultural College
DEFRA	Department for the Environment Food and Rural Affairs	SAC	Special Area of Conservation
EA	Environment Agency	SBBRC	Scottish Borders Biological Records Centre
EMS	European Marine Site	SBC	Scottish Borders Council
FBAA	Federation of Border Angling Associations	SEPA	Scottish Environment Protection Agency
FCS	Forestry Commission Scotland	SFM	Sustainable Flood Management
FLAG	Flood Liaison Advisory Group	SNH	Scottish Natural Heritage
FWAG	Farming and Wildlife Advisory Group	SSSI	Site of Special Scientific Interest
LBAP	Local Biodiversity Action Plan	SUDS	Sustainable Urban Drainage Systems
MIMAS	Morphological Impact Assessment System	SUP	Southern Uplands Partnership
NCC	Northumberland County Council	SW	Scottish Water
NE	Natural England	TCMPI	Tweed Catchment Management Planning Initiative
NFM	Natural Flood Management	TFn	Tweed Foundation
NFUS	National Farmers Union (Scotland)	VSB	Visit Scotland (Borders)
NNPA	Northumberland National Park Authority	WFD	Water Framework Directive
NVZ	Nitrate Vulnerable Zone		

Figure 6 Geographical extent of the Tweed Catchment Management Plan







**TWEED  
FORUM**

Tweed Forum South Court Dryrange Steading Melrose TD6 9DJ  
T 01896 849723 F 01896 849129 E [info@tweedforum.com](mailto:info@tweedforum.com) [www.tweedforum.com](http://www.tweedforum.com)