



North Devon AONB and Biosphere Service
Bideford Station • East the Water • Bideford

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Table of Contents

1. Background	- 4 -
1.1 Climate change	- 5 -
1.2 Business and commerce	- 6 -
1.3 Conservation	- 6 -
1.4. Recreation	- 7 -
2. What guides the management of the Taw Torridge Estuary?	- 7 -
2.1 National legislation	- 8 -
2.2 Local plans and strategies	- 9 -
3. Why a Plan?	- 10 -
3.1. The structure of the plan	- 10 -

Table of Figures

Figure 1. The Location of the Taw Torridge Estuary	- 1 -
Figure 2. How the Regional level strategies will feed back into future Marine Spatial Plans	- 1 -
Figure 3. The area covered by the Taw Torridge Estuary Management Plan	- 1 -

List of Abbreviations

AONB	Area of Outstanding Natural Beauty	MPS	Marine Policy Statement
CRoW	Countryside and Rights of Way Act	NDC	North Devon Council
EMP	Estuary Management Plan	NERC	Natural Environment and Rural Communities Act
LDF	Local Development Framework	SSSI	Site of Special Scientific Interest
MMO	Marine Management Organisation	TDC	Torridge District Council
MoD	Ministry of Defence	TTEF	Taw Torridge Estuary Forum

1. Background

The Taw Torridge Estuary is located on the North Devon coast in an Area of Outstanding Natural Beauty (AONB) and within the North Devon UNESCO Biosphere Reserve (Figure 1). The catchment for the Taw Torridge Estuary helped to define part of the boundary for the North Devon Biosphere Reserve with the core area, Braunton Burrows, located at the estuary mouth and the Taw Torridge Estuary acting as the buffer zone.

The Taw Torridge Estuary was the first in the country to adopt an Estuary Management Plan (EMP) and it is this that has guided the use of the estuary, not only for commerce but for recreation and nature conservation. It has been and still is extensively used: with working ports for fishing and cargo ships of up to 90m; by the Ministry of Defence (MoD); for water and land based recreation; and as a tourist attraction.

The estuary is an important site for wildlife and was designated a Site of Special Scientific Interest (SSSI) for over wintering and migratory birds, special flora and mudflat and intertidal habitats. Areas around the estuary that have also been designated a SSSI are: Northam Burrows (for its land form features, coastal habitats and flora and fauna); Braunton Burrows (for its dune systems, rare or vulnerable species and features of geological interest) and Fremington Quay Cliffs (for its unique geological features). Braunton Burrows is also a Special Area of Conservation (SAC) for its classic dune geomorphology and specialised dune flora.

There is a Taw Torridge Estuary Forum (TTEF) which is comprised of 40 national, regional, county-wide and local member organisations who act as an independent voice for the Estuary. This forum interacts with the other estuary partnerships: Devon Area Estuary Officers, Devon Maritime Forum, Biosphere

Reserve foundation and AONB Partnership. These partnerships work together to ensure collaboration between the different aspects of managing the North Devon environment. These partnerships also interact with national partnerships such as the Coastal Partnerships Working Group to ensure that nationwide coherence of coastal management occurs.

North Devon AONB and Biosphere Service (formerly Northern Devon Coast and Countryside Service) provides a coordinating function for the UNESCO Biosphere Reserve and the Area of Outstanding Natural Beauty. Over the years since the last plan (1999) which it produced with the TTEF, the service has been a major delivery body and co-ordinator for the EMP. It has

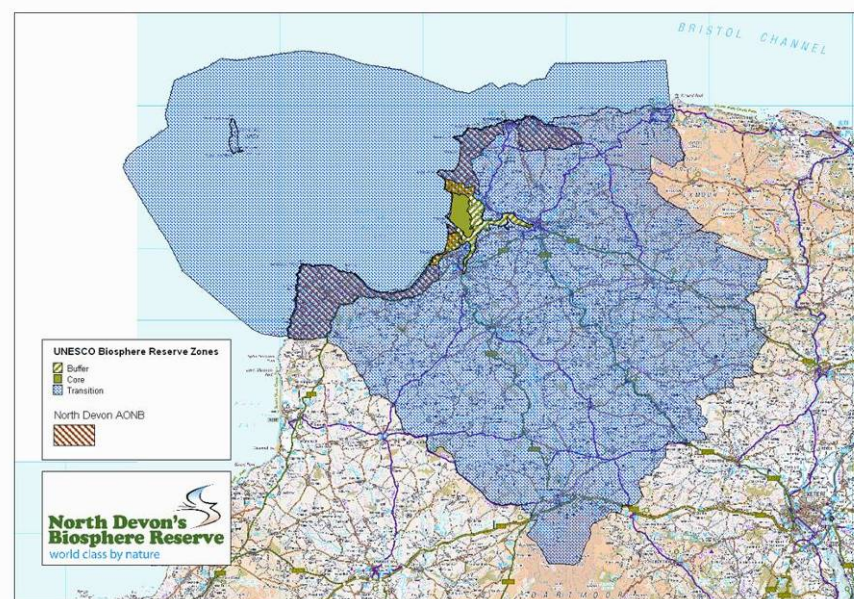
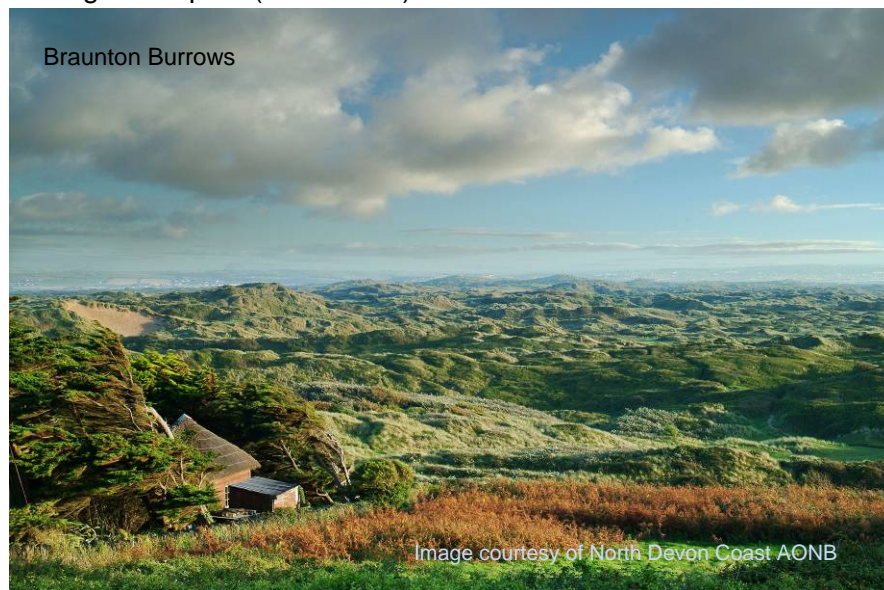


Figure 1. The Location of the Taw Torridge Estuary within the North Devon Biosphere Reserve and the North Devon Coast AONB

undertaken this refresh of the plan with support of the TTEF and under the umbrella of the Biosphere Reserve Partnership with close reference to the Area of Outstanding Natural Beauty management plan (2009-2014).



1.1 Climate change

The response of the coastline and estuaries to climate change and sea level rise has to be considered in any estuary management plan. The estimated rise in sea level of around 1m by 2100 for the south west^{1,2} is of paramount importance when creating the plan for the Taw Torridge Estuary. The loss of habitats due to coastal squeeze³ needs addressing whilst

¹ Defra 2006, Flood and Coastal Defence Appraisal Guidance FCDPAG3 Economic Appraisal Supplementary Note to Operating Authorities – Climate Change Impacts.
<http://www.defra.gov.uk/environment/flooding/documents/policy/guidance/fcdpag/fcd3climate.pdf>

² UKCIP 2007 Updates to regional net sea-level change estimates for Great Britain, [online]
http://www.ukcip.org.uk/images/stories/Scenarios/UKCIP02extras/slr_estimates.pdf

protecting the residents and businesses, where possible, that are located behind any flood defences. Since the introduction of the EMP in 1999 there has been the creation of several Local Nature Reserves (LNR) and habitats to defend against any net loss of estuarine ecosystems due to a rise in sea level. There has been continued response to future threats due to sea level rise, with managed realignment at three sites in the Torridge and the completion of a Catchment Flood Management Plan⁴. The publication of a Shoreline Management Plan⁵ (SMP) has also guided climate change response and this has been updated to produce SMP2 (2010). The flood defences at Bideford and Appledore have been improved, with a reduction of flooding of the western quayside at Bideford.



³ Coastal squeeze occurs when migration of the seaward edge is restricted by a fixed structure such as a sea wall. The migration of the seaward edge can be due to sea level rise and can result in a reduction of inter-tidal area and loss of habitats.

⁴ Environment Agency, North Devon Catchment Flood Management Plan 2009: GESW1109BOUN-E-P [online]
<http://www.environment-agency.gov.uk/research/planning/114342.aspx>

⁵ North Devon and Somerset Shoreline Management Plan 1 [online] <http://www.ndasqa.org/SMP1.html>

1.2 Business and commerce

There are many businesses that rely directly on the estuary and surrounding seas for income: fishing trawlers run from Bideford harbour and shell fisheries have been investigated as a source of income for residents; the Port at Bideford accrues income primarily from harbour fees from visiting cargo ships but also small amounts from the mooring of fishing boats and pleasure craft; there is a major shipyard, a fish dock and aggregate companies sited at Appledore which use the estuary on a regular basis and the MoD have Royal Marine bases at Instow, and Chivenor. The commercial aspect of the estuary also supports the economy through the provision of jobs and indirect income through local spending, housing and recreation.

As well as the commerce that is located around the estuary, there is also the income to the economy from tourism. The Taw Torridge estuary area is attractive to tourists through its beauty, tranquillity and character which need to be protected or enhanced to uphold continued sustainable tourism.



1.3 Conservation

There are many national and regional groups and organisations that work towards the conservation of the Taw Torridge Estuary environment. There are several Local Nature Reserves (LNR) sited around the estuary and there have been concerted efforts by stakeholders to protect or enhance these. The creation of habitats as a response to the threat of sea level rise have gone some way to prevent any net loss of inter tidal area around the estuary.

The designation of the estuary as part of the UNESCO Biosphere Reserve, part of the North Devon Coast AONB, Heritage Coast, SSSI and an SAC at Braunton Burrows has demonstrated the significance of the area as a scientifically and historically important conservation site.

The built environment is also protected and reflects the history of human activity around the estuary, including listed buildings at Richmond Dock (II*), Barnstaple Long Bridge, Tarka Inn and Fremington Quay Lime Kiln. The Stone Row at Isley Marsh and Bideford Long Bridge are Scheduled Ancient Monuments.

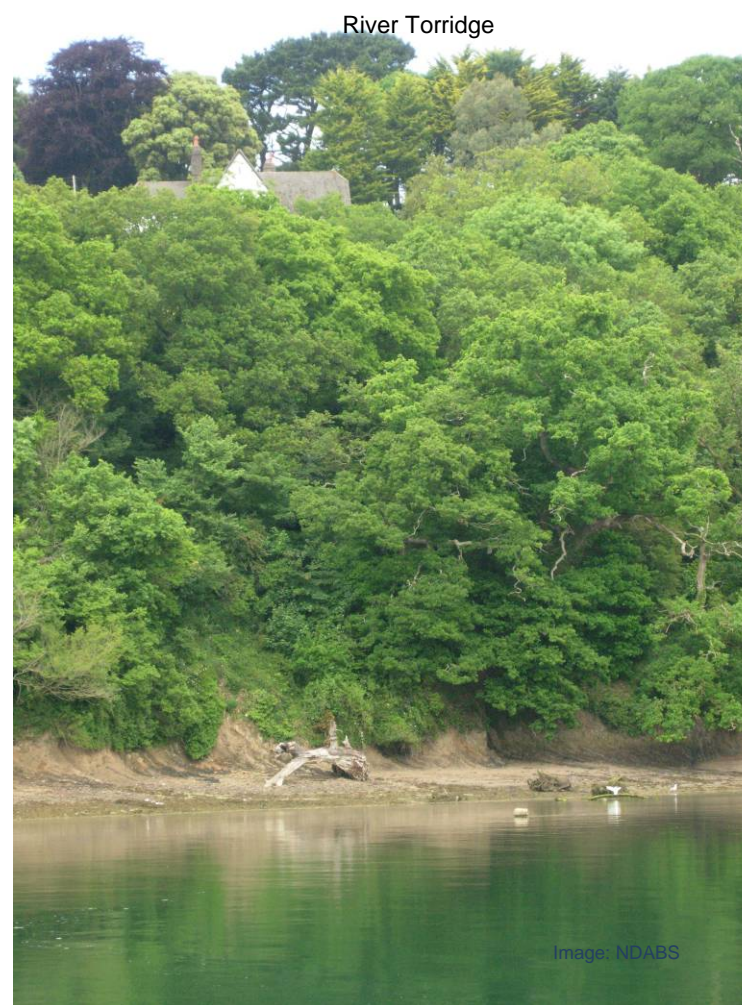


1.4 Recreation

The estuary is used extensively for recreation and sport. Part of the Tarka trail is situated alongside the two rivers, on the old railway line, and is used for walking, jogging and cycling by residents and visitors, as are the coast path and quaysides at Bideford and Barnstaple. Bird watching and wildlife watching occurs in the green areas and nature reserves along the estuary. There is angling from the riverbanks and bridges of the estuary. The estuary water itself is used for powered and non powered sport such as yachting, jet skiing, water skiing, wake boarding, waterborne fishing, rowing, kayaking, canoeing, and pilot gig rowing.

There are water festivals and regattas that encourage the continuation of these sports and celebrate the maritime heritage

of the estuary. There are three adventure schools found on the estuary: Skern Lodge; PGL at Beam and Knapp House.



2. What guides the management of the Taw Torridge Estuary?

To make sure that the updated EMP is applicable the legislation and strategies, that are part of the day to day management of the aquatic and terrestrial environment of the estuary, need to be included. The National legislation which is applicable to the estuary includes: the Marine and Coastal Access act (2009); the EU Water Framework Directive (2000) and the Natural Environment and Rural Communities Act (2006) and the Countryside and Rights of Way Act (2000). At a sub- regional level there are: local plans for TDC and NDC, which will be superseded by the Local Development Framework; the Shoreline Management Plan; the Biosphere Reserve Strategy and the AONB Management Plan. These policies have been developed through contribution by the involved communities

2.1 National legislation

The EU Water Framework Directive 2000 is European legislation which was incorporated into UK law in 2003 and is used to manage the aquatic environment. The EU Water Framework Directive will repeal previous legislation, such as the Shellfish Waters Directive, by 2013 but will result in at least the same level of protection. It has given rise to simpler legislation which guides the management of the water cycle and ecology of the ground waters, rivers, lakes, estuaries and seas of the UK.

The Natural Environment and Rural Communities Act 2006 (NERC) is used to manage the wider environment and is administered in the Taw Torridge area by Natural England and the Commission for Rural England. The purpose of the NERC Act is to 'ensure that the natural environment is conserved, enhanced

and managed for the benefit of present and future'⁶

The Estuary is designated under the Wildlife and Countryside Act 1981 and under this designation certain activities require consent / assent from Natural England before they can proceed.

The Countryside and Rights of Way Act 2000 (CRoW) requires that AONB authorities prepare a management plan and have due regard for the purposes of the designation in all their decisions and actions. It also increases powers to create and maintain current footpaths with regard to the protection of AONBs, SSSIs and wildlife with consideration to land owners and occupiers.

The introduction of the Marine and Coastal Access Act 2009 has resulted in the formation of the Marine Management Organisation (MMO). This organisation, which was launched in April 2010, will aim to ensure that there are 'clean, healthy, safe, productive and biologically diverse oceans and seas'⁷. This will involve the introduction of a two stage Marine Plan. The first stage will be the creation of a Marine Policy Statement (MPS). This statement will encourage integrated and sustainable management of marine resources and will hold legislative weight. The second stage will involve the development of Marine Spatial Plans that will implement the MPS. These will be developed at a regional level, with 12 plans covering the whole of the UK, and will include stakeholder engagement throughout. This will take some time (up to 2024) to implement for all the regions within in the UK.

⁶ Natural Environment and Rural Communities Act, 2006, http://www.opsi.gov.uk/acts/acts2006/pdf/ukpga_20060016_en.pdf

⁷ Defra 2002, Safeguarding our Seas, A Strategy for the Conservation and Sustainable Development of our Marine Environment [online] http://www.defra.gov.uk/environment/marine/documents/marine_stewardship.pdf

2.2 Local plans and strategies

At present there are separate local plans for Torridge District Council (TDC) and North Devon Council (NDC) which are used to guide land use and the sustainable spatial planning strategy for the local area. These documents will be used until 2011 where they are planned to be superseded by the Local Development Framework (LDF). The LDF is an emerging suite of planning documents which has been developed in Northern Devon through collaboration between North Devon Council and Torridge District Council and will help to deliver the Northern Devon Joint Sustainable Communities Strategy (adopted May 2009). The joint core strategy of the LDF sets out objectives and policies towards achieving sustainable development, including levels and distribution of development to meet local needs, whilst protecting environmental assets.

The Biosphere Reserve strategy⁸ is in place to ensure good and sustainable management, at a local level, of the North Devon Biosphere Reserve. This is to ensure that the North Devon Biosphere Reserve can be seen to be a world class area that supports sustainable development and can be used as an example of excellence nationally and internationally

The North Devon Coast AONB Management Strategy⁹ is a five year plan for the management of the North Devon Coast Area of Outstanding Natural Beauty as required by the CRoW Act. It incorporates the conservation and enhancement of the landscape whilst managing development, agriculture and the threats posed by a rise in sea level.

The development of any future Marine Spatial Plans will involve the appraisal and possible incorporation of any existing plans and strategies for each region (Figure 2). This interaction between plans and strategies at a local level ensures that the stakeholders of the estuary contribute to the development of the legislation, regarding the environment and economy, which affects them.

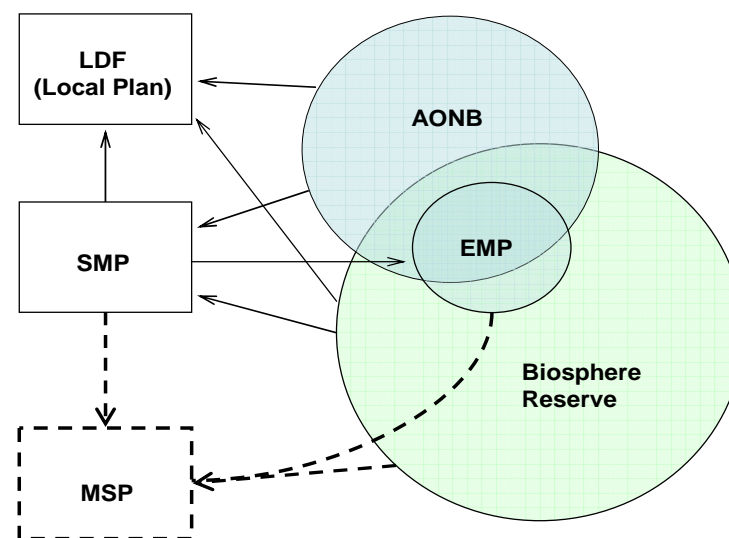


Figure 2 How the Regional level strategies will feed back into future Marine Spatial Plans (MSP). These include; Local plans /Local Development Framework (LDF); Shoreline Management Plan (SMP); Biosphere Reserve Strategy; Area of Outstanding Natural Beauty Management Plan (AONB) and Taw Torridge Estuary Management Plan (EMP)

⁸ North Devon Biosphere Reserve, Our strategy for sustainable development ,2008-2012, [online]
<http://www.northdevonbiosphere.org.uk/assets/Resources/Documents/Biosphere-Reserve-Documents/NDBR-Strategy-Final-Version.pdf>

⁹ North Devon Areas of Outstanding Natural Beauty Management Strategy 2009 -14 [online]
http://www.northdevoncoast.org.uk/pdf/management_strategy.pdf

3. Why a Plan?

It is imperative that the management of the Taw Torridge estuary must safeguard the sustained development of the estuary. It was 10 years ago that the last EMP was published and a revision was needed to reflect the changes over the last 10 years. In that time there have been two AONB Plans published, the designation of the UNESCO Biosphere Reserve and the publication of the Biosphere Reserve strategy.

The 1999 Taw Torridge Estuary Management Plan was compiled through comprehensive stakeholder engagement which resulted in the combined issues report. This report is relevant to the current plan but in the intervening 10 years some of these issues will have been resolved to a lesser or greater degree. A review of the 1999 EMP was needed to understand what had been achieved and to decide which actions were still appropriate to the current management of the estuary. It was also imperative that any new issues were included in the plan and this was achieved through further stakeholder engagement. Locally derived contribution to the revision of the plan will help with the application of the revised plan and provide a reference for future incorporation of the EMP into any Marine Spatial Plans. All current legislation includes some aspect of stakeholder participation and, as such, the estuary management plan must reflect this.

3.1. The structure of the plan

The Taw Torridge EMP is designed as a document of intent that is dependent upon funding and teamwork between the groups and organisations that manage the estuary.

The EMP was previously defined by its issues and not its geography which was an underpinning principle that supported

the designation of the UNESCO Biosphere Reserve. However, as there is now a Biosphere Reserve Strategy and an Area of Outstanding Natural Beauty Management Plan which are used to manage the wider environment in Northern Devon, it is proposed that the estuary management plan can focus on the issues that are significant to the Estuary itself. This is in line with the revised area covered by the Taw Torridge Estuary Forum. The revised boundary for the updated EMP is up to the tidal limits and to 10m OD (Figure 3).

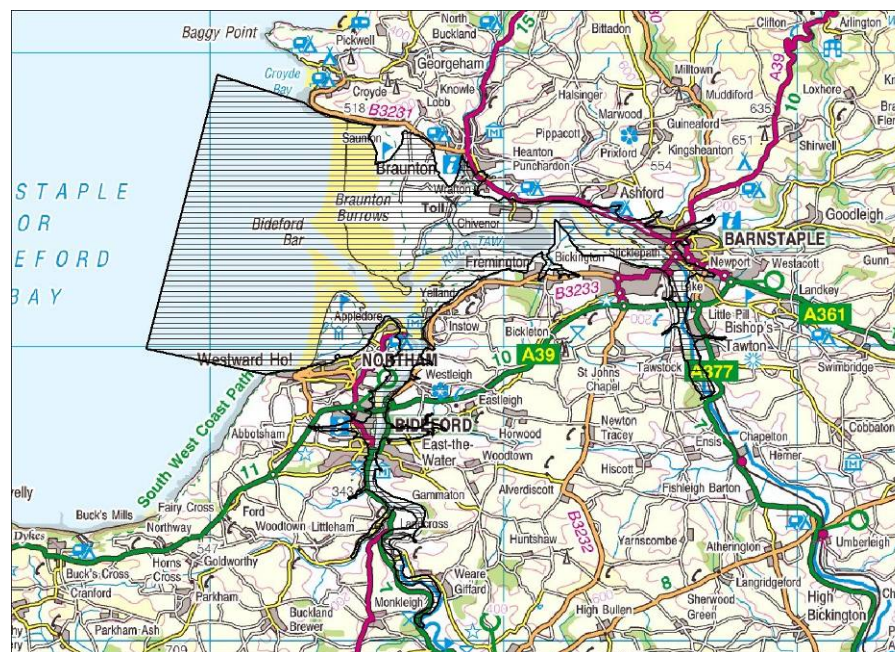


Figure 3 The area, up to 10m OD, covered by the Taw Torridge Estuary Management Plan

The time scale for the revised management plan of five years, from 2010 to 2015, will ensure that the EMP is kept up to date and relevant. The EMP issues will be rationalised to match with the Biosphere Reserve strategic aims, so that the estuary nests

Taw Torridge Estuary Management Plan 2010

neatly within the Biosphere Reserve. This will be helpful in determining how the EMP and the Biosphere Reserve will contribute to the new approaches in the Marine and Coastal Access Act. It has also reduced the 'overlap' between different aims that was apparent in the 1999 EMP, producing a simpler and more manageable plan. This has resulted in eight new aims that carry equal weight within the plan.

The revised Taw Torridge Estuary Management Plan comprises three reports:

1. Review of the Estuary Management Plan 1999
2. Stakeholder Issues
3. Taw Torridge Estuary Action Plan 2010-2015

The first two reports were formulated during a consultation period involving two public events, one in Barnstaple and one in Bideford, and also through direct contact with the stakeholders of the estuary. The final Action Plan was a result of the consultation events and assessment of the previous plan.

Review of the Estuary Management Plan 1999

The assessment of the 1999 plan for completion demonstrated that the plan had been adopted not only by the management organisations but also by many of the stakeholders of the estuary. The combined efforts of all stakeholders of the estuary have produced what is a nearly complete and continuing management plan. The assessment of the original plan will demonstrate to the wider public what has been achieved and by whom.

Stakeholder Issues

The consultation events were used to highlight current issues that are of concern to the stakeholders of the estuary. This was to ensure that the revised plan was relevant and up to date and included issues that were not apparent ten years ago. Stakeholder engagement also established which issues, from the 1999 EMP, have not been resolved or are part of the ongoing management of the estuary.

Taw Torridge Estuary Action Plan 2010-2015

The achievements of the original plan were a good way of assessing the actions for suitability for inclusion in the new plan. This involved including actions from the 1999 Plan that are still ongoing as part of the management of the estuary. It also involved removing issues that are no longer relevant to the more focused geographical area or actions that had been completed and were no longer applicable for the management of the estuary. There was also a need to incorporate new actions which addressed issues that were raised during the consultation events. This has produced in an up to date action plan which will be used to manage the Taw Torridge estuary for the next five years.