

ESTUARIES

DEFINITION

Estuaries are the tidal basins where rivers meet the sea. They are characterised by wide inlets subject to tidal incursion and a salinity range in the water decreasing towards the head of the estuary from the mouth. In this context, estuaries will also include fringing habitats such as saltmarshes of all types through to brackish marshes.

DISTRIBUTION

There are 12 estuaries in Devon, of which only the Taw Torridge Estuary is in North Devon.

LOCATION

The mean high water tidal limit of the Taw Torridge Estuary:

- stretches up the River Torridge to Weare Gifford,
- along the coast and up Fremington Pill to Muddlebridge,
- up the River Taw just beyond Tawstock,
- up the River Yeo into Raleigh, and
- along the coast and up the River Caen as far as Velator.

CHARACTERISTIC WILDLIFE

Plants: sea grass (zostera), various diatoms, sea purslane, sea aster, rock sea lavender, scurvy grass, sea manner grass, cord grass, sea spurrey, sea arrow grass, common saltmarsh grass, glassworts, annual sea blite, red fescue, sea wormwood, sea rush, great sea stock, and common reed.

Insects: plume moth, bloody nose beetle, and dolycopid flies.

Fish: bass, flat fish, flounder, mullet, mussels, salmon, sea trout, shad, and shore crab.

Birds: bar-tailed godwit, cormorant, curlew, golden plover, dunlin, knot, common sandpiper, lapwing, redshank, shelduck, teal, wigeon, oystercatcher.

Molluscs: hydrobia, sea snail, and peppery furrow shell.

Mammals: common seal, otter, and greater horseshoe bat.

THREATS

Estuaries being natural harbours have been the focus of development from the early ages of settlement and trading. They have always been the subject to human activity of some sort, either through water front development taking out estuary habitat (directly or over time) not allowing the estuary to respond naturally to sea level rise (Coastal Squeeze), pollution directly into the water, pollution for diffuse sources within the freshwater catchment, fishing within the estuaries and on the open sea and on the rivers, recreational activity leading to disturbance of birds.

SITE STATUS

Sites of Special Scientific Interest: Taw Torridge Estuary (part of the estuary is included in the Braunton Burrows Special Area of Conservation)
Local Nature Reserve: 2 parts of the estuary are currently being worked on for designation as LNRs.

CURRENT ACTION

An Estuary Management Plan was prepared by a partnership with English Nature, Environment Agency, Devon County Council, North Devon District Council and Torridge District Council and the Taw Torridge Estuary Forum. This plan sets out agreed actions to safeguard the well being of the estuary in conjunction with the economic and cultural activities that take part in the area. Actions include recreation management, recommended development control policies, actions for sustainable management of the fisheries, actions to help the estuary habitats keep pace with sea level rise, actions to improve water quality.

LINKS TO OTHER BIODIVERSITY ACTION PLANS

	UK BAP	SW BAP	Devon BAP	Exmoor BAP	Natural Areas
Habitat Action Plans	Estuaries	Estuaries	Estuaries	-	Lands End to Minehead
Species Action Plans	Otter Greater Horseshoe Bat Coastal Saltmarsh Floodplain And Grazing Marsh		Atlantic salmon Curlew Greater Horseshoe Bat Otter	-	-

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OBJECTIVES

- 1 To ensure that the existing area of estuary is not lost to other land uses.
- 2 To ensure that area of estuary is increased to compensate for loss due to relative sea level rise.
- 3 To ensure that water quality is at the optimum standards for the uses of the estuary.
- 4 To ensure that the existing area of estuary is managed to enhance its wildlife value.
- 5 To encourage and support physical processes for natural evolution of the estuary.
- 6 To foster greater public understanding, involvement and enjoyment of estuary wildlife and its management.

	ACTION	TARGET	LEAD DELIVERER	PARTNERS	Obj. No.
A	Policy and Legislation				
1	Ensure planning policies protect estuary sites from inappropriate development by linking to the Taw Torridge Estuary Strategy, Natural Area Profile data and other sources of information. No net loss in foreshore from any type of development.	Ongoing	NDDC Planning	DCC, TDC, EA, DEFRA.	1
2	Ensure that development along the shore outside urban development boundaries can only take place if a coastal location is absolutely necessary and there is a proven need for the development.	Ongoing	NDDC Planning		1
3	Maximise use of Section 106 Agreements to create new estuary fringing habitats through planning gains.	Ongoing	NDDC Planning	DCC, TDC, EA, DEFRA.	2
4	Designate 2 LNRs around the estuary.	Bideford East-the-Water LNR by 2006 and Fremington LNR by 2005	NDCCS	NDDC Planning	4
5	Ensure appropriate legislation is applied to achieve best practicable water quality for the estuary.	Ongoing	EA	SWWSL	3
6	Ensure that fisheries policies reflect the requirements of species using the estuary.	Shellfish regulatory order by 2007	DEFRA	EA	4, 5

B Site Safeguard and Management					
1	Continue or instigate management programmes on associated habitats using the Agri-Environmental Scheme.	Ongoing	Landowners and Managers.	NDCCS, DEFRA.	4, 5
2	Seek to create new saltmarsh on the Taw Torridge Estuary to compensate for relative sea level rise, and secure its future management.	26 Ha by 2010	Landowners and Managers.	DEFRA, EA, NDCCS, EN	2
3	Negotiate recreation craft management scheme to reduce disturbance to birds	Scheme to be in place by 2006	NDCCS	Local Authorities, User groups, TTEF	4
C Advisory					
1	Offer advisory service to estuary-side owners and managers on management techniques which promote sustainable use and which benefit the characteristic estuary wildlife.	Ongoing	NDCCS	EN, NDDC, DCC, EA, DWT.	4, 5
D Research and Monitoring					
1	Monitor extent and types of saltmarsh, fish populations and bird populations, and support the West Country River Trust's research into genetic fingerprints of salmon.	Annually	DBWPS, EA, DWT, NDCCS.	DEFRA, EN.	5
2	Identify physical requirements for estuary evolution.	Inclusion within SMP by 2007.	SMP Group	DEFRA, EN, EA.	2, 5
E Communication and Publicity					
1	Encourage local producers and industries to support and sustainably exploit the environmental value of the estuary.	Ongoing	NDDC, EA, Chamber of Commerce, Devon Sea Fisheries Committee	Local Agenda 21	4,5,6
2	Work with schools around the estuary to raise awareness of its importance.	2 schools by 2006	NDCCS	DWT, EN, EA.	4,5,6