

Avon Estuary Siltation Research Project

Those who know and love the Avon estuary have been concerned that the rate at which it is silting up has suddenly accelerated. Matters came to a head when the Bantham Harbour Master told the ACA that Bantham Harbour suddenly lost 6ft of draft during a period of easterlies in the spring of 2003. One of the families long established on the estuary has offered to partly finance a siltation study but as the money is to come from a family trust, and the ACA does not have charitable status, we approached the South Hams Society, with whom we have an extensive shared membership, to join us in a joint steering group and this they readily agreed to do, under the chairmanship of John Watling (Chairman, South Hams Society).

The Joint Steering Group has drawn up a briefing document that is now being elaborated with Plymouth University, Plymouth Marine Laboratory and WS Atkins Consulting. Although there are thought to be several contributory factors, two possibilities have been highlighted - the water capture regime of the Avon Dam and changes in land management practices attributable to the subsidy regime of the Common Agricultural Policy.

Because the Avon is no longer a commercial waterway, dredging is not an option, but if the causes can be found, we hope that the rate of siltation can be slowed down. It is easy to amass anecdotal recollections; but quite another matter to persuade companies and individuals to change their working practices, especially if such changes have cost and service implications. For this a serious scientific study is required.

Following preliminary discussions, we have opted for a study with four strands:-

1) A mapping exercise, particularly of the estuary salt marshes and a comparison with historical records. Hopefully we can get some clues about river changes from Luftwaffe high-resolution photographs taken before the Dam was built (good old Zeiss Eikon!),

2) A geo-chemical analysis of core samples taken from the estuary bed and from the fields and streams which feed into it. This should tell us where the silt has come from and to what extent it is compacted (old silt) as distinct from more recent sediment,

3) A hydrological study of the ingress of sand, particularly at the mouth of the Estuary, where groynes, embedded in the 1920s, have recently disintegrated,

4) An examination of land use along the slopes of the Avon river.

It would be wrong to prejudge the findings of the studies but conditions for addressing the issues, through the Avon Estuary Management Forum, are particularly favourable at this point in time. The changes in the subsidy regime should mean that farmers are paid to manage their landscape rather than to plough up unsuitable slopes, grub out old hedges and over-graze pastureland.

The need to regenerate fish stock, particularly salmon and bass, has once again drawn attention to the importance of the water compensation regime to which the Water Company is already committed.

In drafting their briefing document the Joint Steering Group is aware of a good case for measuring the impact of sea-level change which almost all reputable climatologists agree will take place, if not in our life-time, then in the life-time of our children. There are many facets to the proposed study; the extent to which we will be able to respond to them depends in turn on the amount of funding we can raise, but we are already in a position to commission the main work and we aim to report back to our sponsors at latest by December 2006. Periodic updates will be published on this website.